# THE EFFECT OF SIGNIFICANT SECURITIES IN PROCUREMENT PROCESSES IN GHANA

By

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# (BSc Quantity Surveying and Construction Economic)

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# MASTER OF SCIENCE IN PROCUREMENT MAANAGEMENT

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## DECLARATION

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person nor material a substantial extent has been accepted for the award of any other degree or diploma at kwame Nkrumah University of Science and Technology, Kumasi or any other educational institution, except where due acknowledgement is made in the thesis.

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#### ACKNOWLEDGEMENT

I would like to extend my profound gratitude to God Almighty for the strength to finish this study. I also acknowledge my supervisor, Joe Kingsley Hackman (Mr.) for his cherished input into writing this thesis. Also, I am grateful to all of the Department faculty members, especially Dr. Gabriela Nani and Dr. Emmanuel Adinyira. Acknowledgement goes to my parents Mr Daniel Owusu Boateng and Madam Georgina Anowaa, my brother from another mother Stephen Owusu Frimpong, Jemilatu Abgnewu, Miss Elizabeth Asoh Ankrah and all my siblings for their valuable guidance and financial support throughout my education that which words cannot express.

Finally, I must express my profound gratitude to my friends and course mates especially Mr Eric Bissah, Mrs Orgbarmey Louisa, Mr Faisal Issahaku, Mr Blaq and Too Much Sense Team Thanks, Sanctuary of Grace Incorporated, Shakers for their support and continuous encouragement throughout my year of study and through the process of researching and writing this thesis. This accomplishment would not have been possible without them. Thank you and God bless you all.

Frank Osafo

#### **DEDICATION**

First, I wish to express my special thanks and appreciation to Mr Jeo Kingsley Hackman and Prof. Barnard Kofi Baiden for their immense assistance provided in terms of guidance, suggestions and encouragements throughout the research process. The memory they have implanted will forever remain.

I am also grateful to my wife, Mrs Lydia Osafo Fordjour, my sons Crixus Osafo Annor and Jason Owusu Boateng Osafo, my daughter Sheridan Osafo Ampomah, my friend Stephen Owusu Frimpong, and the late Hajia Muna Seidu and her Daughter Jemilatu Abgenewu and all my siblings for helping me to complete this thesis.

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#### ABSTRACT

All nations and organizations need inputs of good, works and services from external suppliers or providers. Procurement represents a very large fraction of total economic activity. Procurement is considered to represent a major aspect of the Gross Domestic Product (GDP) of developing and developed countries which occupies a considerable portion of private and public sector employment. Therefore, this study was conducted to assess the effects of significant security on the procurement process in Ghana.

The study used the descriptive and cross-sectional design and with the incorporation of closed ended questions to gather information from respondents. The research design was quantitative data. The purposive non-probability and systematic sampling techniques were used in selecting subjects for the study. The data obtained from the questionnaires was analysed using Microsoft Excel and The Statistical Package for the Social Sciences (SPSS). Also, the SPSS was used to highlight the various relationships between variables using ANOVA/T-test for significant.

The study revealed that, there are several significant securities that are being employed in the procurement of public goods and services. Payment securities, retention securities, performance securities, builders risk insurance, bid securities and worker's compensation securities were determined to be the types of securities employed in the procurement of public goods, works and services. The results of the study showed a direct positive relationship between the provision of significant securities and its influence on the procurement processes in procuring public goods, works and services. Another significant finding is that, 'Financial institutions and other related parties charges high on securities', 'remedy does not cover the full cost of loss', 'it takes longer period for surety of security be realised', 'limited scope of responding to surety', 'satisfying bid security delays as a result of investigating default in meeting project requirement' were identified as the main challenges in using significant securities in the procurement processes in Ghana.

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# CHAPTER ONE INTRODUCTION

#### **1.1 Background of the Study**

All nations and organizations need inputs of good, works and services from external suppliers or providers. Procurement represents a very large fraction of total economic activity. (Okinyi and Muturi,2016) Procurement is considered to represent a major aspect of the Gross Domestic Product (GDP) of developing and developed countries which occupies a considerable portion of private and public sector employment. Procurement is defined as the function of purchasing services, works and goods, from an external body (Okinyi and Muturi, 2016). Public Procurement is defined as the acquisition of goods, works, and services through contracting to suppliers either in the private sector or the in the public sector (Mahmood, 2010). "Securities which usually come in the form of guarantees and bonds are mostly required for these transactions or procurement as risk mitigation mechanism against non-significant or non-payment" (Kagendo, 2012: pp. 47). According to Baiden (2015) the most common procurement security and retention security (Gwali, Dahal and Maharjan, 2018).

Tender security is a sum of money that is usually determined as a percentage of the estimated budget of a proposed purchase or a percentage of the price of an offer (Okinyi and Muturi, 2016). Mahmood (2010) opined that the tender security is used by the client as protection against the bidder's withdrawal of the offer or the contract expired before the end of its validity, or because the customer refused to sign the contract (Kakwezi and Nyeko, 2010). The tender guarantee is to discourage bidders from withdrawing their offers in the procurement procedure due to the fact that the purchaser might lose the amount used as the tender guarantee (Gwali et al., 2018). It gives the client a certain security that the successful bidder will sign the contract or otherwise lose their money.

A bid security may require companies to submit bids in response to an invitation to tender when procuring goods, works and services that are not consulting (Budu, 2014). The sum of the contract safety can be specified as a proportion of the bidder's bid or as a proportion of the budget assigned to the suggested purchase as stated above. However, if the technique of procurement used does not allow the assigned budget to be revealed, care should be given to create the bid bond as a set quantity or

proportion of the tenderers ' offer and not as a proportion of the expenditure. This would stop the budget setting the quantity of offer safety as a proportion of the projected acquisition of the project budget from being revealed indirectly or accidentally.

Public procurement performs an important role throughout the globe and is also carried out by the state and directly affects the significance of governance (Gwali, Dahal and Maharjan, 2018). The important thing about procurement is a trustable and reputable obligation to ensure that products, operates and facilities are delivered efficiently to the public sector. Procurement by state and local authorities of products, operates and facilities includes different procedures. The method of public procurement differs from one nation to another as it is controlled by legislation and regulations governing procurement. In the event of important demand for products, works and facilities and efficient distribution, public procurement may require (Kakwezi, 2012). By using accessible funds in the most effective, transparent and ethical way, governments are accountable for maintaining and supporting sustainable development with economy and living standards. The primary goal of public procurement, according to Mathew, Patrick and Denise (2013), is to minimize costs by maximizing competition, transparency, protecting government funds and also decreasing and eliminating corruption. Implementation and outcomes, however, are mostly influenced by procurement legislation as well as the socio-political climate, basic financial conditions and the technological climate of the corresponding nations and "most public procurement surveys have shown bad execution of government initiatives and service delivery" (Gwali, Dahal and Maharjan, 2018: pp. 36).

In Ghana, the Public Procurement Act (Act 663) 2003, was passed to complement public procurement processes in the public sector, "secure judicious, economic and efficient use of state resources, and furthermore, ensure that public procurement is fair, transparent and non-discriminatory" (PPA Annual Report, 2007). This current law was created in the nation after years of foul play and violence with regard to procurement. This required a thorough evaluation of the current legislation on procurement. Furthermore, the adoption of the law in 2003 assured that contemporary procurement trends were taken to deliver the much-needed health to the local procurement scheme that was damaged by poor procurement procedures such as corruption and other malfunctions (Baiden, 2015).

"Public procurement in Ghana represents about 24% of total imports and apart from personal emoluments, public procurement represents 50 -70% of the national budget and 14% of GDP" (Parick, 2011). Investigations have found that the yearly cost of public procurement for products, works and advisory facilities was approximately US\$ 600 million which denoted approximately 14% of Ghana's (GDP) in 2015 (Gwali, Dahal and Maharjan, 2018).

However, fraud and corruption are a widespread problem in procurement all over the world. To a very big extent the impact of procurement fraud and corruption to public procurement significant has been proven to have dire consequences on national coffers (Okinyi and Muturi, 2016). According to Budu (2014), corruption in public procurement could threaten credibility and therefore, policies and processes should be developed to reduce potential corruption operations and improve fairness, accountability and integrity. It is against this background that this study is proposed to assess the effects of significant security on the procurement process in Ghana.

## **1.2 Problem Statement**

Procurement is component of government fiscal policies and programs aimed at achieving effective and efficient management of government finances and domestic growth. As an economic tool for ensuring domestic growth, when well-planned and enforced, it has the potential to contribute to enhanced resource mobilization, encourage debt sustainability and efficient debt management, improve the governance of public spending, enhance national income generation and decrease economic and monetary dependence (Kakwezi and Nyeko, 2010).

The purpose of the procurement reform in Ghana is to reconcile public procurement procedures in order to guarantee a judicious, financial and effective use of state funds in public procurement and to guarantee honest, transparent and non-discriminatory government procurement while supporting a sustainable local sector. These reforms have seen significant improvement in the procurement process in the country especially in relation to significant securities. This calls for the need for government to properly manage the procurement processes to achieve its ultimate objective.

Previous studies on the significance of significant securities on public procurement process which ultimately impact on a country's development (Mathew, Patrick and Denise, 2013). Lack adequate implementation of procurement has been identified by (Gyawali et al.,2018) as a limiting factor to the smooth process of development. Okinyi and Muturi (2016) opined that integrating ICT into the procurement process improves adequate contract management in public procurement in achieving efficiency in the public sector. On the other hand, Mrope (2017) found no significant bond as an effective tool to ensuring a smooth procurement process and also ensure procurement is done properly to achieve its objectives.

Though, a variety of research has been carried out in Ghana on public procurement processes and its effects on the nation. Patrick (2011) studied the effects of Procurement Act on public financial management in Ashanti region whiles; Baiden (2015) studied the relevance of procurement securities in the procurement of works in the Ghanaian construction industry. Budu (2014) studied the challenges associated with the procurement of public works at pre-contracting stage in Ghana. Nevertheless, there is restricted investigations only on significant securities and its effects on the public procurement process in Ghana. Numerous investigators have ignored the effects of significant securities on the procurement procedure in Ghana especially in the Eastern region. Considering the insufficient studies of effects of significant securities on the public procurement in Ghana focusing on some selected public institutions in Ghana. The study's outcome is anticipated to add to the existing literature on the impact of important securities on the public sector procurement system.

# 1.3 Aims and Objectives of the Study

The main aim of the investigation is to measure the effects of significant securities on the procurement process in Ghana by focusing on the Eastern region.

#### **1.3.1 Specific Objectives**

Therefore, the specific objectives are stated as follows;

- To identify the various types of significant securities in Ghana.
- To determine the effects of the significant securities on procurement process in Ghana.

• To identify the challenges in using the identified significant securities on the procurement process in Ghana.

## **1.4 Research Questions**

The research questions that will help address the stated objectives of the study are;

- What are the various significant securities available in the procurement process in Ghana?
- What are the effects of significant securities on the procurement process in Ghana?
- What are the challenges faced by procurement process in Ghana in relation to significant securities?

## 1.5 Significance of the Study

The study is conducted to assess the effects of significant securities on procurement processes in Ghana. The research will therefore make a substantial contribution to determining the impacts of important securities on the public sector procurement system. Furthermore, the study's effect will be seen in applying its results to the actual company setting. The research will also reveal the difficulty of applying important bonds in the acquisition system and how to mitigate the impact if not eliminate them. The research will also lead to present research on the impacts on the procurement system of important securities. Finally, the study's suggestions will direct strategy on important securities implementation in Ghana's procurement system.

#### 1.6 Scope of the Study

The proposed study will focus on the effects of significant securities on the procurement process in Ghana focusing on some selected public institution in the Eastern region and Greater Accra Region. The scope of the study will be limited to significant securities and procurement process in the country. The respondents of the study will be selected from some selected public institutions in the Eastern region and Greater Accra region. These institutions are Eastern and Greater Accra Department of Urban Roads, Department of Feeder Roads and Ministry of Roads and Highways.

#### 1.7 Limitation of the Study

The suggested research will be restricted to analysing the impact of important securities on Ghana's procurement system concentrating on chosen organizations in

the Greater Accra region and the Eastern area. Because of the time frame for undertaking and displaying the research, it will therefore be hard to consider issues in excellent detail combined with possible problems in having participants to reply questionnaires. Because of the confidentiality that such data originates with, participants may hesitate to provide economic data. Furthermore, the expense of carrying out a research survey is also viewed as a limiting factor.

#### **1.8 Methodology**

The suggested survey will use the research design description. This was selected because it will assist to detect factors that can be evaluated in conjunction with big information collection as proposed by Kothari (2004). The research will use both primary and secondary information. By developing a questionnaire, primary data will be gathered by reviewing the appropriate literature. On the other side, by checking the company's journals, books, sector publications and annual financial records, secondary data will be gathered. The research will pick participants using the non-probability and systematic sampling method. Microsoft Excel and SPSS will analyse the data gathered for the research. The correlation of the Pearson will be used to determine whether the two factors had an important correlation.

#### **1.9 Organization of Chapters**

It will split the suggested research into five sections. In addition to the gap identified in the study and the study goals, the first chapter will contain the background of the study. The study's scope and meaning will also be provided in the first section. The second chapter will include the literature review where it will discuss the conceptual framework that drives the research path. Furthermore, several literatures will be studied to show the concepts underlying the cash management idea. The following section will concentrate on the methodology for presenting and discussing the research design and techniques used in undertaking the survey. The fourth section will comprise the study's assessment and conclusions, while the following section will contain an overview of results, conclusions and policy guidance suggestions.

# CHAPTER TWO LITERATURE REVIEW

### **2.1 Introduction**

This chapter reviewed relevant literature on the effects of significant securities on procurement processes. Also, key conceptual review, theoretical review and empirical review that reinforce the significance of securities on procurement processes would be performed and moreover, the investigator would take a keen observation at the broad opinions on the investigation of procurement observes.

## **2.2 The Concept of Procurement**

## 2.2.1 Definition of Public Procurement

Patrick (2011) defined public procurement is defined as "the process of the acquisition, usually by means of a contractual arrangement after public competition of goods, services, works and other supplies by the public service". The process takes a full cycle from initial conception and definition of the needs of the public service through to the end of useful life of an asset (Okinyi and Muturi, 2016). According to Bailey, Farmer, Jessop and Jones (2008), public procurement is considered as the process of purchasing commodities and contracting of services through the use of public funds via "state budgets, local authority budgets, states foundation funds, domestic loans or foreign loans guaranteed by the state". Public procurement therefore implies the procurement of government funds by the procurement organization (OECD, 2001).

Public procurement products range from easy products or facilities like videos or washing facilities to large-scale business activities such as infrastructure growth including highways, power stations and airports (Mahmood, 2010). It can also be the purchase of works, equipment and facilities by public bodies, whether under official agreement or not. Cohen and Eimicke (2008) argue that procurement can also imply the method of buying products and facilities and employing contractors and advisors to perform works and facilities. This involves renting, leasing, hiring, licensing, tenancy, franchising or any other contractual buy of works, facilities and equipment (Osei-Tutu, Mensah and Ameyaw, 2011). Procurement also includes wiping out unnecessary purchases. Essentially, the topic of procurement operates at all moments alongside that of disposal of government property that may need to be rejected once they have been obtained in order to comply with their purchase rules.

As per Westering (1997), the range includes Specification of the type and quality of products or services to be purchased or disposed of, investigation of the production industry and contacts with prospective providers or customers, placing an order or agreement, including negotiation of conditions, supervision of delivery and efficiency, and taking needed intervention in the case of insufficient results (Baiden, 2015).

#### 2.2.2 Types of Significant Procurement Securities

## 2.1.2.1 Securities in Construction Procurement

Construction projects have become increasingly complex and intriguing in recent times. This is as a result of the "large number of parties involved, funding for the projects of industry and the largest energy security requires well-managed, profitable construction companies" (Mathew et al., 2013). The realization of a construction project is mostly calculated by the timely response to the specifications around the specified budget completion. On the other hand, Kakwezi and Nyeko (2010) is of the view that in the implementation of any engineering project there is always an element of risk: that is, "the construction is a high-risk business, the level of risk when considered much higher than in other types of economic activities". Additionally, Baiden (2015) opined that there is inherent risk in commercial projects which involves people. The risk affects all parties to a construction contract. According to (Gyawali et al.,2018), receiving a necessity means accepting a chord danger, i.e. the risk of not being able to meet the duty owing to inadequate, own inefficiency, lack of thought or error, or interference from internal sources or supervening occurrences.

## 2.1.2.2 Securities in Financial Institutions

A financial institution such as banks or an insurance companies usually issue tender securities in the financial industry. According to Okinyi and Muturi (2016), the parties involved in the tender process establishes the terms and conditions regarding the tender security. There is the need to inform the client about the requirement in the bond guarantee and to make sure that the issuing institution is reliable, sound and viable in order to respond appropriately to the contract terms (Budu, 2014). Especially in Ghana, bonds and guarantees are provided for national construction companies (private and public) commercial banks and insurance companies. According to Mahmood (2010), commissions bonds and guarantees required by banks are relatively expensive than insurance companies. However, some project owners may require contractors to offer bonds and / or guarantees only from banks. In general, the cost of

a bond is relatively small compared to the contract price. Tender securities are considered not necessary and decisions regarding the risk of a particular contract and the skills and monetary means accessible to the contractors are replaced (Arrowsmith, 2010). Therefore, a decision to undertake security of a contract must be done systematically to manage the risk and putting in measures to mitigate the effect of the risk. Basically, there are different types of bonds which are adopted in a construction activity as indicated by Okinyi & Muturi (2016):

- Bid Bond / Bid Security.
- Performance Bond
- Advance Payment Guarantee / Bank Guarantee
- Retention Money Guarantee

The above-mentioned securities are accepted in public procurement in use in Ghana. However, their use should have to be increased in order to relieve the cash flow problem of the domestic construction firms to some extent.

#### 2.1.3 Importance of Public Procurement

Public procurement as a function of government includes decisions about the services that will be delivered to local authorities and the community they serve (Gayed, 2013). It is therefore unsurprising that many of the organizations within the public sector have expenditures which are vast compared even with some of the large private sector organizations. The objective of public procurement is to grant timely and costeffective agreements for the delivery of products, works and facilities to skilled contractors, distributors and service providers in compliance with the principles and processes laid down in the regulations on public procurement (Kipehilat, 2006). Budu (2014) opined that, the main objective of contract management is to make sure that decent mechanisms are in position to supervise and analyze the performance of contractors, suppliers and service providers in fulfilling their contractual obligations and to guarantee that suitable action is taken to remedy promptly any deficiencies detected in the execution of the contract or in the scope of the contract and the terms and conditions. There is a definite difference between public procurement and contract administration on the grounds of their particular objectives. Far from diminishing the significance of one as compared to the other, this difference

effectively reinforces each other by defining and concentrating on their particular intent.

## 2.1.4 The Effect of Significant Securities

According to Baiden (2015), significant securities serves the purpose of daily prequalification of transfer of risk. Labels efforts predicted pre-qualification, the security of independent third ones that the contractor can hand over his work in accordance with the terms and conditions of outsourcing and of fulfilling his financial obligations (Mathew, Patrick and Denis, 2013). The guarantee of the proposal is only given after a far-reaching prequalification drive to value key issues, such as the financial performance of the firm, current works, the experience of management, business and strategic plans. Additionally, the terms of the contract, the mode of employment, the details of the project are all scrutinised. The company is also assessed to determine its organizational capacity and the financial strength to carry out the project before outsourcing is done (Gyawli, Dahal and Maharjan, 2018). Aside the project stakeholders who performs the daily prequalification, significant securities provide protection in a situation where the contractor is unable to execute the project. Therefore, significant securities are essential in the procurement of public works and supplies. "This performance of transfer of financial risk and for the guarantee of being the main reason in order that contractors to demand public works it will be going to supply meters of performance and of payment" (Baiden, 2015: pp. 65). With regards to contracts and subcontracts in public procurement, it is significant to provide significant securities to protect the integrity of the works. Producing values indicate owners of the project demand contracted values and many contractors have a politics of the enterprise that applies for the connection when of definite-daily pay was subcontracted above a threshold (Budu, 2014).

"Advocates of significant securities that present the main benefits of responsibilities of performance and payment include: Independent, pre-qualification Contractors of third party very often leads to overruns of cost, schedule skids as well as problems pertaining to quality" (Kagendo, 2012). These secondary effects are the main reason that daily pay-qualification of the participants in the project is so important. While it is carried out certain contractor's level of prequalification routinely performed by the insurer, the values are in the only position to value the contracted capacity, the capacity and character. The contractor-guarantee relation stretches out very much besides any project - can stretch out in decades. Due to that in the long-term relationship values have access to benefits and financial data that are not readily available to a contractor. Besides, the values generally have a quite definite process of subscription and it proved that daily pay is managed by a department of risk with years of experience to qualify contractors. In the end of the process of qualification, they have the necessary skill to translate the financial data and of performance of the contractor in the limit of the project and added attachment (Nelson, 2007).

#### 2.1.5 The Challenges in using Significant Securities

Most of the insurers of titles and expected consolidation will make it more difficult for big and small contractors to obtain values (Okinyi and Muturi, 2016). Actually, the necessity of co-guarantors and/or reduction of compulsory limits to the great projects persists. Linking emergent contractors without significant capital or experience remains a challenge. The market for small established contractors became more competitive with the entry of new enterprises that attend to this market or existent enterprises to gain authority to write in additional jurisdictions. The general availability of the credit seems to be improving the security. Industry seems appropriate capacity and guarantees they are disposed spreading guarantee of credit out for the contractors with whom you link have a good relationship of long term (Mahmood, 2010). The criticism expressed regarding general public offer was guaranteed by you that it is centered in two main preoccupations: a) the time period for the answer warns to a defect, b) the narrow perspective of the answer of the bond (Gray 2002). Extension / late answer: A criticism frequently definite enterprise of security is the quantity of time necessary for the guarantee to begin an action for lack of payment of a contractor. After the notification of the main guarantor has several independent legal obligations for the creditor and of the principal. The guarantor is obliged to drive a complete investigation to determine the degree of responsibility of the director and of the legitimacy of the standard through the development of a factual register. If the guarantee is not investigating correctly a demand for titles correctly, the guarantee can lose certain rights regarding the opportunity for staking a claim of compensation against the director of obligations, or credit commerce can be subject to accusations of bad faith or disloyal practices. The period of time necessary for this inquiry is influenced by series of variables, including the present of the information when guarantee was asked for applying to support the allegation.

With the exception of very simple cases, the investigation of the guarantee can take weeks or even months, during which the factory effects are undulating in the whole subcontractor I project (Gray, 2002). The answer time is spread out very often because the parts disagree impact of the project and / or necessary measures to put right (Thai, 2004) actions on the subject of responsibility for lack of payment of the defect. The guarantee can, as a last resort responsible for the adverse effects of a late answer, but, meantime, the adverse effects schedule of the project is left and the costs keep on building (ENR, 2004). Put in perspective nearby Guarantor / absent of control: As soon as the restraint ended his investigation that has the authority to decide on the form of contractor to repair a defect in the terms of his obligations of obligation. The contractor can be consulted, but the final answer is to criterion of the guarantee. Legal considerations and of business it can determine the answer of the guarantee. The medicine of the guarantee can be done from the perspective of his principal (main contractor), and remedy cannot attend fully the necessities and preoccupations of the client or the project (Gray, 2002).

#### **2.3 Theoretical Review**

Theories are principles that are established to advance the understanding a set of facts or phenomenon which has been tested by several researchers and generally accepted and be employed in making predictions about natural phenomenon (Weele, 2010). These are generally used analytical techniques in comprehending, illustrating and predicting a particular topic. A formal theory is syntactic in design and is relevant only if a semantic component is provided by adding it to certain material (i.e. facts and interactions of the real historical universe as it unfolds). (Safo, 2011). This investigation is based on two fundamental theories; institutional theory and Public Value theory.

## **2.3.1 Institutional Theory**

Institutional theory is the traditional method used in examining the fundamentals of public procurement. According to Denning (2012), this theory aids in identifying three institutional elements as behavioral regulatory, normative and cultural. The legislative pillar stresses the use as enforcement tool of rules, regulations and punishments, with expedience as compliance grounds. "The normative pillar refers to norms and values with social obligation as the basis of compliance whiles the cultural-cognitive pillar rests on shared understanding on common" (Seidu, Fatawu

and Maharjan, 2014: pp 56). Institutional theory is considered as a technique that focuses especially on the social and economic development, economic challenges, and finding the Suitable government and private sector alternatives without distinguishing and assessing them as a whole in the procedures of public procurement. According to an autonomous hypothesis of financial institutionalism, the procurement system can be interpreted as a collection of organizations with an outstanding interrelation well between buyers and providers, as as influencing the nation's financial development. (Gayed, 2013). As suggested Ameyaw, Mensah and Osei-Tutu (2012) the institutions in the procurement procedure entails of;

- Formal regulations regulating processes for government procurement and unofficial connections between contracting officials and vendors influencing both their personal relationships and their common contracts and financial growth operations
- Coercive measures to guarantee standards, penalties and abuse in government contracting proceedings in violation of the acquisition legislation.

Public procurement performs a leading position in acquisition, law enforcement, health, social facilities, schooling, defence, transport and environmental problems (Anvuur, 2016). Therefore, in the quantity of procurement, achieving public policy goals and meeting the requirements of civil society is much greater in the public sector organisations than in the private sector. Institutional theory as Toader, et al., (2010) opined offer an opportunity to identify self-formed purchasers and suppliers and separate the network of economic actors' public and private sectors, groups and organizations. A new direction of institutional economic theory has been established as a result of studying the individual behaviour and analysing the theory of institutionalism (Arrowsmith, 2010). Agaba (2007) opined that, this emphasizes on concentrating on the Practical and efficient agencies in the procurement system, analyzing not under the optimal circumstances of a theoretical framework, and as per the law on public procurement with an option that enables the micro-economic assessment to be extended. Besides the physical and technical constraints innate in the concept of classical institutionalism, a new institutionalism has appeared that further identifies and analyses the institutional structure of culture (Basheka, 2008). The economically formed institutional structure reflects the situation in the procurement procedure. The contracting authority's state officials must therefore be involved in a

cost-effective and/or effective purchase, while vendors (company organisations) gain the highest feasible profit after the purchase.

# **2.3.2 Public Value Theory**

The Public Value Theory was fist established by Moore in 1995 to principally provide managers in the public sector with a greater understanding of the limitations and opportunities within which they work, and the challenge to be able to form publically valuable outcomes. According to Bolton (2006), Public Value theory is generally summarized as an approach used by management of public services which is based around the three strategies;

- A combination of agreement of values and overall strategy
- Securing of political legitimacy through the authorizing environment,
- The availability of the appropriate operational capacity

(Gyawhi et al.2014) is of the view that, Public Value Theory stipulates That perhaps the cause for the public sector is to generate public value and that the effective exercise of public administration should boost the short-and long-term government value generated by public sector organizations. It is observed, however, that while a conceptual description of public value is evident, the assessment of its realization is not all that evident (Mathew, Patrick & Denise, 2013).

Public Value is considered as a public management principle where public managers is supposed to think and act strategically to create public value and success is drawn from initiating and reshaping public sector enterprises in ways that increase their value to the public (Ebrahim, 2009). "The concept of strategy applies meaningfully to the public sector when considering that a public sector organisation might have a distinctive competence wider than its current use and that public sector executives should connect their performance to the aspirations of citizens, overseers and clients" (Baiden, 2015: pp. 73). Due to the perception that public servants act in their own interest, it is generally seen that they should not be acting entrepreneurially. This act of society denies the public sector the key ingredient on which the private sector specifically relies to remain responsive, dynamic and value creating (Edward, 2009). Additionally, the private sector is able to adopt strategies to be able to adapt and be efficient which is as a result of the use of managers ' creativity to mix government

requirement with resource access and operational capability monitoring to generate profit (Kakwei and Nyeko, 2010). Public Value therefore provides a more contemporary perspective of the manager of the public sector, embraces accountability and views government executives as explorers ordered by culture to seek public value, and is supposed to use their action and imagination in doing so (Kagendo, 2012). Behind the paradigm of public value, various goals are pursued by government executives, including smaller service goals, wider results, and confidence and legitimacy building and maintaining (Fawcett, 2007). Hommen and Rolfstam (2009) argues that public value offers a wider viewpoint for assessing the efficiency of the public sector, including the results and means used to produce those results, as well as confidence and validity problems. The emphasis provided to consultation and involvement has risen in the exploration and definition of public value, which has, in turn, raised standards and put bureaucrats under higher stress. McCrudden (2004) is of the view that public value as shifting away from business ideology versus state supply.

# CHAPTER THREE METHODOLOGY

## **3.1 Introduction**

The methods and techniques used for collecting and analyzing information for this study are discussed in this section as well as the reasons for choosing these methods. The investigator's involvement in the method of information compilation is also addressed. In addition, the study method is outlined in detail in accordance with the study aims and goals set out in section one. This section finally describes the study's accuracy and legitimacy.

#### **3.2 Research Design**

This study is conducted to determine the effect of significant securities in the procurement processes in Ghana. Therefore, the research design is both qualitative and quantitative data. The reason for selecting the qualitative and quantitative process also referred to as the mixed methods, was borne out of the capabilities of improving the evaluation of the study by ensuring that the limitations of one type of data are balanced by the strengths of another as suggested by Kothari (2004). The mixed methods have the potential of improving the understanding of the study by incorporating various methods of understanding.

# **3.3 Research Approach**

The research used the descriptive and cross-sectional design to collect data from participants by incorporating closed-ended questions. Cross-sectional design was chosen to provide information for an exploratory or descriptive investigation and help broaden the understanding of the person tax reliefs to enhance the filling behaviour of employees. This helped to determine which account or theory suits the gathered information best and also helped to determine the causal orientation of the study's main factors. The survey technique was also employed in this study. The survey was conducted by administering questionnaire to respondents.

# **3.4 Research Strategy**

This study was conducted to examine the effects of significant securities on the procurement processes in Ghana. Therefore, the study will employ both the case study research design. This will enable the researcher to concentrate on an in-depth examination of a single case or small number of cases as stipulated by (Kothari,

2004). To answer the research question, the study used the quantitative research survey in collecting data from respondents. The study also enabled the researcher to collect data from high profile individuals working in the various departments.

### 3.5 Structure of Questionnaire

The questionnaire was structured into three parts. Part I addressed the demographic data of respondents where respondents profile and other related information was collected. Part II addressed the research objective one. Questions were asked to determine the types of significant securities available in the procurement of public goods and services. Part III addressed research objective two. This was to determine the effects of significant securities on the procurement processes in Ghana. Part IV addressed objective three. The sought to determine the challenges in using significant securities in the procurement processes.

In order to collect primary data, the questionnaire survey technique will be used to gather quantitative data. Due to its cheap and versatile nature, the questionnaire poll is chosen and it is also a practical way to collect information for studies of this type. The questionnaire was developed based on the review of pertinent literature. The open and closed-ended questionnaires will be used in collecting data from respondents. The respondents will also be required to indicate their level of agreement with predetermined statements which will direct the respondents in a specific way. The responses will be rated on a scale as follows; 5 – Strongly Agree, 4 – Agree, 3 – Neutral, 2 – Disagree and 1 – Strongly Disagree. Additionally, the Ball (2014) survey, it concludes that questionnaire survey allows participants to be targeted as in groups to make it easier for the investigator to handle different groups. This data gathering technique has been regarded as the efficient technique of collecting information in comparison with techniques such as interview or experiment, where the target population is distributed over a big area.

#### **3.6 Population**

The target population comprises the 60 employees drawn from some selected public institutions in the Eastern and Greater Accra regions. These institutions are Eastern and Greater Accra Department of Urban Roads, Department of Feeder roads and Ministry of Roads and Highways. These institutions were selected due to proximity to the researcher in addition to the willingness of the employees to participate in the

study. The population included employees who have been working at their various institutions for at least 1 - 10 years. These employees were selected based on their long service in the institutions and have been through the procurement processes to enable them respond better to the researcher.

#### 3.7 Sample and Sampling Technique

Research sampling is largely carried out to enable the detailed investigation of part of a population, rather than the entire population Ross (2008). In choosing topics for the research, the purposive non-probability and systematic sampling methods were used. Ball (2014) described systematic sampling as a method used to create a random sampling of probability in which each item of information is selected for incorporation in the sample at a set interval. The systematic sampling method was chosen because it is the easier and simpler type of bias-free random sampling. Alternatively, the purposive sample as stated by (Densombe, 2010) is a nonprobability sampling technique where "elements selected for the sample are chosen by the judgment of the researcher. Researchers often believe that they can obtain a representative sample by using a sound judgment, which will result in saving time and money". Lists of working employees of the various institutions were collected from their heads of departments and combined into one list. All the respondents were put together in a sequence where each of them has an equal chance of being selected. Respondents will be contacted at their respective workplaces and the questionnaire will be administered to them as soon as they indicated their willingness to participate in the study.

With a population of 60, 53 sample sizes will provide an error margin of 5 percent and a confidence level of 95 percent. The sample size was determined using the Raosoft software. The Raosoft software was sourced from <u>www.raosoft.com/samplesize.html</u>, where the population was keyed into the calculator to determine the sample size.

# 3.8 Methods of Data Analysis

Microsoft Excel and The Statistical Package for the Social Sciences (SPSS) will analyse the information acquired from the questionnaires. Both software (Microsoft Excel and SPSS) will use graphs, charts and lists to represent the research results. Also used to operate frequencies and cross tabulation will be SPSS. Also, using ANOVA / T-test for meaning, SPSS will show the different interactions between factors.

#### 3.9 Test of Validity and Reliability

At the beginning, the investigator had to acknowledge the questionnaire's face legitimacy. Face validity can be defined as a feeling that it feels like the questionnaire weighs what it was meant to evaluate. In order to reflect on the research topic and goals, the questions were phrased and the alternatives for answering were organized appropriately. The accuracy of content is also generally one of the first methods to guarantee that a questionnaire or other metric is valid. The investigator therefore included objects in the questionnaire which identified the impact of significant securities on the procurement processes in Ghana. The investigator also determined the validity of the criterion. This was performed by monitoring respondents at their duty desk to see how the findings of the questionnaire relate to their real work performance in their different agencies.

The investigator retained consistency in the issues that were requested to guarantee accuracy. These were accomplished by rehashing questions to ensure that the participants provided accurate answers, which also implied that if the participants were asked the same questions after the study, the same results could be obtained by the researcher.

# CHAPTER FOUR PRESENTATION OF RESULTS

# **4.1 Introduction**

This chapter present the results of the study. The chapter is divided into four parts. Part one discusses the respondent's profile whiles part two presents results on the types of significant securities applied in the procurement processes. Part three present the regression results on the effects of significant securities on the procurement processes in Ghana. Part four presents the results for the identified challenges in using significant securities in the procurement processes.

# PART ONE: RESPONDENT'S PROFILE

# 4.2 Respondent's Profile

# Table 4.1 Respondent's Profile

		Frequency	Percent
Gender	Male	30	56.6
	Female	23	43.4
	Total	53	100.0
Age	21 - 25 years	6	11.3
	26 - 30 years	10	18.9
	31 - 35 years	16	30.2
	35 - 40 years	13	24.5
	41 45 years	6	11.3
	46 - 50 years	2	0.01
	Over 50 years	0	0.0
	Total	53	100.0
Highest Qualifications	HND	9	17.0
	Bachelors' Degree	19	35.8
	Masters	16	30.2
	Doctorate	6	11.3
	Others please specify	3	0.1
	Total	53	100.0
No. of Years in Institution	1 year	10	18.9
	2 - 3 years	14	26.4
	4 - 5 years	18	34.0
	6 years and above	11	20.8
	Total	53	100
Position in Organization	Site Engineer	6	11.3
	Contract Manager	18	34.0
	Procurement Officer	23	43.4
	Project Manager	6	11.3
	Others please specify	0	0
	Total	53	100

(Source: Research Field Work, 2019)

Table 4.1 indicates the profile of respondents. With regards to gender, thirty (30) respondents representing 56.6% were male whiles twenty-three (23) representing 43.4% were female. This is an indication that, men participated in the study than women.

Taking age of respondents into consideration, their ages were group into the following form; 21 -25; 26 – 30; 31 – 35; 36 – 40; 41 – 45; 46 – 50 and older than 50 years. As evidenced in Table 4.1, nine (9) of the respondents representing 17.0% lingered among the ages of 21 -25 years, whereas ten (10) representing 18.9% lingered among the ages of 26 – 30. Sixteen (16) of the participants representing 30.2% lingered among the ages of 31 – 35, whereas thirteen (13) representing 24.5% lingered among the ages of 36 – 40 years. Six (3) of the participants representing 11.3% lingered between the ages 41 - 45 years whiles two (2) of the respondents representing 0.01% lingered among the ages of 46 - 50 years. Neither of the participants were over 50 years of age.

Considering the highest level of education of respondents, the study revealed that, nine (9) of the respondents representing 17.0% indicated that they held Higher National Diploma (HND) certification whereas nineteen (19) of the participants representing 35.8% specified that they held bachelors' degree. Sixteen (16) respondents representing 30.8% said they attained master's degree while six (6) respondents representing 11.3% are doctorate holders. Three (3) of the respondents mentioned other qualifications such as professional qualification.

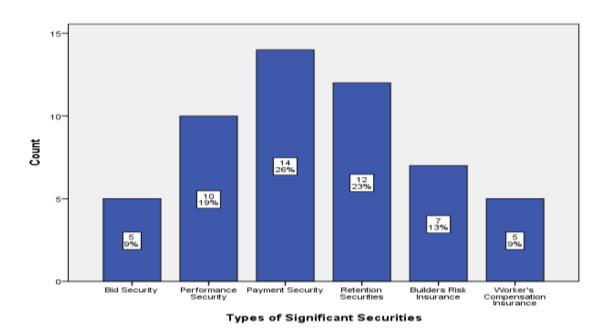
Additionally, respondents were asked to determine the number of years they have been working in their various departments. As indicated in Table 4.1, ten (10) of the respondents representing 18.9% indicated that that they have been working in their various department for about one-year whiles fourteen (14) of them representing 26.4% indicated that they have been working in the department from 2 - 3 years. Eighteen (18) of the participants representing 34.0% specified that they have been working in the department from 3 - 4 years whiles eleven (11) of them mentioned that they have been working in their various departments for about one-years.

Respondents were also asked to determine the positions they hold in their various departments. As seen above, six (6) of the respondent representing 11.3% indicated that they are site engineers whereas eighteen (18) of the participants representing

34.0% point out that they are contract managers. Twenty-three (23) of the respondents representing 43.4% mentioned that they are procurement officers whilst, six (6) of them representing 11.3% indicated they are project managers.

# PART TWO: TYPES OF SIGNIFICANT SECURITIES

This part of the study sought to identify the various types of significant securities used in the procurement processes in Ghana. Respondents were asked to indicate the type of significant securities used in their procurement processes.

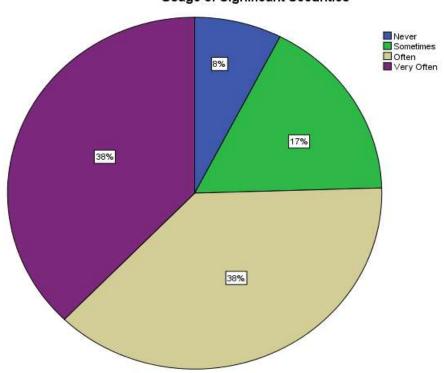


# **4.2 Types of Significant Securities**

**Figure 1 Types of Significant Securities** 

(Source: Research Field Work, 2019)

This issue was posed in order to determine types of significant securities employed by the various departments in their procurement processes. As shown in Figure 1, 9% of the respondents indicated that they use bid security whiles 10% of the respondents indicated that they use performance securities in their procurement processes. 14% of the respondents also indicated that they use payment securities in their procurement processes whiles 12% of the respondent mentioned return securities, 7% of the respondents said they use builders risk insurance. 5% of the respondents said they use worker's compensation insurance in their procurement processes. This indicate that, various significant securities are being employed in the procurement processes in Ghana.

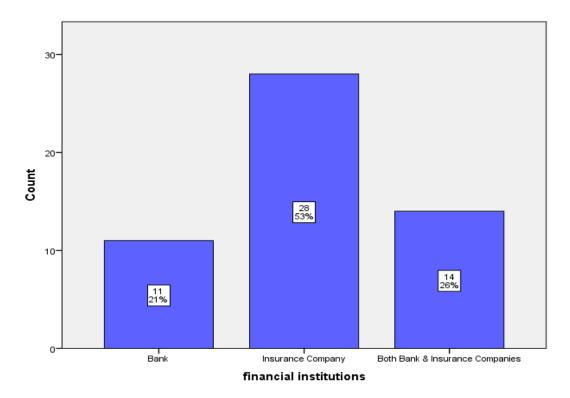


**Usage of Significant Securities** 

Figure 2 Use of Significant Securities

(Source: Research Filed Work, 2019)

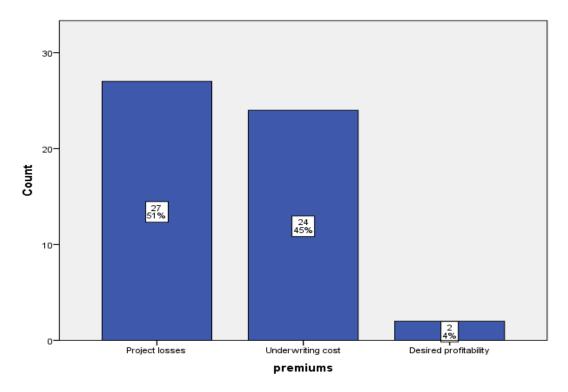
This was to determine how often do respondents use significant procurement in their procurement processes. Figure 2 shows that 8% of respondents indicated that they never used significant securities in their procurement processes whiles 17% of the respondents indicated that they sometimes use significant securities when procuring public goods and services. 38% of the respondents indicated that they often use significant securities in their procurement processes whiles another 38% of the respondents said they very often use significant securities in their procurement processes. This is an indication that significant securities are commonly used in the public procurement process for goods, works and services.



**Figure 3 Financial Institutions** 

(Source: Research Field Work, 2019)

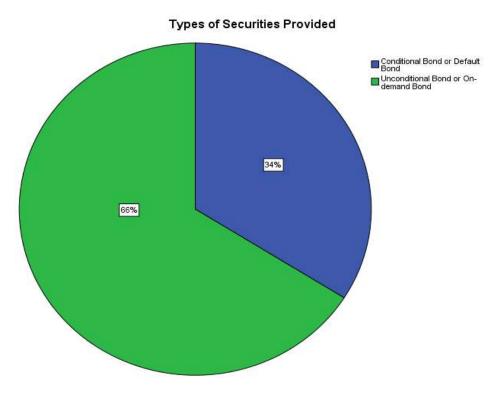
This was to define the type of financial institutions which provides significant securities to clients in their procurement processes. Figure 3 indicate that 21% of the respondents mentioned that they receive significant security certificates from the banks whiles 53% of the respondents indicated that they receive significant security certificates from insurance companies. On the other hand, 26% of the respondents mentioned that they receive significant security certificates from both the banks and insurance companies. This is an indication that significant security can be issued by either a bank or an insurance company.



**Figure 4 Decision for Premium on Securities** 

(Source: Research Field Work, 2019)

This was noticed from participants the basis upon which the premium on significant securities are paid on. Figure 4 shows that, 51% of the respondents indicated that the premium paid on significant securities are based on the project losses whiles 45% of the respondents said it is based on underwriting cost. On the other hand, 2% of the respondents said the premium on significant securities are paid based on the desired profitability of the project. This indicate that there are varied reasons for paying premium on significant securities.



**Figure 5 Types of Securities Provided** 

(Source: Research Field Work, 2019)

This was to identify the kind of significant securities clients are being required to provide. Figure, 5 shows that 34% of the respondents mentioned that they require their clients to provide conditional bond or default bond whiles 66% of the respondents said they require their clients to provide unconditional bond or on-demand bond. This indicates that clients are either required to provide conditional bond or unconditional bond when providing significant securities in the procurement processes.

### PART THREE: EFFECTS OF SIGNIFICANT SECURITIES ON THE PROCUREMENT PROCESS

During the study, several factors of significant securities were identified to have an effect on the procurement processes. Respondents were asked to indicate their opinion and experience to predetermined factors that have influence on Procurement Security based on a five-point Linkert scale: 1 =Strongly agree 2 =Somewhat agree; 3 =Agree; 4 =Disagree; 5 =Strongly disagree. The linear regression was used to highlight the various relationships between variables using ANOVA/F-test for significance.

#### 4.3 Inferential Statistics

This section discussed the effects of significant securities on the procurement processes in Ghana. The study used the linear regression in establishing the correlation between the predictors (independent variables) and the response variable (dependent variable).

#### 4.3.1 Regression Analysis

The linear regression was used to analyse the correlation between the independent and dependent variables. This was done by first performing the coding in an Excel sheet before uploading it onto the SPSS platform to determine the measurement of the linear regression for the study.

Model	R	<b>R</b> Square	Adjusted Square	Std Error of the Estimate
1	0.675	0.524	0.302	0.5234

(Source: Research Field Work, 2019)

Table 4.3.1 shows the correlation coefficient (R) which establishes the relationship between the independent variables and the dependent variables is 0.675 (67.5%). This is an indication of a direct and positive relationship between the significant securities and procurement processes in public procurement in Ghana. However, the coefficient of variation which represents the  $R^2$  of 0.524 indicates that significant procurement can explain 52% of the variability of influencing the procurement processes in public procurement. This means that the variables which were not included in the study shows 48% variation in financial inclusion of the unbanked in Ghana.

#### 4.3.2 ANOVA Results

Table 4.3.2 shows the ANOVA of regression model for the study. The results show the F statistics p value of 0.0041. The F ratio indicated in the ANOVA table examines either the entire regression model is fit for the data collected.

Model	Sum of Square	df	Mean Square	F	Sig
Regression	21.981	8	4.769	13.006	0.0041
Residual	47.876	45	1.731		
Total	69.827	53			

(Source: Research Field Work, 2019)

Therefore, as the tests in Table 4.3.2 shows the p value of the F statistics is less than 0.05, the coefficient in the equation was fit for the studies. This is an indication that the regression model is fit for the data collected and significant securities statistically significantly influenced the procurement processes in public procurement in Ghana.

#### 4.3.3 Interpretation of the Results

This study used the linear regression analysis to establish the relationship between the independent variable and the dependent variable. Table 4.3.3 presents the regression results which was determined through SPSS. The regression equation is as follows;

#### $Y=\alpha+\beta_1X_1+\epsilon$

 $Thus = Y = 3.521 + 0.814X_1 + \epsilon$ 

#### **Table 4.3.3 Coefficient of Determination**

		Unstandardized		Standardized	
	Model	Coefficients		Coefficient	Т
-		Beta	Std. Error	Beta	
1	Constant	3.521	0.152		9.191
	Significant Securities	0.814	0.205	0.308	5.236

(Source: Research Field Work, 2019)

Table 4.3.3 indicates that significant securities significantly influence the procurement processes in public procurement in Ghana with a coefficient value of 0.814. This suggest that significant procurement influences the public procurement processes by 81.4%. This also means that a unit increase in significant securities will result in an increase of 81.4% in the procurement processes. In other words, if the level of significant securities increases, the level of procurement processes also increases. Finally, at a 5% significant level and 95% confidence level, significant securities significant securities to financial inclusion of the unbanked in Ghana.

### PART IV: CHALLENGES USING SIGNIFICANT SECURITIES IN THE PROCUREMENT PROCESSES

This part of the study was to determine the challenges faced by these public institutions in using significant securities in their procurement processes in Ghana. During the literature review, several challenges in using significant securities in the procurement processes were identified and assessed. As a result, respondents were asked to rate the significance level of the challenges indicated in the questionnaire using the Linkert scale. The results are presented in Table 4.4 below.

#### 4.4 Challenges in using Significant Securities in Procurement Processes

This was to determine the challenges in using significant securities in the procurement processes in Ghana. The mean score and standard deviation were used as a statistical tool in determining that. A criterion is seen to be significant if its mean is 3.5. in a situation where the means of two or more are equal, the one with the least standard deviation is accorded the highest significance ranking.

Item	Statement	Mean	Std. Deviation	Ranking
	Organizations are unable to financially			
1	meet the security requirement	2.41	0.9832	7th
	Satisfying bid security delays as a			
	result of investigating defaults in			
2	meeting project requirements	4.56	0.6754	5th
	Financial institutions and other related			
3	parties' charges high on securities	4.97	0.5421	1st
4	Limited scope of responding to surety	3.65	0.4326	4th
	It takes longer period for surety of			
5	security to be realised	4.67	0.6542	3rd
	Remedy does not cover the full cost of			
6	the loss	4.87	0.7439	2nd
	Procurement security makes the bid			
7	price very expensive	4.43	0.3289	6th

Table 4.4 Challenges in using Significant Securities in Procurement Processes

(Source: Research Field Work, 2019)

As indicated in Table 4.4, it was revealed that 'financial institutions and other related parties charges high on securities', 'remedy does not cover the full cost of loss', 'it takes longer period for surety of security be realised', 'limited scope of responding to surety', 'satisfying bid security delays as a result of investigating default in meeting project requirement' were identified as the main challenges in using significant securities in the procurement processes in Ghana with means above 3.5.

#### 4.5 Discussions of Results

The investigation was performed to determine the effects of significant securities on the procurement processes in Ghana. As evidenced in the results, there men participated more than female respondents in the study. The ages of respondents for the study were between 21 - 50 years. indicating that respondents were matured enough to respondent accurately to the study. Additionally, it was revealed that respondents attained various degree of education to be able to administer the questionnaires by themselves. Respondents also worked with their various institutions from 1 year and above to be able to understand the effects of significant securities in the procurement processes. The positions of respondents were also determined including site engineers, contract managers, procurement officers and project managers. This means that respondents worked in various capacities in the procurement of goods, works and services to contribute meaningfully to the study.

With regards to the types of significant securities employed by the institutions in their procurement processes, the study revealed that there are several significant securities that are being employed in the procurement of public goods, works and services. Payment securities, retention securities, performance securities, builders risk insurance, bid securities and worker's compensation securities were determined to be the types of securities employed in the procurement process for goods, works and services. The study also revealed that the payment security, performance security and retention securities were significantly used in the procurement process. This result is consistent with the findings of Kakwezi and Nyeko (2010) and Gayed (2013) It was also revealed that; significant securities have been generally used in procuring public goods, works and services. 38% of the respondents indicated very often use significant securities in their procurement processes. This finding is in line with practice since public procurement in Ghana requires significant securities (Mrope,

2017). It was also revealed that significant securities were sourced from either a bank or an insurance company. 51% of the respondents indicated that the basis upon which the premium on securities are paid is on the project losses whiles 45 of the respondents indicated it is on the project's underwriting cost. This is an indication that the basis on which the premium on significant securities are either on the project losses or its underwriting cost. This finding is consistent with the results of Gyawli, Dahal and Maharajan (2018) and Baiden (2015).

A linear regression analysis was performed to determine the relationship between significant securities and how it influences the procurement processes in public procurement in Ghana. The results showed a direct positive relationship between the provision of significant securities and its influence on the procurement processes in procuring public goods, works and services. The regression model used in performing the analysis was considered to be significantly good fit for the data collected since its coefficient of variations was determined to be 52%. Additionally, the study revealed that the significant securities significantly influence the procurement processes in public procurement processes in Ghana indicating a coefficient value of 81%. This indicates that a unit increase in significant securities will result in an increase in the procurement processes in Ghana. Finally, at a 5% significant level and 95% confidence level, significant securities significantly contribute to financial inclusion of the unbanked in Ghana. This finding is consistent with the findings of Patrick (2011); Baiden (2015) and Mathew, Patrick and Denise (2013),

Another significant finding is that, there are several challenges in using significant securities in the public procurement procedures in Ghana. 'Financial institutions and other related parties charges high on securities', 'remedy does not cover the full cost of loss', 'it takes longer period for surety of security be realised', 'limited scope of responding to surety', 'satisfying bid security delays as a result of investigating default in meeting project requirement' were identified as the main challenges in using significant securities in the procurement processes in Ghana with means above 3.5. this shows that, all the factors identified significantly challenges the use of significant securities in the procurement procedures in Ghana. These findings are consistent with the results of Budu (2014).

#### **CHAPTER FIVE**

### SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter presents the summary of findings, the conclusion and recommendations are made.

#### **5.2 Summary of Findings**

The study was conducted to determine the effects of significant securities on the procurement processes in Ghana. The results showed that there were more men respondents than female respondents in the study with age ranging from 21 to 50 years. Additionally, it was revealed that respondents attained various degree of education to be able to administer the questionnaires by themselves as well as working in various capacities in their respective departments and as long as above 6 years.

#### **5.2.1 Types of Significant Procurement**

With regards to the types of significant securities employed by the institutions in their procurement processes, the study revealed that there are several significant securities that are being employed in the procurement of public goods and services. Payment securities, retention securities, performance securities, builders risk insurance, bid securities and worker's compensation securities were determined to be the types of securities employed in the procurement public goods, works and services. The study also revealed that the payment security, performance security and retention securities were significantly used in the procurement process.

#### 5.2.2 Effects of Significant Securities on the Procurement Processes

A linear regression analysis was performed to determine the relationship between significant securities and how it influences the procurement processes in public procurement in Ghana. The results showed a direct positive relationship between the provision of significant securities and its influence on the procurement processes in procuring public goods, works and services. Additionally, the study revealed that the significant securities significantly influence the procurement processes in public procurement processes in Ghana indicating a coefficient value of 81%. Finally, at a 5% significant level and 95% confidence level, significant securities significantly contribute to financial inclusion of the unbanked in Ghana.

#### **5.2.3** Challenges in Using Significant Securities in the Procurement Processes

The study also revealed that, there are several challenges in using significant securities in the public procurement procedures in Ghana. 'Financial institutions and other related parties charges high on securities', 'remedy does not cover the full cost of loss', 'it takes longer period for surety of security be realised', 'limited scope of responding to surety', 'satisfying bid security delays as a result of investigating default in meeting project requirement' were identified as the main challenges in using significant securities in the procurement processes in Ghana with means above 3.5. this shows that, all the factors identified significantly challenges the use of significant securities in the procurement processes in Ghana.

#### **5.3** Conclusion

During the study, it was evidenced that procurement securities ensure bids are submitted in good faith. Additionally, significant securities make sure that project performance are done in accordance to specifications and standards and also protect clients against default at the end of the defects liability in the road sector. With the current huge number of infrastructure development projects in Ghana, it is significant to acquire the financial as well as technical requirement before starting the implementations of such projects. It is indicated from the collected data of this study that most of the domestic construction firms have acute financial scarcity to execute and complete their project. The analysis of the collected data appears to suggest that significant securities have significant effect on the procurement processes in Ghana.

This study provides evidences that 'Financial institutions and other related parties charges high on securities', 'remedy does not cover the full cost of loss', 'it takes longer period for surety of security be realised', 'limited scope of responding to surety', 'satisfying bid security delays as a result of investigating default in meeting project requirement' were identified as the main challenges in using significant securities in the procurement processes in Ghana.

#### **5.4 Recommendations**

It is recommended that; financial institutions and other institutions should be able to provide significant securities to reduce the safety margins set as collateral for securing bank guarantees and loans for construction in the country. Secondly, it is recommended that, public institutions should be able to determine the suitability of clients such as technical, financial and managerial skills when procuring public goods, works and services. Lastly, procurement agencies and companies should also ensure that they acquire the required securities, technical and managerial abilities before undertaking a construction job in Ghana.

#### **5.4.1 Recommendations for Future Research**

It is recommended that; future studies should be conducted on the challenges faced by contractors in procuring securities in the procurement processes. Additionally, further studies should be conducted to determine the minimum and maximum cost charged on procurement securities in Ghana.

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To whom it may concern

Dear Sir/Madam,

## Invitation to participate in a research topic "the effect of significant securities in procurement process in Ghana"

Please I am a Graduate student from Kwame Nkrumah University of Science and Technology conducting research into "effect of significant securities in procurement process in Ghana. I respectfully request you to assist in finding solution to the above project topic, which will help to proffer solution to my problem. You can be assured that information you provide will be treated with the strictest confidence and will be used only for the purpose of this research. This research is entitled "THE EFFECT OF SIGNIFICANT SECURITIES IN PROCUREMENT PROCESS IN GHANA"

The questionnaire will take 10 to 15 minutes. All your responses will be treated with strict confidentiality and used only for academic purpose. Your views are valuable for the success of this research. After the research, we are willing to share a summary of the outcomes with practitioners in Ghana and anyone who shows interest. For any enquiries, please contact **Frank Osafo Owusu** [Tel.: **0243-585857/0207925858**; & email: <u>fosafo74@gmail.com</u>].

Sincerely,

FOO

Frank Osafo Owusu (MSc Student)

Mr. Joe Kingsley Hackman, Supervisor.

Department of Department of Construction Technology and Management

The Kwame Nkrumah University of Science and Technology, Ghana

#### APPENDIX

#### **QUESTIONNAIRE**

#### Introduction

I am a student of the Kwame Nkrumah University of Science and Technology conducting a study on the topic: "THE EFFECT OF SIGNIFICANT SECURITIES IN PROCUREMENT PROCESSES IN GHANA". I would be very grateful if you could complete this questionnaire for me. I assure you that all responses given will be treated confidentially and used for academic purpose only.

#### PART ONE

#### **RESPONDENT'S PROFILE**

Please tick ( $\sqrt{}$ ) appropriate box (es)

#### 3) No, OF YEARS IN THE INSTITUTION

 $\Box 1$  year  $\Box 2$  -3 years  $\Box 4$  - 5 years  $\Box 6$  years and above

#### 4) POSITION IN ORGANIZATION

#### Please tick ( $\sqrt{}$ ) appropriate box(es)

□Site Engineer

□Contracts Manager

 $\Box$ Procurement Officer

□Project Manager

□Other .....please specify

5) What type of securities and guarantees are you getting from your financial institution?

- $\square$  Bid security
- □ Performance security
- □ Payment security
- □ Retention Securities
- □ Builders risk insurance
- □ Worker's Compensation insurance

#### PART TWO: TYPES OF SIGNIFICANT SECURITIES

- 1) How often does your institution use securities in their procurement of road infrastructure?
- $\square$  Never
- $\square$  Sometimes
- $\Box$  Often
- □ Very Often
- 2) What type of securities do you provide to your clients?□ Conditional bond or default bond
  - $\hfill\square$  Unconditional bond or on-demand bond
- 3) What form of financial institution provides you the kind securities provided to clients?
  - $\square$  Bank
  - □ Insurance company
  - □ Others (Please specify) .....
- 4) The premiums paid for the securities are based on ....□ Projected losses
  - □ Underwriting costs
  - □ Desired profitability

# PART THREE: EFFECTS OF SIGNIFICANT SECURITIES ON THE PROCUREMENT PROCESS

It has been identified that the following factors have influence on Procurement Security, please kindly rate the following factors according to your opinion and experience as:

1 = Strongly agree 2 = Somewhat agree; 3 = Agree; 4 = Disagree; 5 = Strongly disagree.

No	Statement	1	2	3	4	5
	EFFECTS					
1	Procurement securities transfers					
	performance and financial risk to the surety					
2	Procurement security ensures that bid prices					
	are guarantee					
3	Procurement security provides payment					
	protection for subcontractors and suppliers					
4	Procurement security ensures commitment					
	from all stakeholders					
5	Procurement securities ensures that the					
	performance on the project is protected					
6	Procurement securities ensures that projects					
	are covered to its limits					
7	Protection for unforeseen event or loss					
8	It ensures that the parties to a project are					
	well qualified for the job (independent, third					
	party prequalification)					
9	Provide protection in the event that the					
	contractor is unable or unwilling to perform					
10	Guarantee against default at the end of the					
	defect liability period					
11	Ensures bid is submitted in good faith					
12	Ensures contractor enters into the contract at					

**EFFECTS OF SIGNIFICANT SECURITY ON PROCUREMENT PROCESSES** 

	the bid price			
13	Ensures that contractors provide the required			
	performance and payment bonds			
14	Retention securities protect clients against			
	default at the end of the defects liability			
15	A payment security guarantees payment to			
	contain subcontractors and supplies			
16	A payment security allows advance			
	payments under an awarded contract to			
	enable initial purchase			
17	Payment securities allow subcontractors to			
	make claims and recover for unpaid labour			
18	Performance compensation insurance			
	provides cover for injured employees			
20	Builders risk insurance covers losses or			
	damages			
21	Reduce the risk of default			
22	Ensures bid is submitted in good faith			

### PART FOUR: CHALLENGES USING SIGNIFICANT SECURITIES IN THE PROCUREMENT PROCESSES

#### Directions

The following factor has been identified as challenges in using significant securities in the procurement processes. Please kindly rate the following according to your opinion and experiences;

No	Statement	1	2	3	4	5
	Challenges					
1	Organizations are unable to financially meet					
	the security requirement					
2	Satisfying bid security delays as a result of					
	investigating defaults in meeting project					
	requirements					
3	Financial institutions and other related					
	parties' charges high on securities					
4	Limited scope of responding to surety					
5	It takes longer period for surety of security					
	to be realised					
6	Remedy does not cover the full cost of the					
	loss					
7	Procurement security makes the bid price					
	very expensive					

1= Strongly Disagree; 2= Disagree; 3= Neutral; 4= Agree; 5= Strongly Agree

8) Please kindly indicate in the spaces below, any suggestions or critical factors which you deem necessary to improve performance.

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