

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND
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THE EFFECT OF FINANCIAL IRREGULARITIES ON THE ECONOMIC
PERFORMANCE OF THE GHANAIAN ECONOMY: THE MEDIATING
ROLES OF INTEREST AND INFLATION RATES

By

ABABIO DANQUAH AKUAMOAH (MSC. ACCOUNTING AND FINANCE)

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DECLARATION

I hereby declare that this submission is my original work towards the award of the MSc Accounting and Finance, and therefore, to the best of my knowledge, it contains no material already published by another person (s), or any material which has been accepted for the award of any other degrees of the university or elsewhere, except where due acknowledgement has been made in the work.

Ababio Danquah Akuamoah

(PG 9349821)

Signature

Date

Certified by:

Dr. Evans Agalega

(Supervisor)

Signature

Date

Prof K.O. Appiah

(Head of Department)

Signature

Date

DEDICATION

I dedicate this academic work to my dearest wife, Aboagye-Agyepong Lydia and my children, Ababio Antwi Aidan and Ababio Aboagye Bethia for their prayers, advice and support towards the successful completion of my study.



ACKNOWLEDGEMENT

I wish to express my gratitude to the Almighty God for giving me the grace and strength to be able to go through the academic work including this piece together successfully. My heartfelt gratitude goes to my supervisor in the person of Dr. Evans Agalega for painstakingly ensuring that this work was successfully executed. Finally, all others who directly or indirectly greatly supported in ensuring this work came out well and met the accepted standards are greatly appreciated.

God bless everyone.



ABSTRACT

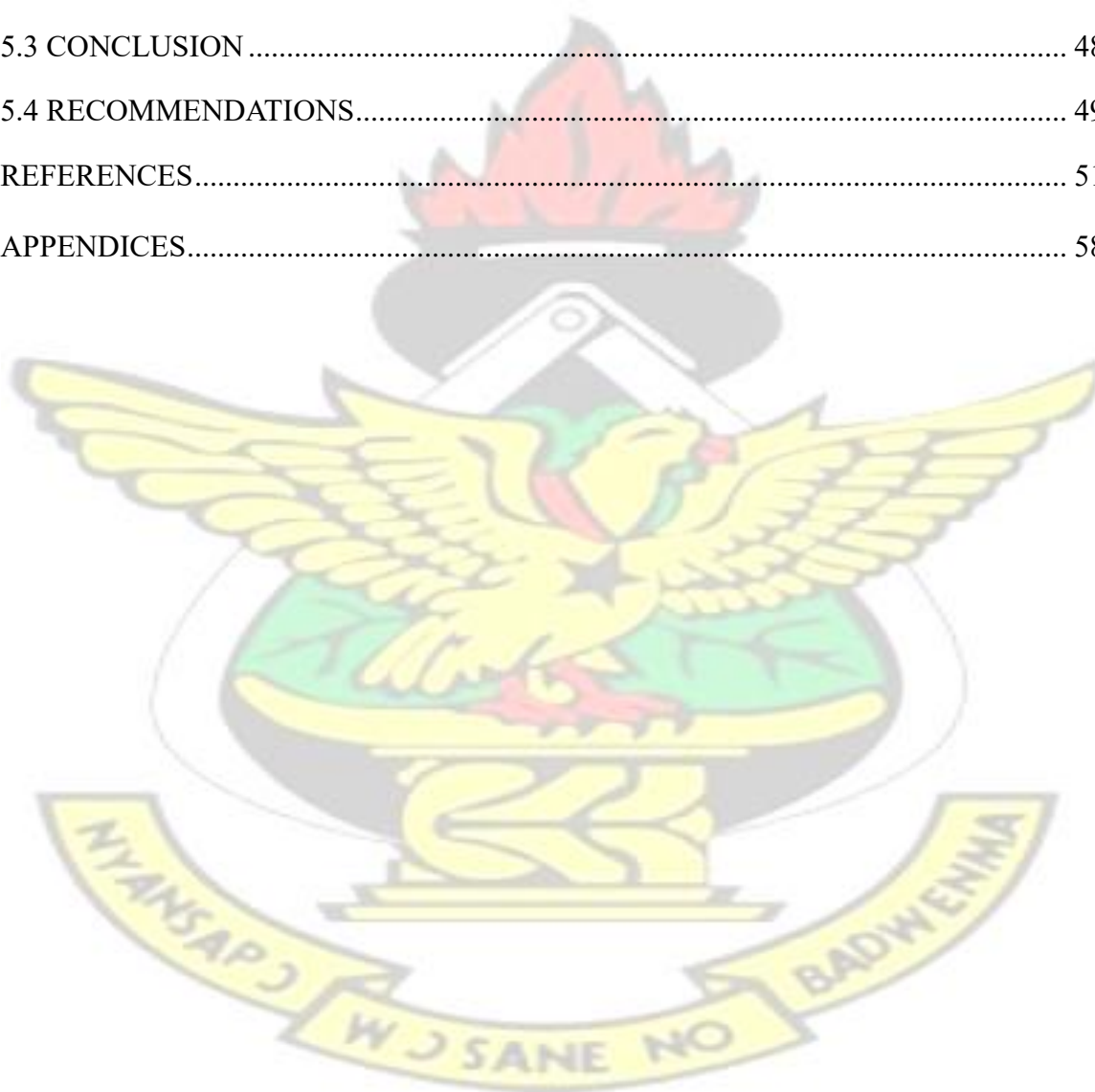
The purpose of the study was to examine the effect of financial irregularities on the economic performance of the Ghanaian economy: The mediating Roles of interest and inflation rates. The following are specific objectives of the study are to establish the relationship between financial irregularities (tax, cash, procurement and stores) and economic performance (GDP) of Ghana, to determine the effects of macro-economic variables (Interest Rate and Inflation Rate) on economic performance (GDP) of Ghana, and to determine mediating role of macro-economic indicators on the relationship between financial irregularities and economic performance in Ghana. A time series data relating to the variables was collected covering the period of 1990 to 2022 for the analyses. The Pearson correlation, multiple linear regression and structural equation model was used to analyse data. The study found that relationship between economic performance and financial irregularities, demonstrated a relatively strong positive statistically significant link between financial irregularities and GDP between 1990 and 2022. The study also revealed that inflation has a significant and positive influence on economic performance. Moreover, interest rate has a significant and positive effect on economic performance. The result indicated that the relationship between financial irregularities and economic performance is mediated by both interest rate and inflation rate. The study recommends prudent measures to be taken to prevent financial irregularities and control inflation and interest rates.

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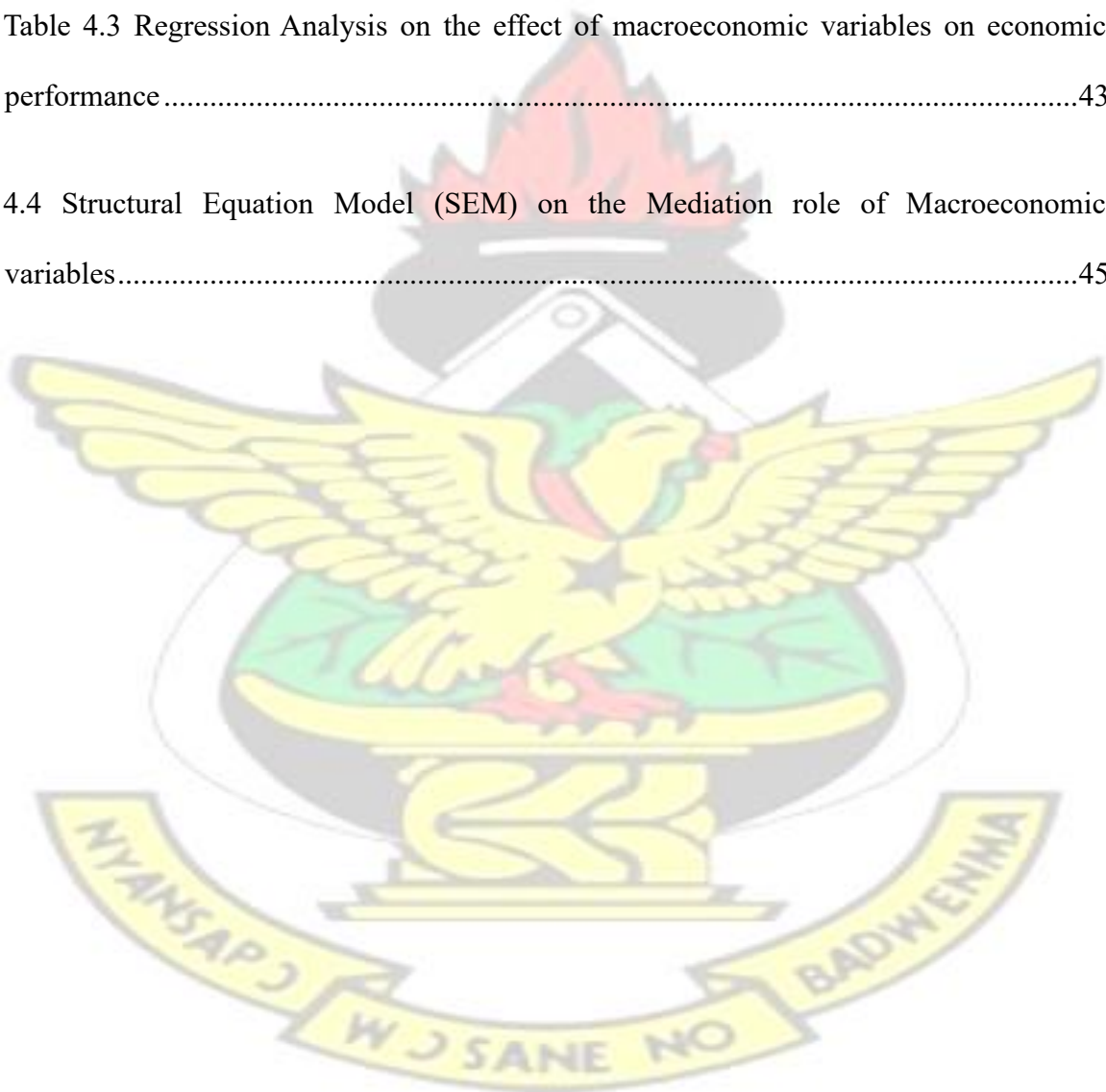
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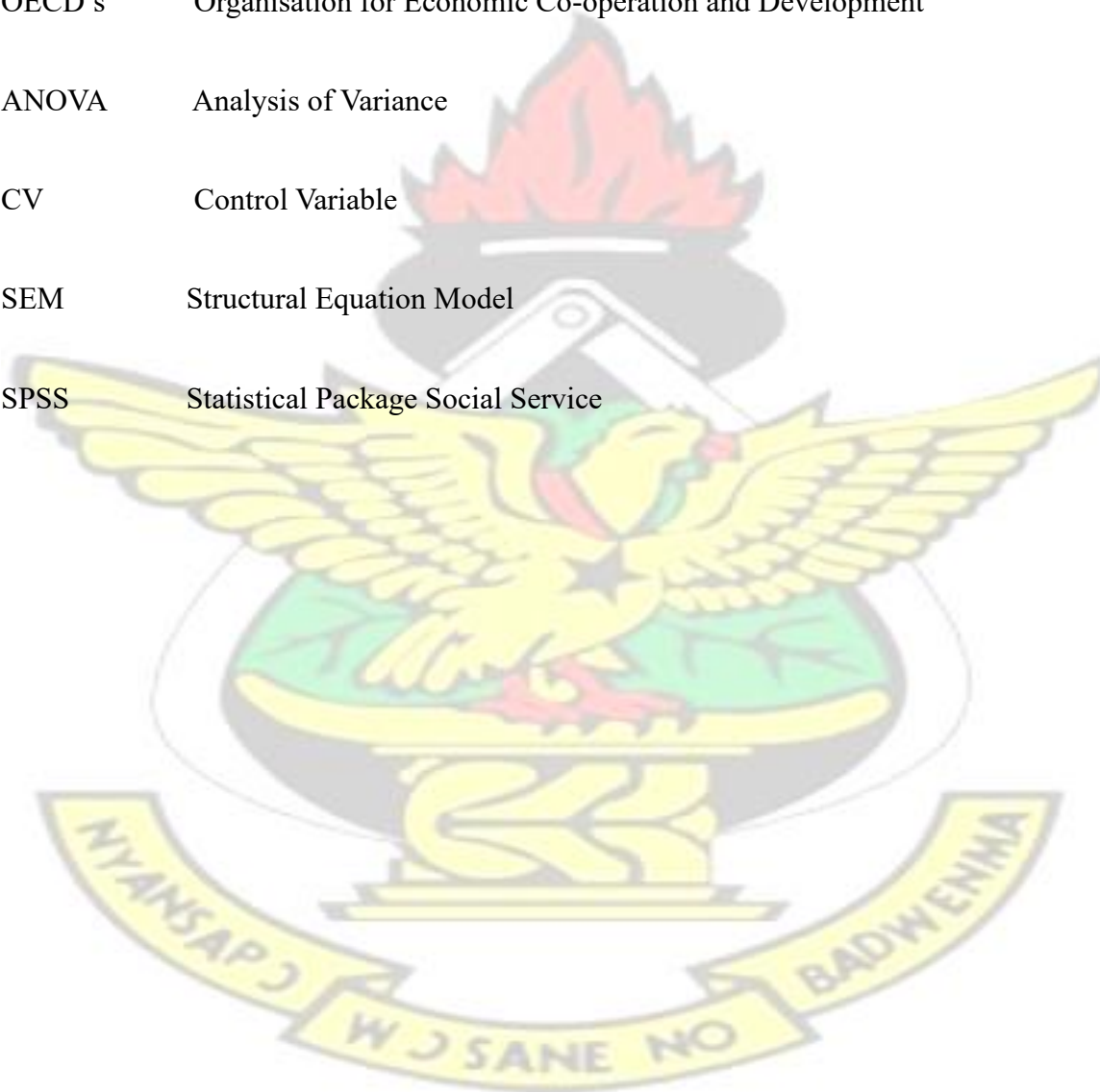
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LIST OF ABBREVIATIONS

ICT	Information Communication and Technology
AG	Auditor General
GDP	Gross Domestic Product
OECD's	Organisation for Economic Co-operation and Development
ANOVA	Analysis of Variance
CV	Control Variable
SEM	Structural Equation Model
SPSS	Statistical Package Social Service



CHAPTER ONE

INTRODUCTION

BACKGROUND OF THE STUDY

The board that controls Government-owned asset, councils, and/or management must guarantee that the public resources entrusted to their care are preserved and free from financial or budgetary irregularities, mistakes of all types, and unlawful spending of money. Such major financial irregularities may negatively affect the business or institution, the offenders, and the expansion and growth of the economy as a whole. The Auditor General's Report on the Public Accounts of Ghana (2019) states that financial irregularities either represent savings that the state had endured due to impropriness or a lack of integrity in the activities and judgments of public officials' losses that the state had endured as a result of their behaviour violating the public financial administration established to regulate their behaviour and protect public funds.

Seven (7) primary variables—tax irregularities, cash irregularities, unpaid debt, payroll irregularities, stores/procurement irregularities, rent irregularities, and contract irregularities—are used to measure these financial abnormalities. The purpose of this study is to look at how financial irregularities affect Ghana's overall economic growth and development. People have experienced similar negative effects of recent financial irregularities, such as job loss and legal action, institutions have experienced closures and mergers and acquisitions, and the economy has suffered overall. These results have slowed down economic growth and advancement (Bank of Ghana, 2019).

On the other hand, Estrin et al. (2018) conclude that good associated administration is a need, not a luxury, for effective financial management. The public consistently expects the

efficient use of public resources in an era of growing interest in transparent, accountable, and responsible governance. As a result, how effectively assets are seen to be handled or cared for has an impact on the public's faith in the government and its institutions. According to Deegan (2019), who used regression analysis to assess the impact of extortion as well as associated financial crimes on the development and growth of the Nigerian economy, the impact of misrepresentation and related financial crime on the Nigerian economy is significant, whereas extortion and financial crime have little to no effect on inflation.

The recommendations included enhancing internal control mechanisms to counter opportunities that attract extortion criminals and enhancing the ability of the National Assembly to monitor public officials and hold them accountable. Additionally, because fraudsters are now employing advanced strategies, auditors and accountants in businesses and financial institutions must acquire training on the most effective way to carry out the measured inquiry. The findings recommend that internal control frameworks be improved to block opportunities that attract extortion criminals and that the National Assembly's oversight capacities be strengthened to hold public officials responsible. Given the sophistication of today's fraudsters' strategies, it is also recommended that auditors and accountants in enterprises and financial foundations acquire training on how to do quantitative assessments successfully.

The findings suggest that internal control frameworks be reinforced to thwart chances that draw extortion criminals and that the monitoring capabilities of the National Assembly be bolstered to hold Accountability of public authorities. It is also crucial that auditors and accountants in businesses and financial foundations receive training on how to correctly

carry out a quantitative evaluation, given the sophistication of today's fraudsters' techniques. Extortion results in bank disappointment and liquidation, which have a detrimental effect on money collection and credit distribution in the economy, according to Ambe and Ebi's study from 2022 on the effect of defilement on the growth and improvement of the Nigerian economy.

Similarly to this, several research has shown that financial and budgetary crimes have increased despite strict approach standards being implemented in both developed and developing countries. For instance, it was determined that industrialized and developing countries together pay out \$1.5 trillion to \$2 trillion annually (or more than 2% of global GDP) (Hug, 2020). In 2014, there were still more than US\$1 trillion in illicit financial flows (IFFs) from developing and emerging countries, according to a 2017 analysis by Global Financial Integrity. The poor in developing nations may wind up paying 6.4 to 12.6 per cent of their salary in debt due to the greater possibility of financial and budgetary violations (World Bank, 2017).

The number one public enemy in rising nations, above other financial and budgetary issues, was classified as corruption (Williams-Elegbe, 2018). Corruption is seen as notably impeding the dual goals of lowering acute neediness by 2030 and increasing shared prosperity for the unfortunate 40% of people in emerging countries. This suggests that corruption impedes economic growth and the progress of the poor (World Bank Group, 2017). Before external auditors from external audit arrive to examine the financial summary, it becomes essential to build systems, structures, and procedures that may avoid, detect, and identify anomalies or irregularities connected to fakes, and mistakes. To assist managers in safeguarding and defending associations' assets, cash, and other resources,

notably in the public sector, all types of businesses or organizations are required to establish units responsible for both internal and external auditing as part of their current financial-related administration functions. This study will highlight the circumstance as it relates to the Ghanaian economy.

1.2 STATEMENT OF THE PROBLEM

Financial irregularities may harm both established and developing countries' economies, according to studies. Financial irregularities have a considerable impact on the Nigerian economy, but other types, such as extortion and crimes involving money, have little to no impact on growth, according to (Adegboyo et al, 2021; Saddiq and Abu-Bakar (2019); Quansah, 2021;). The finest methods for passing legal tests should be taught to financial institution auditors and accountants, it is suggested. This is due to the intricacy of fraudsters' contemporary business operations, which calls for strengthening both the National Assembly's oversight abilities to hold public officials accountable and the external control frameworks to thwart fraudsters' opportunities.

Unpredictability in finances has the potential to erode economic stability and impede long-term progress. Gaining knowledge of the particular ways in which anomalies impact the Ghanaian economy can be extremely beneficial in identifying strategies for promoting stability and growth. Investors, both local and foreign, frequently look for transparent and reliable financial conditions. An abundance of inconsistencies could discourage investment and make it more difficult for the nation to raise money for infrastructure projects and job growth. Analysing financial anomalies can reveal information about how well-functioning

the current legal and regulatory systems are. It might point out any holes or flaws that should be fixed to build a stronger, more open financial system.

Finding trends and best practises might be aided by doing comparative research with different economies. Policy recommendations can benefit from an understanding of how other nations handle and lessen the effects of financial irregularities, as this can advance global knowledge. Uneven financial conditions can make social and economic disparities worse. Examining their impact on the economy might draw attention to the necessity of inclusive economic changes and policies that benefit a larger proportion of society. The study's ultimate goal may be to offer evidence-based suggestions to decision-makers for enhancing financial governance, lowering anomalies, and fostering economic sustainability. In views of this the study seeks to examine the effect of financial irregularities on the economic performance of the Ghanaian economy: The mediating Roles of interest and inflation rates.

1.3 OBJECTIVES OF THE STUDY

The primary objective is to examine the effect of financial irregularities on the economic performance of the Ghanaian economy: The mediating Roles of interest and inflation rates.

The following are specific objectives of the study;

- i. To establish the relationship between financial irregularities (tax, cash, procurement and stores) and economic performance (GDP) of Ghana.
- ii. To determine the effects of macro-economic variables (Interest Rate and Inflation Rate) on economic performance (GDP) of Ghana.

- iii. To determine mediating role of macro-economic indicators on the relationship between financial irregularities and economic performance in Ghana.

1.4 RESEARCH QUESTIONS

The following pertinent questions have been put up for this study's consideration to help it achieve its goals.

- i. What is the relationship between financial irregularities and economic performance of Ghana?
- ii. What are the effects of macro-economic variables (Interest Rate and Inflation Rate) on economic performance of Ghana?
- iii. What are the effects of mediating role of macro-economic indicators on the relationship between financial irregularities and economic performance in Ghana?

1.5 SIGNIFICANCE OF THE STUDY

Comprehending the ways in which financial irregularities affect the economy of Ghana might facilitate the formulation of efficacious policies and tactics aimed at alleviating the adverse consequences. The results of this study can be utilised by policymakers to develop and execute reforms that improve financial transparency, fortify regulatory frameworks, and foster sound governance. The study's conclusions emphasise the significance of an open and well-regulated financial system, which may have an impact on investor confidence. Increased investment can result from increased confidence, which promotes development and economic growth.

Understanding the particular risks connected to financial irregularities can be advantageous for businesses and financial institutions. This information can help firms protect their assets and reputation by informing risk management methods. The study might advance knowledge of the connection between financial irregularities and economic performance on a worldwide scale. Analyses conducted in comparison with other nations can reveal recurring trends and effective methods for resolving abnormalities. Initiatives to increase capacity can be influenced by the study's identification of the financial system's weak points. This entails bolstering regulatory agencies, developing financial professional training programmes, and improving the financial sector's general resilience.

Financial irregularities frequently have social repercussions, impacting marginalised groups and exacerbating income disparities. The results of the study can help shape social policies meant to lessen the effects on underprivileged populations and encourage more equal economic growth. If the investigation finds flaws in the current institutional and legal structures, it may serve as a foundation for proposing and carrying out improvements. This entails fortifying anti-corruption initiatives, bolstering law enforcement, and boosting regulatory organisations' independence. Public knowledge of the value of financial integrity and the repercussions of anomalies may be increased as a result of the study.

Knowledgeable people are in a better position to demand transparency and take part in initiatives to establish a more responsible and transparent financial environment. Financial anomalies frequently have effects across international borders. By shedding light on practical tactics and encouraging collaboration between Ghana and other countries, the study can support global efforts to combat financial crimes. The study broadens our understanding of the relationship between financial irregularities and economic

performance in scholarly research. It can act as a starting point for additional study and advance knowledge of the relationships between economic results and financial integrity.

1.6 SUMMARY OF METHODOLOGY

To evaluate the elements of changes, variations, and interruptions in connection to financial anomalies and Ghanaian financial development data, regression and correlation models will be utilized together with descriptive statistics. Secondary data from the World Bank, the Ghana Statistical Service, and Auditor General Reports will all be actively employed in this study. From 1990 through 2022, cross sectional data on yearly economic performance and financial anomalies will be included. Graphs means, and standard deviations, among other analytical tools and procedures, will be used to look into relationships and corroborate the hypotheses supporting the usage of regression processes before utilizing inferential statistical tools and techniques.

1.7 LIMITATIONS OF THE STUDY

The study uses the inflation rate and interest rates as control variables to investigate just Ghana's financial anomalies, not the country's economic growth and development, from 2000 to 2021. As far as the Ghanaian economy is concerned, this will make it easier to analyze and simulate the problems with financial irregularities that arise in the public sector.

1.8 THE SCOPE OF THE STUDY

According to the constraints, this study examines all four (4) important economic factors concerning Ghana's overall economy from 1990 to 2022. These variables comprised financial irregularities of tax, procurement, contract, and cash irregularities, as well as

economic performance as assessed by the GDP of the economy as the primary or dependent variable. The research also includes interest rates and inflation rates as additional macroeconomic factors.

1.9 ORGANIZATION OF THE STUDY

There will be five primary chapters in the thesis. The context of the inquiry, a few research questions with connected aims, the study's constraints, its importance, and the chapter's organization are all covered in the first chapter. The second chapter studies relevant literature to ascertain what is known and what is unknown as well as to identify a gap that permits the study to be conducted. The variables and methodologies used in the study are thoroughly described in the third chapter, while the presentation, interpretations, and discussions of the results from the data analysis are provided in the fourth chapter. The last chapter, which also contains the section's conclusions and provocative ideas, presents the key findings.

CHAPTER TWO

LITERATURE REVIEW

2.0 INTRODUCTION

This chapter explores the previous research conducted on the study areas to serve as a foundation for the study. The chapter is mostly concerned with examining the corpus of current literature to identify any gaps that must be filled to select the right subject based on the unknown. Utilizing conceptual, theoretical, and empirical literature will allow the review to be completed.

2.1 CONCEPTUAL REVIEW

2.1.1 Definition of Financial Irregularities

Financial irregularities are intentional inaccuracies or omissions in financial statements. The misuse of assets, often known as defalcations, and dishonest financial reporting intended to deceive the public with financial statements are examples of irregularities. A few examples of irregularities include falsifying, manipulating, or tampering with accounting records or supporting documentation used to construct financial accounts; omitting events, transactions, or other key information on purpose; and wilfully applying accounting principles incorrectly concerning quantity, categorization, presentation, or disclosure. In this sense, "financial irregularities" therefore refers to financial fraud rather than unintentional mistakes. To surpass present methods for preventing the misapplication and misappropriation of funds, best practices in accounting areas such as accounts payable, billing, credit, cash management, financial statements, the general ledger, internal audits, inventory, and payroll must be pursued zealously (Forbes, 2021).

2.1.2 Financial irregularity practices and their social perception or Construction

Examples of the two main forms of fraud that have been extensively defined in the literature asset theft and the transmission of false or misleading financial information—are included in the study under examination. These two broad categories can coexist, like in the case of managers who steal money from the business while feigning to provide certain goods or services. This method occasionally even includes selling stock in businesses that don't exist, which is pure fraud. White-collar crime, in the opinion of some experts, differs fundamentally from "regular crimes" in that it might occasionally be hard to distinguish it from going about one's daily business. This fundamental concept explains how fraud is socially formed and why it is often so easy to conceal. (Berghoff and Spiekermann, 2018).

The fraud detection industry has a fluid social structure. For instance, British private foreign commerce started to lose its former connotation of deceit in the seventeenth century, whereas the East India Company as a corporate entity came under scrutiny for providing a cloak for unethical business practices (Pettigrew, 2018). A certain amount of specificity in the description of those behaviours is needed to assess how they are socially produced. According to Van Driel (2018), the failure of L.R. Steel's US retail network in 1923 which had duped 60,000 investors was not the result of deliberate fraud since "there is nothing illegal about losing money." However, the author of the book omits from his very sparingly annotated book the information that the stock seller presented to investors on the company's financial prospects. The company has swiftly grown its network of outlets since its foundation in 1919, yet it has never turned a profit.

Government authorities and press media may and frequently do work together on scandal and fraud. Different assessments of questionable behaviour were permitted, especially where there were no quantifiable guidelines for appropriate conduct. When it came to light that George Hudson had enriched himself with company funds in 1849, when the British railway craze peaked, by inflating railroad company earnings to justify extravagant dividend payments, his reputation suffered. Government authorities and press media may and frequently do work together on scandal and fraud. When there were no quantifiable norms for appropriate behaviour, different assessments of questionable conduct were permitted. George Hudson's reputation was damaged when it was revealed that, when the British railway craze peaked in 1849, he had enriched himself with company money and overstated railroad company income to justify extravagant dividend payments. Hudson's abuse of business cash was considered adequate pay for his services, at least by some observers, but no charges were taken against him since there was no legal definition of "earnings" at the time, and directors' pay was so low Van Driel (2018).

2.1.3. Determinants and consequences of irregularities financial practices

2.1.3.1 Economic environment

Some academics believe that industrialization and the emergence of a national market economy were responsible for the growth of questionable corporate practices. This economic revolution was primarily caused by many developments. in communications and transportation. Business relationships become increasingly impersonal as a result of the lack of guidelines for acceptable behaviour in the newly developing new economic environment. The transactions included further parties, which made it more difficult to evaluate the counterparty's reliability (Balleisen, 2017). Players in the economy were

subject to growing rivalry pressure and had the opportunity to profit from growing knowledge asymmetry in their illicit actions.

Since innovations typically result in booms that are inexorably followed by busts, they were considered to be a primary underlying source of financial irregularities. As a result, people were motivated to take unjustified risks. As a result, an economy's growth may be a typical sign of impending financial irregularities and other problems. Euphoria encourages carelessness and recklessness during an upswing, which raises the possibility of fraud that goes unnoticed. When a boom is followed by a collapse or even a fright, investment losses occur, and firms attempt to hide their excessive risk-taking by appearing doubtful or committing open fraud (Van Driel, 2018).

Katti and Phani outline the invention that resulted in a significant knowledge disparity in more recent ages (2016). A typical MLM pays entry fees and/or a percentage of sales to independent product distributors who recruit distributors lower on the food chain. One poll found that the majority of MLMs are thought to be inherently dishonest. The study's authors write that "participants need to create further downline enrolment to return their initial investment and reportedly much more, as expected by the participants," but they do not specify when they believe this MLM practice became widespread. As a result, the great majority of participants' hopes for healing are both rejected and rendered impossible to realize (Katti and Phani).

2.1.3.2 Governance and Control

Managers of businesses may simply alter governance more frequently. It was a popular trick to gain credibility by adding respected companies and other people to a board who acted as "decoy ducks" or "puppets" rather than performing any oversight duties (Van Driel, 2018). While claiming that Liberator was primarily financing mortgages for small homebuyers, Jabez Spencer Balfour and his associate's utilized money from the Liberator Building Society, which Balfour had expanded from its inception in 1868 to become Britain's largest construction society, were used to finance speculative building projects by allied enterprises on a gigantic scale. (Van Driel, 2018). The company's insolvency was concealed from the public via accounting fraud, which included fabricating bogus transactions between group members to generate false profits. The manager and sole proprietor of the business, Swedish "match king" Ivar Kreuger, effectively ran a gigantic pyramid scam (Dean, 2021).

Accountants found more instances of fraud, both in the United States in the early 20th century and in Britain beginning in the 1850s (Toms, 2019). Despite these findings, research reveals that auditing was often not a particularly effective defence against financial fraud or abnormalities of any type. Auditors were held accountable for both the Balfour and Kreuger frauds as a result of their involvement in the massive US savings and loan fraud of the 1980s, which involved several accountants (Van Driel, 2018). Therefore, problematic behaviour has not been much curbed by corporate governance in more recent years either. Cheffins (2018) contends that despite almost no effective board or shareholder monitoring of CEOs during this "managerial capitalism era," the 1950s and 1960s in the

US were relatively scandal-free. Instead, he contends that CEOs' overall sense of duty and regulation kept scandals from happening during this period.

2.1.3.3 Individual traits

Oftentimes, egotistical individual players are held responsible for fraud or financial issues.

It is unusually clear what led to the main scandal waves that swept the US between 1900 and 2000: "Not all authors linger upon individual attributes as a fraud predictor but they may take malicious intentions for granted or are maybe unwilling to psychologize about the motives of the fraudsters. "Oftentimes, egotistical individual players are held responsible for fraud or financial issues. It is unusually clear what led to the main scandal waves that swept the US between 1900 and 2000: "Not all authors linger upon individual attributes as a fraud predictor but they may take malicious intentions for granted or are maybe unwilling to psychologize about the motives of the fraudsters. "Oftentimes, egotistical individual players are held responsible for fraud or financial issues.

It is unusually clear what led to the main scandal waves that swept the US between 1900 and 2000: "Not all authors linger upon individual attributes as a fraud predictor but they may take malicious intentions for granted or are maybe unwilling to psychologize about the motives of the fraudsters." Most of the time, they attribute instances of improper conduct to conceit, a desire for fame, naiveté, optimism, incompetence, - attempts to save a failing firm or cover up or make up for previous losses (Toms, 2019). Similarly to this, Van Driel (2018) when asserting that the widespread use of retail premium schemes entices customers to purchase a pricey item by adding a low-value "present," which in some cases

was little more than a lottery ticket, to an "economic need," he cites a nineteenth-century source.

2.1.3.4. Regulation

There is no question that the present regulations and laws have been utilized from the outset to combat fraud. However, a lack of manpower and resources, oversight holes, as well as conflicting legal jurisdictions, may seriously impair the government's capacity to detect and prevent fraud. Laws and other rules were frequently applied inconsistently or laxly (Del Bosque et al, 2021). Overall, however, the media played a critical role in disclosing dubious financial operations and acted as a supplement to the government's efforts to combat financial fraud or irregularities, if not a stand-in for them (Dong et al, 2018). Since Ghana's fourth republic, the bulk of financial irregularities and associated crimes have been mostly reported in the media. "Watchdog journalism" filled the "regulatory vacuum that the lack of statutory safeguards against fraud had caused" in the United Kingdom, notably from the 1840s onward. (Sless, 2022).

Journals exposed the deceit or excessive risk present in a lot of organizations, which ultimately contributed to their death. Additionally, the majority of joint-stock companies disclosed more financial information than was required by the following company laws beginning in 1844 in press reaction demands for greater transparency, which meant that the press also unintentionally forced these businesses to adopt good financial management practices. Following many scandals of the interwar period at the uncontrolled fringe of the financial system of the United Kingdom, broker regulation was tightened (De Bromhead et al., 2019).

According to Adhiambo (2022), "moral persuasion and fast procedures of regulatory correction" were the most effective antifraud tactics. The existence of oligopolies and Government Regulation in several industries also decreased the demands on established corporations in the United States to engage in hazardous economic endeavours in the decades following World War II. The strict banking law and powerful unions also restrained executives who were prone to questionable behaviour (Boschee, 2022). Many people today think that the deregulation that started in the late 1970s was what led to the major scandals that emerged in the decades since.

2.1.3.5 Consequences

Financial scandals, fraud, and anomalies have the potential to have a big impact on the economy. The business climate has been impacted by waves of scandals, according to various studies, which have led to a persistent decline in investor confidence in the institutions and enterprises involved as well as in the economy as a whole (Kizil and Kaşbaş, 2018).

2.1.4 Justification and Motive for financial irregularities' Behaviours, determinants, and Repercussions

The perpetrators and those who support them have provided a variety of justifications for the acts, factors, and outcomes.

2.1.4.1 The practices

In several recent instances of contentious behaviour, press pundits backed this "business as usual" strategy (Li and Liu, 2019). Other places offered clearer arguments for comparable actions. In a libel case in 1891, Harry Marks, a British newspaper editor and promoter, was

charged with hiding his sizeable investment in a South African mine by employing a proxy shareholder. Marks just replied, "It happens every day," and the clerk who supported Marks' actions by assuming the identity of a nominated vendor of farmland to the mine likewise echoed this sentiment (Owolabi, 2020). In Ghana, a phrase similar to this is used to describe the situation, particularly when political activists commit crimes and are thus more likely to get away with them. A Swiss trader Lloyds Bank International was accused of rogue trading in 1974., "It is obvious that I lack the competence to have been the developer of such complex concealment strategies all on my own." (Derviz, 2023).

2.1.4.2 Economic Context: economic conditions and competitive pressure

Entrepreneurs were tempted to blame macroeconomic issues, Economic crises or "panics" caused by a boom-bust cycle, economic policies, and other factors that contributed to their failure. Economic actors may purposefully frame their activities as being necessary for them to continue operating to stay in business by bending the commonly accepted "business as usual" narrative. More recently, in the aftermath of the Enron and World Com scandals in 2001 and 2002, accounting leaders blamed their unethical behaviour on increased competitive pressure. As can be shown, a climate that encourages misconduct frequently includes inexperienced investors. The most startling finding of this analysis of the literature is how long victim blaming has been employed as a highly potent defence for dubious behaviour.

Until the late nineteenth century, the British press and government usually attributed personal instances of fraud to investor greed and inexperience (Pavanelli, 2023). These victims weren't deserving of help. The main defence offered by detractors for not

prosecuting the investors' avarice was represented by Railway King George Hudson. (Sless and Sless, 2022). Nevertheless, similar attitudes were common among Americans in the nineteenth century, who looked down on "suckers" who succumbed to their greed. Similar emotions were employed in court proceedings even though there is little documentary proof of how such arguments were used in particular situations (Shakesheff, 2023). It will be shown in the sections that follow how a shifting understanding of fraud victims' culpability was a crucial motivator for the late-nineteenth-century demand for stronger regulation.

2.1.4.3 Governance and Control: entrepreneurial freedom and Auditors' Lack of Knowledge

The literature study has justified a few examples of loose control and governance, or even the absence of any regulations at all, as provided for entrepreneurial flexibility. Before his several enterprises failed in 1932, Ivar Kreuger urged "that the financial statements not be examined" and "preached a mindset that concealment was crucial to corporate success." (Prabowo and others, 2021). Similarly, James Guerin's shady business After being purchased by Ferranti in 1987, ISC was still overseen by a proxy board., according to Ferranti's long-held belief that entrepreneurs like Guerin should be allowed as much independence as feasible (Aernan et al, 2023). The other managers who appointed "puppets" to the board most likely shared a story about exercising entrepreneurial judgment, but they did not verbalize it. Similarly, in the well-known 2001-2002 Enron and World Com scandals, accountants accused of negligence blamed a lack of information from the client companies (Hail, 2018).

2.1.4.4 Personal Characteristics: positive intentions and personal merits

Criminals and their sympathizers commonly utilized the personalizing defence, especially in court, to divert attention away from the accused's crimes and onto their personality attributes, claiming good intentions and personal characteristics demonstrated, for example, by humanitarian actions. In general, this defence did not assist the wrongdoer to avoid punishment. Victims, the media, and prosecutors depicted him as a horrible guy in an attempt to undermine his defence team, family, friends, and other fans who complimented his personality. (Hausman, 2018).

2.1.4.5 Consequences: financial mismanagement socioeconomic advancement

Businessmen and their supporters have a better chance of explaining unlawful behaviour by emphasizing their good effects. Mining promoters and their allies, including certain officials and politicians, regularly used the argument that gambling was a necessary component of the mining sector, as well as the assertion that new mines were being developed., highly speculative firms fostered economic development to justify financial malfeasance. Nevertheless, the liberal narrative was warmly accepted by certain regulators, who decided to apply the regulations leniently. Promoters of mining in Canada positioned themselves as being the defenders of little investors as part of their narrative when selling them "penny stocks." Similarly to this, several con artists used anti-establishment sentiments to fabricate what they stated in their emancipatory narrative to be standing up for the interests of common people who were being ignored or even violated by well-known financial organizations.

2.1.4.6 Regulation stifles progress and creates a false sense of security.

To counteract regulatory intervention, it was evident that emphasizing the beneficial externalities of clever entrepreneurial activity was a good rhetorical move. The idea that excessive regulation impedes economic and technological progress and that "fraud is a byproduct of an otherwise successful market economy and ought to be tolerated as such" fits well with a worldview that supports free business (Toms, 2019). The caveat emptor theory holds that protecting prospective victims was unnecessary, and legislation may exacerbate the problem by providing investors and consumers with a false feeling of security.

2.3 THEORETICAL LITERATURE REVIEW

There are two theories that underlines this study. These are Fraud theory and Agency theory.

2.3.1 Fraud theories

To look into financial fraud and irregularities that organizations and individuals conduct, four proposals have been made. These hypotheses include the fraud triangle hypothesis, the fraud scale theory, the white-collar crime theory, and Clarke's theory. The white-colour criminal fraud hypothesis contends that fraud is not hereditary but rather learnt. This shifts the focus of fraud responsibility away from an uncontrolled genetic force and onto the choices made by individual fraudsters. The three categories of external pressures, internal opportunities, and internal integrity are used by the fraud scale hypothesis to group the nine motivational variables that contribute to fraud. Clarke's theory identifies a distinct reason why fraud happens, similar to the fraud scale.

The spectacular amassing of millions via personal achievement or financial success is responsible for the intense pressure to perform in a narrowly defined way. The spectacular amassing of millions via personal achievement or financial success is responsible for the intense pressure to perform in a narrowly defined way. Many criminals commit fraud because they want to achieve such prosperity through their investment(s) (Jimoh, 2022). An organization experiences financial challenges when it fails to live up to Wall Street's expectations (Kozarevic et al, 2022). Other times, financial hardship is caused by a business's incapacity to compete with businesses in comparable companies.

To improve the financial performance of the company, executives are given financial pay bonuses which are used as incentives under these rules. Financial incentives and the company's interest in the relationships with its investors serve as additional motivations for executives to falsify financial accounts. Unhappiness at work and perceived injustice are two instances of non-financial workplace variables that motivate fraud. Another set of forces that foster lying is the use of drugs and gambling as vices (Dougherty et al, 2020). The ease of internet gambling access, which includes poker, slot casinos, slot machines, and lotto-style games, has considerably aided the growth of the gambling industry (Hollingshead et al, 2020). Fraudsters are motivated by increased possibilities to steal money and other assets to feed their long-term gambling addiction. (Kuzmenko et al, 2022).

Due to their thirst for material possessions, the offenders are under pressure to live like their more affluent co-workers (Hipp et al, 2022). The amount of pressure an offender experiences varies depending on their particular circumstances (David, Angel and White, 2018). According to the report, a large portion of these offenders had "egocentric reasons

and a need to acquire more than one can afford, usually described as "keeping up with the Joneses" (Chishimba, 2022). Any demands that serve to artificially elevate one's status are referred to as "pressures to fraudulently increase personal status," and they serve as a motivator for fraud. This type of motivation is frequently "seen in those individuals with very aggressive conduct and a desire to gain more functional authority in the organization," according to research. Due to their high levels of ambition and obsession with power and control, these criminals are more likely to engage in risky activity that might lead to fraud (Ozili, 2020).

However, Cressey's fraud triangle theory predominates all three of the hypotheses given. The basics of this notion appear to include all areas of the current investigation. As a result, it was chosen as the theoretical framework for the investigation. Below is a detailed study of this idea, which heavily references earlier research by Lokanan (2015). According to Cressey, unjustifiable financial stress is a leading cause of deception. Non-shareable financial strain is that which a person experiences but does not like to discuss with others. They turn to breaking the law to solve their financial problems since they are unable to communicate with them.

The research on the pressures to conduct professional fraud may be classified into two categories: financial and non-financial causes. (Asmah, Atuilik, and Ofori, 2019). According to Cressey, unjustifiable financial pressure leads to individuals committing fraud. Non-shareable financial pressure is the name given to financial strain that an individual feels but does not wish to discuss with others. They turn to breaking the law to find a solution since they are unable to communicate their financial issues. In the literature

on workplace pressure to commit fraud, financial pressures and non-financial factors can be roughly classified (Asmah, Atuilik, and Ofori, 2019).

2.3.2 Agency Theory

Public administration students frequently debate whether the portfolio of the government should be arranged as a single ministry or as a dual organization consisting of one or more semidetached agencies and a governmental department (Sinaga et al, 2021). Over time, it appears that agencies have been transferred back and forth between ministerial departments. Agencies are intended to have some independence from the associated in terms of decision making, and ministerial departments (Liao et al. 2022). Nevertheless, individual ministers frequently continue to have political responsibility for agency operations. Agencification may be explained using the following techniques: (1) structural, (2) functional, (3) contingent, and (4) institutional (Verhoest et al, 2021). An organizational or institutional view holds that agencies are formed via power struggles and compromises limited by previous organizational structures.

As a result, new agencies will likely be included in the present organizational structure since organizational growth is framed by the history of structures (Yuan et al, 2021). According to a functionalist perspective, agencification is a remedy for problems with collective activity. Moral hazard and adverse selection may be produced as a result of the agent's opportunistic activities (Bellavitis et al, 2019). To make the agent work harder and so decrease the effects of goal conflict and information asymmetry, the principal can use several control techniques. The economic arguments against agencification were rejected by Maznorbalia et al. (2023), who discovered that agencification harmed both public sector

production and efficiency. Agencification theory's implications for the current investigation.

Following the theory of agency, the public will make up the Board of Trustees, except for the principal, to prevent managerial opportunism and agency loss and the partial sacrifice of shareholders' interests in favour of management. A fundamental challenge for the agency relationship is the agent's actions and his aim to optimize his utility function, which may be incompatible with the principal's goals (Brown et al, 2022). This raises the question of agency, wherein, as in the instance of resource theft, the agent may not behave in the best interests of the principal. The issues brought up by the audit demand, agency, and fraud theories are therefore crucial components in the emergence of financial anomalies. These three primary concepts are therefore used in this study.

2.4 EMPIRICAL LITERATURE REVIEW

2.4.1 The relationship between financial irregularities and economic performance

Several studies have been conducted in recent years on the relationship between financial irregularities and economic performance in Ghana. According to Abor and Quartey (2010), financial irregularities have a detrimental influence on Ghana's economic growth, investment, and other economic indicators. According to Ofosu-Mensah Ababio et al. (2014), financial irregularities have a detrimental influence on Ghana's economic development, investment, trade and employment. Several empirical studies have been conducted on the effects of macroeconomic variables such as interest rates and inflation rates on economic performance in Ghana.

High borrowing rates, according to Aryeetey and Udry (2000), have a detrimental influence on the growth and profitability of SMEs, whereas inflation, according to Baah and Koomson (2015) and Aryeetey and Fenny (2017), harms economic growth in Ghana. Aryeetey and Fenny (2017) discovered that both interest rates and inflation rates had increased. High-interest rates are detrimental to the growth and profitability of SMEs, while inflation is detrimental to economic growth. There has been little research into the direct relationship between macroeconomic indicators and financial irregularities in Ghana, but several studies have looked at the impact of macroeconomic variables on the financial sector and the overall economy, which can influence the occurrence of financial irregularities indirectly. According to one research, inflation and currency rate volatility have a substantial influence on Ghana's banking system, while interest rates and inflation have a large impact on non-performing loans.

Poor macroeconomic conditions, such as high inflation and slow GDP development, might raise the likelihood of financial hardship among Ghanaian banks, leading to financial irregularities. Another study discovered that in Ghana, high-interest rates and poor GDP growth might enhance the chance of corporate fraud Attah-Obeng (2013). These studies suggest that macroeconomic indicators, through their impact on the financial sector and the economy at large, can indirectly affect the occurrence of financial irregularities in Ghana, but more research is needed to fully understand the relationship between macroeconomic indicators and financial irregularities in Ghana.

From 2014 to 2018, the Auditor General's findings indicated a considerable level of irregularity in the performance of public procurement in the District Assemblies. This is owing to the District Assemblies' reliance on these procedures, which fosters public procurement fraud and corruption. To close the gap, an effective ICT strategy is required.

Ali and Oudat (2020) interviewed 36 Bahraini investment banks on the matter and discovered that the financial audit report was a trustworthy and valuable source of information. Human characteristics, corporate governance and control, the overall state of the economy, and regulation, according to Driel (2018), all have a significant impact on the prevalence and form of deceit and other questionable financial activities.

Modern intellectuals frequently manufacture stories about undesirable behaviours to anticipate regulatory reform efforts, including the possibility to portray them as scandals. Yahaya (2022) used regression analysis to explore the effects of deceit and associated financial crimes on the development and growth of the Nigerian economy. According to Irwansyah (2020), the empirical universe of financial irregularities fraud is described in the academic literature by describing the various forms of fraudulent behaviour in the context of financial market activities, the prevalence and consequences of such behaviour, and the economic and market structures that scholars believe facilitate it. The findings highlight the complexities of financial fraud as a phenomenon that can take several forms depending on the market sectors it impacts, the monetary instruments used, and the persons involved. Based on the Auditor General's (AG) report on pre-university educational institutions, Acquah (2017) discovered a rise in financial irregularities in Ghanaian secondary schools. Accounting software and two school governance factors, the gender of the headmaster and the size of the board, accounted for 30.3 per cent of the variation, according to regression research.

2.4.2 The effect of macroeconomic variables on economic performance

There are compelling arguments can be made about how specific macroeconomic issues ought to affect growth. These pertinent variables include the budget deficit, the balance of payments, and the monetary and fiscal policies that influence inflation rates (Mbulawa, 2015). Milton Friedman contended that market prices become a less effective mechanism for coordinating economic activity when inflation becomes very variable (Chowdhury, Hamid & Akhi, 2019). High inflation is an indication that a government has lost control over its economy. Inflation may also be a measure of the government's overall capacity to manage the economy. In addition, nations with persistently high rates of inflation are likely to see slow economic growth. Additionally, investments may suffer from inflation.

According to Issah and Antwi (2017), monetary volatility deters potential investors by making it harder to calculate the rate of return on investment projects (Issah & Antwi, 2017). In general, low and stable inflation, suitable real interest rates, a sustainable fiscal policy, and a manageable balance of payments position are necessary components of a robust, growth-friendly macroeconomic environment. Government debt inhibits growth and investment in a number of ways. First, private capital is displaced by government debt (Ullah & Rauf 2013). Instead of building up private wealth, people amass government debt as it is financed, for instance, by bonds.

Interest rates rise when fewer people want to hold private money, which deters enterprises from wanting to hold private capital or make new, more expensive investments. Government debt also has the effect of lowering output. Taxes increased to pay interest on government debt reduce national income and consumption (Olokoyo, Ibhagui, Babajide & Yinka-Banjo, 2019). Numerous investigations have been carried out to examine the impact

of macroeconomic policies on economic growth. Fischer discovered that a number of these variables, particularly inflation and debt, did have a major impact on long-term growth in two different studies that used a sample of more than 100 nations (Otambo, 2016). He discovered that there was a considerable negative correlation between higher levels of investment and high levels of debt and inflation. Countries suffer when they lose out on prospective investments because there are fewer opportunities for faster growth. However, some economists do not believe that macroeconomic issues have a significant role in explaining growth.

Looking at sixty-seven countries over a twenty-seven-year period, Mwangi (2013) found no indication of a relationship between low levels of economic growth and high levels of inflation, huge budget deficits, and greater levels of debt. Fischer also makes the case for the significance of macroeconomic variables on growth via case studies. Restoring greater rates of growth in Chile and Mexico required strict budgetary control as well as a decrease in inflation. But sustained high rates of inflation in Brazil resulted in increased macroeconomic instability, stalled investment, and slow economic growth (Antwi, Mills & Zhao, 2013). Single- or low double-digit inflation rates have also been associated with high growth rates in East Asia. This link is not ideal, though, as poor levels of economic development have been observed in a number of African nations that are part of the Francophone Zone, despite low levels of inflation.

2.4.3 The effects of macro-economic indicators on financial irregularities

Macroeconomic shifts and bad credit are related, with economic factors influencing bad credit since they impact people's capacity to repay loans (Betz et al., 2020). One

macroeconomic aspect influencing non-performing loans is credit growth (Vithessonthi, 2016). People's ability to pay off their debts is impacted by inflation after it has an effect on their income (Zheng et al., 2020). Economic growth, which measures the community's total revenue, is influenced by the exchange rate (Jovica et al., 2019). Ultimately, it affects the government's capacity to repay debt. Bank performance is impacted by interest rate risk (Margono et al., 2020). There is a correlation between interest rates and debt repayments: the higher the interest rate, the more challenging it is for debtors to make their loan payments, which can result in a negative credit score (Bellotti et al., 2020).

Variations in macroeconomic circumstances impact publicly traded corporations' optimal performance. These factors are outside the company and outside management's jurisdiction. Suppliers, government rules, rivals, and political and environmental factors are also relevant (Issah & Antwi, 2017). A corporation's earnings growth is influenced by a variety of external factors (ObengKrampah, 2018). The exchange rate, government spending, unemployment, population, interest rate, inflation rate, money supply, and GDP are considered by many researchers to be the most significant and well-established variables, even though the aforementioned variables also exist (World Bank Report, 2019; Haider et al., 2018; Issah & Antwi, 2017; Ngowi, 2015). It is critical to remember that these variables are not independent when evaluating the significance of reporting to the government, stock exchange, listed firms, and investors the impact of macroeconomic conditions on the performance of listed enterprises (Epaphra & Salema, 2018).

Numerous research have examined the connection between macroeconomic conditions and publicly traded companies' performance; yet, experts have produced inconsistent results. Zeitun et al. (2007) shown, using data from Jordan, that macroeconomic factors like the

exchange rate have an impact on the cost of debt since rising interest rates have a cascading effect on other sectors. Pakistan's Rehman (2016) looked at seven macroeconomic indicators and found that while the money supply, exchange rate, and other variables were negatively correlated with the success of listed businesses, the inflation rate was positively correlated with company performance.

According to research conducted in Indonesia by Dewi et al. (2019), the rate of inflation in the nation reduced the profits of publicly traded enterprises. Alibabae and Khanmohammadi (2016) discovered that the currency rate had a positive effect on business performance in Iran, whereas interest rates and inflation had a negative one. The Turkish experience indicates a positive correlation between business success (profitability) and GDP (Tuncay & Cengiz, 2017). According to Gatsimbazi et al. (2018), there is an inverse relationship between the GDP, inflation rate, and exchange rate and the performance of listed firms. Ismail et al. (2018) found that interest rates and GDP have a favourable effect on Malaysian enterprises' performance.

The impact of macroeconomic conditions on company performance has also been investigated within the African environment. When Nyamu (2016) looked into how well businesses performed in Ghana, they found a favourable correlation between company performance and changes in the interest rate, inflation rate, and currency rate of the nation. Omodero and Mlangi (2019) discovered a negative relationship in Nigeria between interest rates, currency exchange rates, and business performance. Simiyu and Ngile (2015) found a negative correlation between GDP growth and publicly traded companies in Kenya in their 2015 investigation. On the other hand, a previous study demonstrated the reverse; Kolapo et al. (2018) discovered a positive association between GDP and money supply and

company performance in the Nigerian economy. Research on the impact of Tanzania's macroeconomic environment changes on the performance of publicly traded companies is scarce. For example, Kingu, Macha and Gwahula (2018) and Epaphra (2018) examined stock prices and stock market performance, but their assessments of the variables (exchange rate, GDP, money supply, and inflation rate) produced inconsistent findings.

The varied findings from earlier studies show how complicated the relationship is between macroeconomic circumstances and corporate performance. A firm's finances can be greatly impacted by a number of macroeconomic factors that are outside of management's control, such as GDP, interest rates, inflation, and currency exchange rates. These effects result from the fact that the businesses operate in the shadow of these macroeconomic conditions, which they cannot control or avoid; they can only learn to live with or risk going out of business. Therefore, it is critical for businesses to comprehend the context-specific impact of these variables and modify their strategy appropriately.

To make sensible decisions that support a robust economy, policymakers and corporate executives need to understand the relationship between macroeconomic variables and corporate performance. In addition, more investigation is required to clarify the discrepancies and create appropriate macroeconomic strategies. Therefore, this article's main goal was to look into the macroeconomic factors that affect how well DSE-listed companies perform. The goal was accomplished by contrasting the performance of the firm with macroeconomic factors including GDP, interest rates, exchange rates, inflation rates, and money supply. This prompted the testing of the following hypothesis: macroeconomic conditions have an impact on the performance of companies listed on the Dar Es Salaam Stock Exchange.

2.5 CONCEPTUAL FRAMEWORK

Based on the review of extant literature through conceptual, theoretical and empirical, the conceptual framework for the study is diagrammatically presented in Figure 2.1 and subsequently discussed.

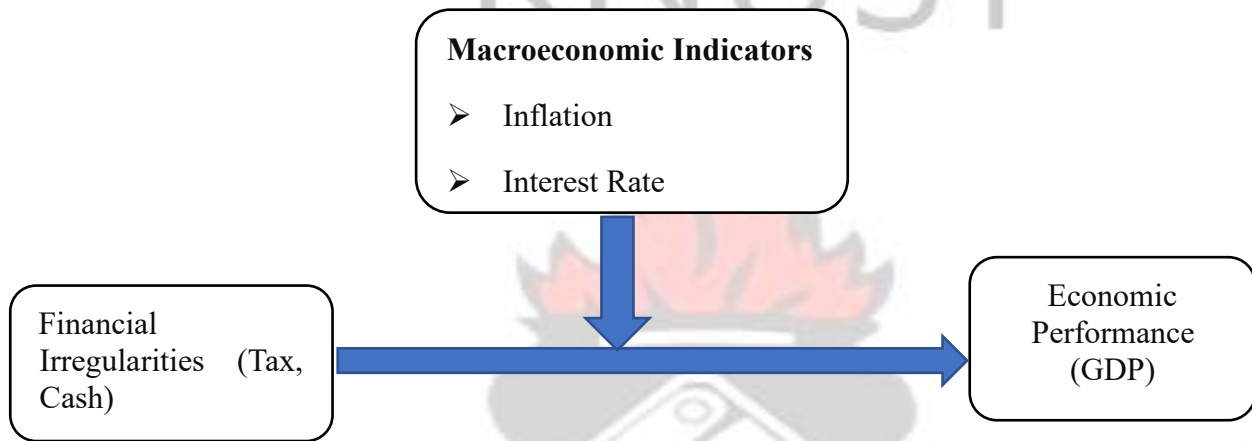


Figure 2.1: Conceptual framework for the study

Source: Authors own design (2023)

As depicted in the figure 2.1, economic performance is the dependent variable and financial irregularities is the independent variable. The study will first establish the relationship and the effects of financial irregularities and economic performance. The study will also want to know the mediation role of macroeconomic indicators such as inflation and interest rate on the relationship between financial irregularities and economic performance.

2.6 SUMMARY OF CHAPTER

The literature review based on conceptual, theoretical, and empirical research thus far suggests that the economic environment has a persistent influence, most notably through innovation, on facilitating or even stimulating questionable practices, that governance,

control, and regulations have only a weak preventative effect, and that individual traits and regulation, while constrained by the context and conventions of the particular period, are important in facilitating or even stimulating questionable practices elucidating why certain practices are acceptable in some contexts but not others. Victims may suffer serious financial consequences, which tend to get worse with time. Financial irregularities may also have a detrimental effect on the business climate as a whole, which may lead to failures of the company as specified by organizational objectives.



CHAPTER THREE

METHODOLOGY

3.0 INTRODUCTION

The techniques utilised to gather the pertinent data for this investigation are covered in this chapter. It highlights the study's design, methodology, fictitious development, data sources, and survey characteristics, such as sample design and data collection methods. To achieve a high degree of validity and reliability, the relevant measures were thorough and methodically applied.

3.1 RESEARCH DESIGN

This study the study adopted a quantitative research design in relation with exploratory research strategy. Research design is a plan that guides research activity to ensure that sound conclusions are reached (Babbie 2013 and McMillan 2012). According to Rovai et al. (2014), quantitative researchers see the world as existing outside of themselves and believe that there is an objective reality that exists regardless of any observations. The research strategy is said to as explanatory when the goal of the study is to investigate a novel, unstudied cosmos (Kothari, 2010). The study adopted quantitative research design in relation with exploratory research approach due to the cause and effect approach of the study. That is, study is to determine the effect of financial irregularities on economic performance in Ghana.

3.2 POPULATION OF THE STUDY

It was necessary to identify a target population that has the requested information, choose a sample structure to draw a sample and choose a sample method for potential informants in order to provide relevant and useful answers to the research questions (Hair et al., 2007).

World Bank's Population Division, and Auditor General's Reports on Ghana's Public Accounts from 1990 to 2022 provided the data for the study. Information on the following variables was available from the global bank's national accounts data: GDP, inflation rate, change in population (growth rate), and financial irregularities. On the other hand, information on these same factors was supplied in the Auditor General's Reports. The data consisted of annual data for each of the variables from 1990 to 2022, following the screening to verify that years with publicly available data were included.

3.3 SAMPLE SIZE AND SAMPLING TECHNIQUE(S)

An efficient method for determining the right sample size for a given population is required. The most widely accepted method for determining the sample size in a descriptive survey, according to researchers like Creswell (2014), Cohen, Manion and Morrison (2014), and Malhotra and Birks (2012), is to first specify the level of estimation precision you want, after which you can figure out how many people you need to make sure you get that level of precision. Based on information pertinent to the study's goals, the primary or dependent variable was the gross domestic product. The independent variable was financial irregularities as identified and classified in the Auditor General's Report, and the mediating variables were inflation rate and interest rate. This led to the creation of seven (7) variables, each of which had 33 observations collected annually. Since each of the seven variables' data was collected over a consistent period, the data is likely a time series. Additionally, purposive sampling was used in the study's dataset selection process. Purposive sampling, sometimes referred to as the judging technique of sampling, is the process of manually

selecting the instances to be included in the sample based on judgement and specialised knowledge of the subject under inquiry (Best & Kahn, 2012).

3.4 DATA COLLECTION

The data for the study was collected from Ghana Audit website. Also, secondary data was used, covering the years 1990 to 2022.

Table 3.1 Variables and Measurements

Variables	Measurements
Dependent Variable GDP	Gross domestic product. Annual performance of the economy
Independent Variables Financial irregularities	This comprises cash, contract, tax, procurement and stores irregularities
Mediating Variables Inflation	Annual inflation rate (%)
Interest rate (%)	Annual interest rate (%)

The regression equation is used in the study. $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \varepsilon \dots \dots \dots (1)$, as the primary model for assessing financial irregularities and the performance of the Ghanaian economy. As the primary model for evaluating financial irregularities and the performance of the Ghanaian economy. It is measured by the total output (monetary value) of goods and services within the economy usually for one year. β_0 is the Y or dependent variable's constant or intercept. X_1 reflect the independent variable in this study, financial irregularities. It is the total or composite of all seven types of financial irregularities, including tax, cash, payroll, outstanding loans or debts, stores/procurement, rent, and contract irregularities;

β_1 is the X1 coefficient, which measures the rate of change in economic performance caused by changes in the X1 variable (financial irregularities). X2 portray the inflation rate as a control variable to investigate how it influences performance in the context of financial irregularities. The yearly percentage change in the prices of goods and services across the economy is measured as the inflation rate. β_2 is the X2 variable's coefficient, which measures the pace at which economic performance or growth varies as a function of changes in X2 (inflation rate);

X3 is another control variable that is used to see if it has any effect on the dependent variable by regulating the independent variable. The yearly percentage change in population or growth is used to calculate population change. β_3 is the X3 co-efficient, which assesses the rate of change in economic performance or growth as a result of a change in X3 (change in population or growth rate); and lastly, the error term, which takes into account any other variable not accounted for in the model.

3.5 DATA ANALYSIS

Pearson correlation, Linear Regression and Structural Equation Model (SEM) is the statistical method utilized for the analysis of this study, and this part uses inferential statistics. Through the use of tables, they are utilized to convey quantitative description in an understandable format. The study employed a linear regression to ascertain how FDI affected economic growth. The association between the study's variables was established using a Pearson pairwise correlation. Version 4.3.0 of Statistical Package for Social Sciences (SPSS) version 27 was used to analyse the data.

3.6 VALIDITY AND RELIABILITY

The confirmatory factor analysis (CFA) and the coefficients of Cronbach alpha (α) were modified to test for the validity and reliability of the variables. The path modeling used by Agyapong et al (2015) and Boso et al. was used to compute all the required fit indexes (2013). The loadings included essential buildings, such as tax, contract, cash, procurement and stores irregularities, inflation and interest rate, as well as economic performance (GDP). In all the measures, large levels of fit indexes showed that the variables adapted were highly accurate and valid. The study evaluates the model's validity using additional diagnostic tests. This includes the White (heteroscedasticity) test, the autocorrelation tests, and the normality test (serial correlation) of the residuals. To identify the autocorrelation in the data, compare the residual values to the predicted values and plot the residual value. If there is heteroscedasticity in the model, as shown by a statistically significant probability value compared to the computed F-statistics, the null hypothesis is rejected.

3.7 ETHICAL CONSIDERATIONS

Ethics is a critical consideration in research with human participants. It covers how researchers ought to conduct themselves in line with socially acceptable norms (Best & Kahn, 2012). Adhering to specified processes and standards of research ethics, the researcher, research subjects, and study clients were protected against any negative effects. Several ethical factors were considered in the study. This study took into account a number of ethical issues, including the right to privacy, informed consent, anonymity and confidentiality, deceit, and misconduct in science. According to university regulations, the researcher made sure all ethical conditions, such as plagiarism, academic honesty, as well as recognising the use of any copyrighted sources, were followed.

CHAPTER FOUR

4.0 INTRODUCTION

This section contains the results of the data analysis., along with their interpretations and debates. The primary goal of this study was to investigate the connection between financial irregularities and Ghana's economy. It specifically looks at the impact of financial irregularities on Ghana's economic production, the impact of inflation and interest rates on that output, and the roles of those variables in the link between economic output and financial irregularities in Ghana.

4.1 DESCRIPTIVE ANALYSIS

Table 4.1 summarises the descriptive statistics of the variables used. It makes use of the mean (average value) and standard deviation. All the variables in the table have respective means and standard deviations, which show that they are not significantly different from the mean (average value). The average value with a standard deviation of economic growth in Ghana are (mean=5.328, Std. Dev.=2.266) and the average value of GDP is (mean=47.1228, Std. Dev.=19.77497). with respect to the financial irregularities, the average value of cash, contract, procurement and stores and tax irregularities are depicted in the Table.

Table 4.1: Summary of Descriptive Statistics.

Variable	Obs	Mean	Std. Dev.	Min	Max
Economic perf. (Y)	33	5.328	2.265529	3.300	14.047124
GDP	33	47.1228	19.77497	11.47	79.157
Inflation Rate	33	20.2694	12.665	7.140	59.46
Interest Rate	33	18.6933	4.70661	12.50	27.00
Cash Irregularities	33	122825829.4	363775365.5	26557.98	2053622216
Contract Irregularities	33	20189903.94	45725336.93	0.000	171364190.2
Procurement and Store	33	9283174.5	13717620.88	0.000	47139747.8
Tax Irregularities	33	622203289.9	1269475848	0.000	4788284799

Notes- Eco.Perf. (Y)=Economic Performance

Source: Analysis of Data (WDI, 2023)

4.2 The relationship between financial irregularities (tax, cash, procurement and stores) and economic performance

The first objective of the study seeks to determine the relationship between financial irregularities and economic performance. To be able to achieve this objective, the study adopted pearson correlation. The results is in Table 4.2.

Table 4.1 Correlation Analysis and Variance Inflation Factor Analysis

	GDP	Economic Perf.	Cash Irr.	Contract Irr.	Procurement and Store Irr	Tax Irr
GDP	1.000					
Economic Perf.	-.584**	1.000				
Cash Irr	.218**	-.131*	1.000			
Contract Irr	.131	-.173**	-.061	1.000		
Procurement & Store	-.161	0.084**	.407**	.017	1.000	
Tax Irr	.493**	-.270**	.209	-.036	.068	1.000

Notes- Irr. = Irregularities whilst Perf.= Performance ** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed).

As depicted in 4.2, there is a negative and significant relationship between cash irregularities and economic performance ($r = -.131$, $P < .05$), which means that as cash irregularities increasing, the lower the performance of the economy. That is, the economic performance decreases by 13.1%. Also, there is a negative and significant relationship between contract irregularities and economic performance ($r = -.173$, $P < .05$), which means that as contract irregularities increasing, the lower the performance of the economy. That is, economic performance decreases by 17.3%. Moreover there is a positive and significant relationship between procurement and stores irregularities and economic performance ($r = .084$, $P < .05$), which means that as procurement and stores irregularities increasing, the higher the performance of the economy. That is, economic performance decreases by 8.4%. Also, there is a negative and significant relationship between tax irregularities and economic performance ($r = -.270$, $P < .05$), which means that as tax irregularities increasing, the lower the performance of the economy. That is, economic performance decreases by 27.0%. The finding of the study confirms a study by Abor and Quartey (2010), of which they concluded that financial irregularities have a detrimental influence on Ghana's economic growth, investment, and other economic indicators. According to Ofosu-Mensah Ababio et al. (2014), financial irregularities have a detrimental influence on Ghana's economic development, investment, trade and employment. Several empirical studies have been conducted on the effects of macroeconomic variables such as interest rates and inflation rates on economic performance in Ghana.

4.3 The effects of macroeconomic variables (Interest Rate and Inflation Rate) on economic performance of Ghana

The second objective of the study sought to examine the relationship between macroeconomic variables such as inflation and interest rate and economic performance. To be able to achieve this objective, the study adopted multiple linear regression. The results is in Table 4.3.

Table 4.3 Regression Analysis on the effect of macroeconomic variables on economic performance

Variables	Unstandardized Coefficient		Standardized Coefficient		Collinearity Statistics	
	B	Std. Error	Beta (β)	Sig.	Tolerance	VIF
<i>Inflation Rate</i>	0.655	0.148	0.618**	0.008	0.114	8.777
<i>Interest Rate</i>	0.035	0.114	0.034***	0.000	0.174	5.749
Constant			0.632			
R			0.558			
R Square			0.760			
Adjusted R Square			0.748			

Source: Field Data, (2023) * $p < 0.05$, ** $p < 0.01$ (N = 33)

Dependent Variable: Economic Performance

Table 4.3 displays the multiple linear regression analysis on the effect of macroeconomic variables on economic performance. From the Table, inflation has a significant and positive influence on economic performance ($\beta=0.618$, $p < 0.05$). With respect to the influence of interest rate on economic performance. That is, interest rate has a significant and positive effect on economic performance ($\beta=0.034$, $p < 0.05$). However, it is noteworthy to note that, with an adjusted R^2 of 0.748, the total contribution of the independent factors to the

variation in the dependent variable (economic performance) is 0.748. This indicates that 74.8 percent of the volatility in economic performance can be predicted or explained by macroeconomic variables (interest rate, and inflation rate). This indicates that, independent incorporated into the model, other factors that are not yet taken into account have a probability of adding 25.2 percent to economic performance. Thus, this study revealed that the existence of macroeconomic variables as a component will lead to better economic performance.

This findings confirms studies such as Mbulawa, (2015), Issah and Antwi (2017) and Chowdhury, Hamid and Akhi, 2(019) of which they revealed that High inflation is an indication that a government has lost control over its economy. Inflation may also be a measure of the government's overall capacity to manage the economy. In addition, nations with persistently high rates of inflation are likely to see slow economic growth. Mwangi (2013) found no indication of a relationship between low levels of economic growth and high levels of inflation, huge budget deficits, and greater levels of debt.

4.4 Structural Equation Model (SEM) on the Mediation role of Macroeconomic variables

Effect type	Paths	Effect	(Boot) SE	P- value	(Boot) LLCI	(Boot) ULCI
¹ Direct	Cash Irregularities→ Economic Performance	0.529	0.033	0.000	0.465	0.593
	Contract Irregularities→ Economic Performance	0.439	0.055	0.000	0.332	0.546
	Tax Irregularities→ Economic Performance	0.470	0.033	0.000	0.406	0.535
	Procurement and stores Irregularities→ Economic Performance	0.479	0.050	0.000	0.380	0.578
² Mediation	Cash Irregularities→ Inflation→ Economic Performance	0.403	0.040	0.000	0.324	0.482
	Contract Irregularities→ Inflation→ Economic Performance	0.179	0.064	0.002	0.071	0.323
	Tax Irregularities→ Inflation → Economic Performance	0.384	0.036	0.000	0.313	0.455
	Procurement and stores Irregularities→ Inflation → Economic Performance	0.367	0.066	0.000	0.238	0.496
	Cash Irregularities→ Interest rate→ Economic Performance	0.457	0.039	0.000	0.381	0.533
	Contract Irregularities→ Interest rate→ Economic Performance	0.267	0.060	0.000	0.148	0.386
	Tax Irregularities→ Interest rate→ Economic Performance	0.437	0.041	0.000	0.356	0.517
	Procurement and stores Irregularities→ Interest rate→ Economic Performance	0.252	0.066	0.000	0.123	0.381

** path significant at 5% (2-tailed test).

Number of bootstrap samples = 5000.

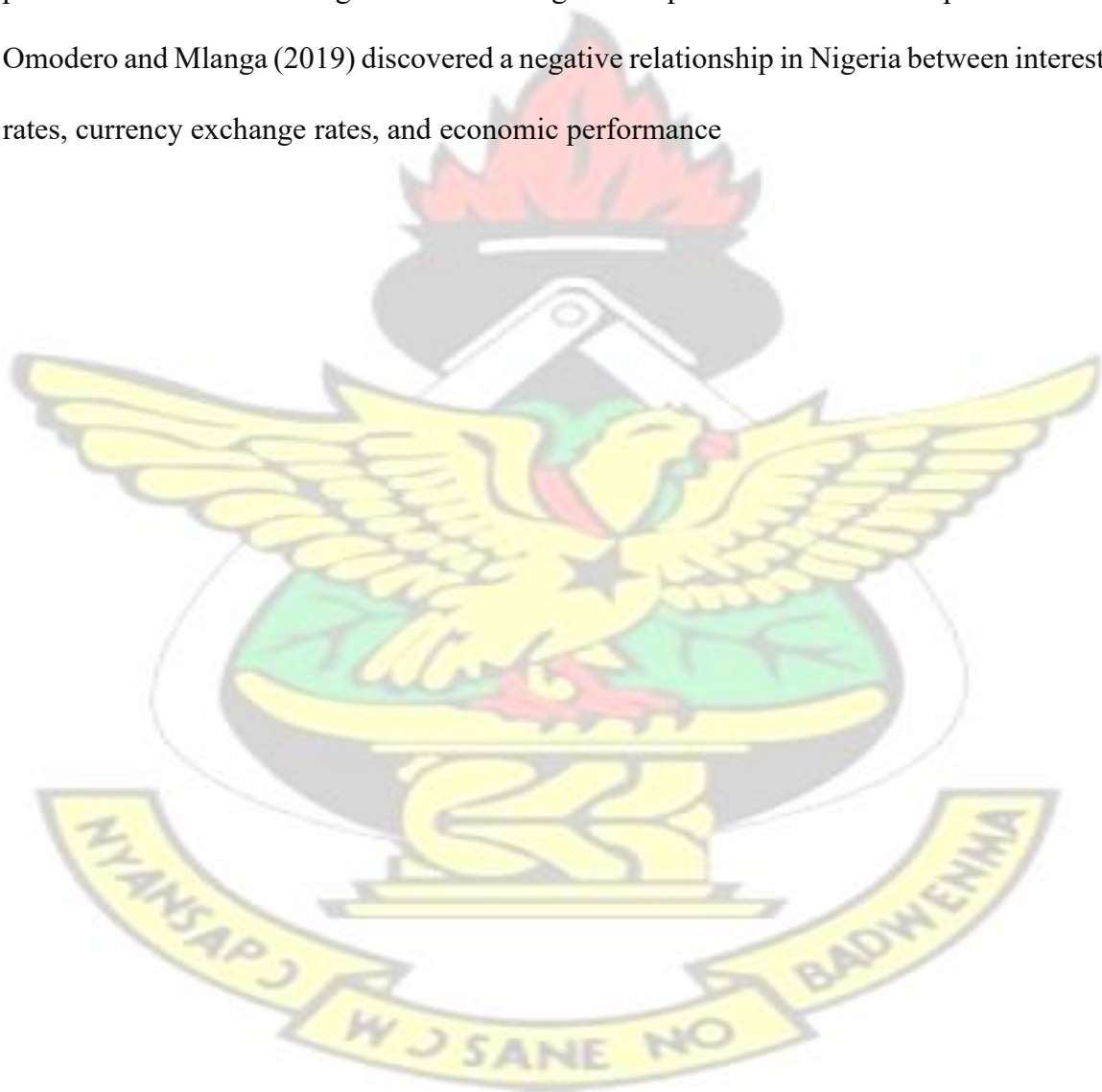
Number of bootstrap samples = 1000

4.4. The mediating role of macro-economic indicators on the relationship between financial irregularities and economic performance in Ghana.

The result obtained using the PROCESS version 3.5 shows the mediating effect of macroeconomic variables in the model as indicated in Table 4.4. The result indicated that the relationship between cash irregularities and economic performance is mediated by inflation ($\beta=0.403$, 95%CI [0.324, 0.482]). The result showed that controlling for the

mediator (inflation), cash irregularities was a significant predictor of economic performance. The result obtained suggest that inflations serve as a mediator variable in the relationship between cash irregularities and economic performance. Also, the relationship between contract irregularities and economic performance is mediated by inflation ($\beta=0.179$, 95%CI [0.071, 0.323]). The result showed that controlling for the mediator (inflation), contract irregularities was a significant predictor of economic performance. Again, the relationship between tax irregularities and economic performance is mediated by inflation ($\beta=0.384$, 95%CI [0.313, 0.455]). The result showed that controlling for the mediator (inflation), tax irregularities was a significant predictor of economic performance. Moreover, the relationship between procurement and stores irregularities and economic performance is mediated by inflation ($\beta=0.367$, 95%CI [0.238, 0.496]). The result showed that controlling for the mediator (inflation), procurement and stores irregularities was a significant predictor of economic performance. When Nyamu (2016) looked into how well businesses performed in Ghana, they found a favourable correlation between company performance and changes in the interest rate, inflation rate, and currency rate of the nation. Considering the mediating role of interest rate, the result indicated that the relationship between cash irregularities and economic performance is mediated by interest rate ($\beta=0.457$, 95%CI [0.381, 0.533]). The result showed that controlling for the mediator (interest rate), cash irregularities was a significant predictor of economic performance. Also, the relationship between contract irregularities and economic performance is mediated by interest rate ($\beta=0.267$, 95%CI [0.148, 0.386]). The result showed that controlling for the mediator (interest rate), contract irregularities was a significant predictor of economic performance. Again, the relationship between tax irregularities and economic

performance is mediated by interest rate ($\beta=0.437$, 95%CI [0.356, 0.517]). The result showed that controlling for the mediator (interest rate), tax irregularities was a significant predictor of economic performance. Moreover, the relationship between procurement and stores irregularities and economic performance is mediated by interest rate ($\beta=0.252$, 95%CI [0.123, 0.381]). The result showed that controlling for the mediator (interest rate), procurement and stores irregularities was a significant predictor of economic performance. Omodero and Mlana (2019) discovered a negative relationship in Nigeria between interest rates, currency exchange rates, and economic performance



CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION, AND RECOMMENDATIONS

5.1 INTRODUCTION

This is the last chapter of the study. It covers summary of the findings from the study, study conclusion and recommendations advanced by the study.

5.2 SUMMARY OF FINDINGS

The following are the conclusions drawn from the study based on the outcomes of the data analysis that was done. Pearson correlation analysis, a more condensed method for determining the relationship between economic performance and financial irregularities, demonstrated a relatively strong positive statistically significant link between financial irregularities and GDP between 1990 and 2022. The study also revealed that inflation has a significant and positive influence on economic performance. Moreover, interest rate has a significant and positive effect on economic performance. Additionally, it is noteworthy to note that, with an adjusted R^2 of 0.748, the total contribution of the independent factors to the variation in the dependent variable (economic performance) is 0.748. This indicates that 74.8 percent of the volatility in economic performance can be predicted or explained by macroeconomic variables (interest rate, and inflation rate). The result indicated that the relationship between financial irregularities and economic performance is mediated by both interest rate and inflation rate.

5.3 CONCLUSION

Based on the observations and results obtained, the study comes to the following conclusions. First, the study's findings show that no type of economic setbacks, such as

fraud or irregularity, recession, or slowdown harmed Ghana's economy's pattern of growth. This is because the study's analysis of the link between financial irregularities and economic growth in Ghana was only mediation strong. Although there was no statistically significant difference between the roles performed by the two variables, population change and inflation, economic variables like these had a substantial impact on the association between financial irregularities and economic growth. The result indicated that the relationship between financial irregularities and economic performance is mediated by both interest rate and inflation rate.

5.4 RECOMMENDATIONS

Based on the conclusions reached from the outcomes and findings found, the following suggestions are made for the stakeholders' consideration.

First and foremost, it is advised that steps be taken to maintain and boost the current growth of the gross domestic product to further enhance the nation's economic prospects. These strategies might be directed towards macroeconomic initiatives including employment creation, interest rate lowering, and inflation targeting.

Additionally, because of the model's strong correlation with the relevant variables, the research advises policymakers to use it for their analysis of Ghana's economic growth.

Furthermore, prudent measures should be put in place by stakeholders to help prevent financial irregularities from occurring to mitigate their negative impact on GDP in terms of future production. Mention can be made of the application of the law of causing financial loss to the state by prosecuting, recovering and jailing if possible. This will aid the country's economic prosperity.

Finally, the study suggests that other independent variables be included in future studies to examine the relationship because financial irregularities were found not to significantly relate to economic growth to establish a perfect relationship when combined with other economic variables while dealing with measures to reduce financial irregularities occurrences.



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APPENDICES

Appendix A: Data on Ghana's GDP, Inflation Rate, Interest Rate and Financial irregularities from 1990 to 2022:

YEAR	GDP	INFLATION RATE	INTEREST RATE	CASH IRREGULARITIES	CONTRACT IRREGULARITIES	PROCUREMENT AND STORES IRREGULARITIES	TAX IRREGULARITIES	ECONOMIC GROWTH
2022	68.353	27.88	12.88	57471599	556333	321950	1247530110	3.328817883
2021	79.157	9.97	14.5	45763607	1559424	511569	989026225	5.28182629
2020	70.008	9.89	14.5	34034697.72	171364190.2	10667174.6	694386436	3.879419253
2019	68.353	7.14	16	276624480.4	77093	20604593	2666743135	4.850000564
2018	67.259	7.81	17	388925019.9	5598252	6823337	4788284799	3.299999591
2017	60.385	12.37	20	190560990.9	0	41668682	655599736	4.11241904
2016	56.144	17.45	25.5	2053622216	13006034.86	35940445.4	42866490.7	4.602461045
2015	49.437	17.15	26	47629013.32	51941818.68	20623604.5	305417021	4.196357576
2014	54.285	15.49	21	5089352.06	2784226.72	2373354.81	217186534	4.700390779
2013	63.702	11.67	16	19133001.39	127856539.5	2740788.67	268764477	4.39999686
2012	56.854	11.19	15	6776364.99	1620641.51	866451.98	340146162	3.700000115
2011	53.849	8.73	12.5	33972751.25	24946637.32	780027.67	52838612.2	4
2010	43.327	10.73	13.5	94545872	283578	684375	72414244	4.499999699
2009	34.601	19.25	18	14315000	229685	1270295	7392358	5.199999984
2008	38.659	16.49	17	342835.78	3039741.82	71189	247770.22	5.59999999
2007	34.044	10.73	13.5	2066606.15	6628348.32	586732.28	682939.48	5.900003953
2006	28.883	11.68	12.5	41421.5	5539.7	12414.2	172019.9	6.399912419
2005	24.6	15.44	15.5	26866.7	10126	8918.5	183812.9	4.346819153
2004	20.302	18.04	18.5	34960.3	5434.3	10559.5	118340.9	9.149799094
2003	17.528	29.77	21.5	12075399.85	35940445.43	2437094.3	2066606.15	4.844486889
2002	14.205	9.36	24.5	1147817.83	9049219.49	31224856.7	6628348.32	7.899711912
2001	12.234	41.51	27	343596.44	13006034.86	452983.31	586732.28	14.04712365

2000	11.47	40.24	27	42866490.7	4281994.51	47139747.8	682939.48	9.292789414
1999	56.144	14.62	17	318900	795600	17000	0	7.312525021
1998	49.437	27.88	20	133093.41	208320.21	202533.45	0	3.985865624
1997	54.285	46.56	25.5	26557.98	257817	208650	0	3.837040864
1996	63.702	59.46	26	847236	1225000	0	0	3.721902905
1995	56.854	24.87	21	23000000	0	6400000	16700000	8.507156219
1994	53.849	24.95	16	784606.65	3900000	2375470	0	3.299999591
1993	43.327	10.06	14.5	34034697.72	171364190.2	10667174.6	694386436	4.11241904
1992	68.353	18.03	16	276624480.4	77093	20604593	2666743135	4.602461045
1991	67.259	37.26	17	388925019.9	5598252	6823337	4788284799	4.196357576
1990	14.205	25.22	24.5	1147817.83	9049219.49	31224856.7	6628348.32	4.700390779

