

**EFFECT OF CORPORATE GOVERNANCE ON BUDGETARY
CONTROL AMONG GOVERNMENT AGENCIES IN KENYA**

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**A RESEARCH PROJECT SUBMITTED IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD
OF THE DEGREE OF MASTER OF SCIENCE IN FINANCE,
FACULTY OF BUSINESS AND MANAGEMENT SCIENCES,
UNIVERSITY OF NAIROBI**

OCTOBER, 2022

DECLARATION

I, the undersigned, declare that this is my original work and has not been presented to any institution or university other than the University of Nairobi for examination.

Signed:



Date: 28th October, 2022

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This research project has been submitted for examination with my approval as the University Supervisor.

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ACKNOWLEDGEMENT

This research is a compilation of a meaningful journey characterized by eye opening experiences and discoveries. Firstly, is to thank the God Almighty for continued grace and favor that sustained me through my entire academic journey. To my supervisor Prof. Josiah Aduda and moderator Dr. Herrick Ondigo I sincerely appreciate their guidance, corrections and direction towards completing the project. I appreciate their scholarly excellence and effort in enabling me come up with an acceptable quality work. Their dedication is not only good for my study but also helpful to my future life and career.

I am also very grateful to my family for prayers and unlimited support throughout the journey. Thank you for believing in me and unconditional Love.

DEDICATION

This research project is dedicated to my family for their unconditional support in my academic journey and in completing this project.

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LIST OF ABBREVIATIONS

ANOVA	Analysis of Variance
CBK	Central Bank of Kenya
CBRR	Capital Budget Realization Ratio
CEO	Chief Executive Officer
CG	Corporate Governance
CSC	Commercial State Corporation
ERM	Enterprise Risk Management
GOK	Government of Kenya
KNBS	Kenya National Bureau of Statistics
ROA	Return on Assets
ROE	Return on Equity
SME	Small and Medium Enterprises
SOE	State Owned Enterprise
SPSS	Statistical Package for Social Sciences
VIF	Variance Inflation Factors

ABSTRACT

Good corporate governance practices are critical for both private and public sector organizations. This study was prompted by the inability of government agencies to operate within their approved budgets. It is in the public domain that the services offered by most of these public entities do not commensurate with the tax-payers burden. Reported corporate accounting and financial scandals in public sector have been on rise as reported by Governance institutions such as Ethics and Anticorruption Commission, Controller of Budgets and Office of the Auditor General. The main intention of this research was to examine corporate governance influence on budgetary control of government agencies in Kenya. Agency theory, stakeholder theory and stewardship theory were adopted to anchor the study. A descriptive research design was used in this research. The target population was the 94 government agencies in Kenya. Secondary data was obtained from the Office of the Auditor General and individual government agencies annual reports for a 5 year period (2017 to 2021). Upon collection of the data, inferential as well as descriptive statistics generated included frequencies and percentages and simple and multiple linear regression respectively. The regression results produced an R square of 0.2836 which implies that 28.36% of the changes in budgetary control among government agencies in Kenya can be explained by the six selected variables for this study. The overall model was found to be statistically significant as exhibited by a p value of 0.000 which was less than 0.05. The study further revealed that board independence, board meetings and firm size had a positive and significant effect on budgetary control of government agencies in Kenya while financial leverage has a significant negative effect. Gender diversity and management efficiency had no significant effect on budgetary control. This study concluded that corporate governance practices are essential for government agencies to use in their endeavor to improve on their budgetary control. The study recommends that management of government agencies should ensure their boards are independent and there are adequate board meetings as this will enhance budgetary controls. It is further recommended that policy makers should come up with sound policies to guide government agencies on corporate governance practices.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Corporate governance is vital in many ways. Mgammal, Bardai and Ku Ismail (2018) stated that, good governance structures impact positively on the budgetary control of firms. Gaining a clear understanding of sound governance procedures is very important to helping firms prevent deviation of the actual expense from the budget. Schubert and Kirsten (2021) hold that corporate governance can be used to enhance budgetary controls in both public and private corporations. According to Pimpong and Laryea (2016), effective corporate governance enhances budgetary control as it enhances monitoring and therefore can reveal areas of weakness and plan and control a firm's income and expenditure to achieve organizational goals.

On a theoretical perspective, this study drew support from agency theory, stakeholder theory and stewardship theory that have attempted to elaborate how corporate governance relates to budgetary control. The research anchor theory is Jensen and Meckling (1976) agency theory as it explains in what manner management, being agent, is supposed to fulfill their perfect fiduciary duty of serving the principal's best interests to enhance the main goal of a firm. The theory links corporate governance with budgetary control. The stakeholder theory by Freeman (1984) is applicable to this study because it provides backing for agency theory, which failed to capture all other important stakeholders who depend on financial results to make economic decisions, like regulators, credit suppliers, staff, financial analysts, as well as probable investors, among others. Stewardship theory by Donaldson and Davis (1991) offers a theoretical framework for understanding how successful agents who are firm managers manage their profession through performing their duties with highest dignity, compulsory

corporate governance code compliance, as well as the disclosure of correct, appropriate, and suitable reports to all stakeholders at regular intervals.

Globally, the public sector plays a central role in socio-economic development but the sector has however been affected by globalization, public sector reforms, regional and international partnerships among other factors. Kenya's public sector organizations need good governance in order to realize efficiency and better service delivery as enshrined in Vision 2030 that envisages new structure of governance that can only be achieved in an environment of good corporate governance practices (Koech & Ogollah, 2018). For government agencies to achieve their mandate, it is important to enhance the budgetary controls as it enables management translate firm's objectives into action.

1.1.1 Corporate Governance

Corporate Governance (CG) refers to the leadership, culture, policies, procedures and controls that help an institution to meet its strategic goals (Dunn, 2016). Corporate governance can also be described as the process through which organizations uphold accountability through structured controlled systems directed towards effective leadership and attainment of organizational targets (Wilson, 2016). Furthermore, CG can be defined as a set of rules and regulations aimed at offering structural support towards achieving transparency, accountability, fairness and respecting the rights of both majority and minority stakeholders (Liao, 2018). Corporate governance is defined in this research as a collection of rules and procedures that influence organizational culture and set the right tone right from the top levels of management to the bottom levels of subordinates.

Governance has assumed critical importance in the socio-economic and political systems. Firms with effective corporate governance are more likely to be transparent in

their disclosures and are more likely to meet shareholder's need of wealth maximization by investing effectively than firms with weak governance structures (Chen et al., 2017). Corporate governance is not the ultimate goal but a way to support financial stability, economic efficiency and sustainable growth (Bidabad et al., 2017). Salem et al. (2019) established that entities that embrace effective corporate practices are associated with benefits of increased profitability, enhanced credibility and competitiveness as well as effective management of stakeholders' relationships.

In regards to operationalization, there is diversity in corporate governance measurement. Mamatzakis and Bermpei (2015) operationalized corporate governance in terms of board independence, executive's compensation, CEO duality, board meetings, and gender diversity. Board as well as committee structure, composition of board of directors, governing systems and processes, board autonomy, components of audits, as well as the manner the corporate bodies circulates and publishes information to stakeholders are all significant corporate governance qualities (Olick, 2015). As per Wasike (2012), corporate governance involves; the corporation's directors 'board characteristics, the corporate ownership structure, financial transparency as well as disclosing information. The current research will operationalize corporate governance in relation to board independence, gender diversity and board meetings as they have been hypothesized to have an effect on budgetary control from previous literature.

1.1.2 Budgetary Control

Budgetary control refers to the establishment of budgets relating to the responsibilities of the executives of a policy and the continuous comparison of the actual with the budgeted results, aimed at securing the objective of the policy or to provide a basis for

revision (Olaoye & Ogunmakin, 2014). According to Igbinosun and Ohiokha (2012), budgetary control entails the process of establishing what is happening and comparing the actual results with budgeted targets to ascertain achievement or remedy any variances that may have arisen. Swaine (2017) define budgetary control as the establishment of budgets relating to the responsibilities of executives and the continuous comparison of actual with the budgeted results, either to secure by individual actions the objectives of that policy or to provide a basis for its revision.

It is traditional for most organizations to establish a budget at the beginning of each period that guide towards meeting the objectives of the organization within the specified predetermined estimate that depends on the management of the organization (Bashuna, 2013). The scope of the budget will determine the level of operations to be carried out and proper budgetary control will aid in decision making as it tracks the level of performance of every activity and then identifying underperformed activities that may require revision or possible elimination (Mohamed, Evans & Tirimba, 2015). In order to keep in line with the objectives of the organization, every function within the organization must meet its stated budget and thus ultimately making it possible for the objectives of the organization to be achieved. Budgetary control is therefore important as it makes this possible through coordinating and monitoring of the various functions (Abdullahi, Abubakar, Kuwata & Muhammad, 2015).

Several ratios are utilized in measuring budgetary control. The most common metric for budgetary control is the difference between actual expenditure and budgeted expenditure (Batra & Verma, 2017). Another widely used measure of absorption rate among county governments is the ratio of final actual spending to final approved budget (Polisetty, 2016). A higher ratio would mean a corporation is spending more than

budgeted and therefore control measures need to be taken. The current study will utilize the ratio of final actual spending to final approved budget as it shows the extent to which the actual spending varies from the budget.

1.1.3 Corporate Governance and Budgetary Control

Some theories describe the theoretical link between corporate governance and budgetary control, like the agency theory, which forecasts that corporate governance has a positive impact on budgetary control. Firm owners may take consolation in the knowledge that agents' actions favours the owners if they are offered adequate incentives and are properly managed (Jensen & Meckling, 1976). As a result, the director's function becomes one of monitoring management's actions who as per the stewardship theory has the fiduciary duty of ensuring the interests of the shareholders are well shielded. Thorough stakeholder monitoring will improve the likelihood of complete disclosure, resulting in a positive corporate governance structure's impact on budgetary control.

Freeman (1984) state that managers only keep their self- interests in mind and the maximization of the goals of the firm is conditional to having efficient governance structures that will punish wrongful acts. Additionally, the stewardship theory holds that governance problems do not always originate from executives; rather, these challenges stem from the choices of regulators and investors who are working toward their own goals of achieving self-fulfillment (Donaldson & Davis, 1991). The two theories agree that effective corporate governance can enhance budgetary control.

Corporate governance improves a firm's overall efficiency which contributes to sustainable economic development whilst reducing their susceptibility to financial crises (Naimah & Hamidah, 2017). Hence, it is vital for every entity to observe best

practices for corporate governance. Moreover, corporate governance that is sound enhances budgetary control and advances trust among shareholders and other stakeholders (Price, 2018). Therefore, adoption of effective corporate governance by businesses is essential in improving their budgetary control whilst embracing sustainability.

1.1.4 Government Agencies in Kenya

Government agencies are state entities incorporated outside the mainstream civil service established for purposes of public service delivery and according to RoK (2021), Kenya has 94 government agencies as at 31st December 2021. The agencies are established for specified purposes such as policy and regulation, undertake specific strategic government objectives in delivering public service (RoK, 2021). Whilst enabling states achieve the said goals, they play a huge role in enabling social and economic transformation, improve public service delivery, and create good and widespread opportunities in various jurisdictions (RoK, 2013).

Just like in most developed economies in the world and developing nations in the region, Kenya is not left behind in terms of Corporate Governance Practices in state owned entities. According to Malenya (2011) corporate governance continues to deteriorate in Kenya even though there is a tight regulatory framework. According to Koech and Ogollah (2018), many institutions in Kenya have been characterized with scandals of different levels and magnitudes. A study conducted by Mwende (2016) on the effect of corporate governance on performance of public corporations in Kenya established that corporate governance is one of the determinants in the level of performance among government agencies in Kenya.

Government agencies were established to fulfill social objectives of the state and therefore the government supports its agencies through funding and training of Board of Directors on good Corporate Governance so as to achieve this objective. However, reported corporate accounting and financial scandals in public sector have been on rise as reported by Governance institutions such as Ethics and Anticorruption Commission, Controller of Budgets and Office of the Auditor General (CBK, 2016). There is therefore need to investigate the effectiveness of corporate governance on budgetary control.

1.2 Research Problem

Budgetary control system in a multinational company like any other business is inevitable and largely influences performance and decision making at all levels of the organization. It is an important tool used in monitoring the performance of the organization, which is done through variance analysis i.e. assessing and devising possible reasons that have caused actual results to be different from what was budgeted and taking necessary corrective actions to prevent or minimize future reoccurrence (Sidik, 2012). Mgammal, Bardai and Ku Ismail (2018) stated that, good governance structures impact positively on the budgetary control of firms. Gaining a clear understanding of sound governance procedures is very important to helping firms prevent deviation of the actual expense from the budget.

This study was prompted by the inability of government agencies to operate within their approved budgets. It is in the public domain that the services offered by most of these public entities do not commensurate with the tax-payers burden (Mwangi, 2018). Reported corporate accounting and financial scandals in public sector have been on rise as reported by Governance institutions such as Ethics and Anticorruption Commission,

Controller of Budgets and Office of the Auditor General. These scandals often involved Heads of Institutions, CEOs, Directors, Board Members and Heads of Departments-acting unethically in pursuit of financial gains. Such cases include Kenya Medical Supplies Agency (KEMSA) covid-19 kits procurement scandal, National Lands Commission (NLC) standard gauge rail compensation scandal and the 1.6 billion loss of funds at the National Social Security Fund (NSSF) as reported by the office of the director of public prosecution. All these are signals of poor corporate governance practices. The current study sought to establish if effective corporate governance can enhance budgetary control.

Globally, there exist empirical studies in this area but they exhibit conceptual, contextual and methodological research gaps. Jermias, Fu, Fu and Chen (2022) sought to examine the design and implementation of enterprise risk management in three large Chinese state-owned enterprises. The research presents a contextual gap as it was performed in China which has a different economic and social situation from Kenya. Schubert and Kirsten (2021) examine the effect of budgeting control on the financial performance of SMEs in Germany. The research offers a conceptual gap as it did not address the effect of corporate governance on budgetary control. Qadorah and Fadzil (2018) investigated the correlation between internal corporate governance mechanisms and board of directors' features (board independence and board meeting frequency) and firm performance in Jordanian listed companies. The study presents a conceptual gap as some structures of corporate governance such as gender diversity and board meetings were not considered.

Locally, numerous studies have extensively studied the influence of corporate governance across fields. For instance, Abang'a, Tauringana, Wang'ombe and Achiro

(2021) focuses on the effect of aggregate and individual corporate governance factors on the financial performance of state-owned enterprises in Kenya. The research presents a conceptual gap as budgetary control was not considered. Saddimbah (2019) aimed to establish corporate governance effect on Kenya's Commercial State Corporations (CSC) financial performance. The research presents conceptual gaps as budgetary control was not considered. Koech (2018) studied the determinants of effective corporate governance among state corporations found in Kenya. Conclusions depicting corporate governance had a positive relation to firm characteristics among the corporations. This research failed to study the influence of CG on other variables such as budgetary control.

This study was motivated by the inability of government agencies to operate within their approved budgets. The increase in financial scandals in the public sector is a factor motivating this study. Although there are previous studies in this area, the studies have left research gaps on the impact of corporate governance on budgetary control among government agencies in Kenya. The current study leveraged on this knowledge gap by answering the research question; what is the effect of corporate governance on budgetary control of government agencies in Kenya?

1.3 Research Objective

The objective of this research was to determine the effect of corporate governance on budgetary control of government agencies in Kenya.

1.4 Value of the Study

This research will contribute to already existing theoretical as well as empirical literature on corporate governance and budgetary control. The findings will also help in theory development as they will offer insights on the shortcomings and relevance of

the current theories to the variables of the study. Subsequent studies may also be carried out based on the recommendation for further research.

The findings of the research might be relevant to the policy makers such as the government. The research will serve as government guide on its role in policy making and how CG affects budgetary control. This would help the government identify areas of improvement. It will also help in evaluating how the various government agencies are doing in terms of CG and budgetary control and develop relevant policies.

The study will also aid government agencies management in understanding the correlation between the two variables; the research will give them insight on the significance of corporate governance. Managers are likely to develop a clear strategy for improving their corporate governance. The information can be used by the firms to enhance their delivery mode as well as strengthen their position.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter widely explains the theories on which corporate governance and budgetary control is based. It further discusses the previous empirical studies; knowledge gaps identified and summarizes with a conceptual framework and hypotheses showing the expected relationship among the study variables.

2.2 Theoretical Framework

This segment examines the theories which underpin the study of corporate governance and budgetary control. The study reviewed the agency theory, stakeholder theory and the stewardship theory.

2.2.1 Agency Theory

This is the anchor theory of the current study. Jensen and Meckling (1976) agency theory describe an 'agent' as someone who works on behalf of another person. The problem with the principal-agent relationship is that principals cannot contractually specify what the agent can do in any case (Moenga, 2015). Three factors can exacerbate the problems that arise from the principal-agent relationship: opportunism, sunk costs, and secret facts (Njau, 2016). Hidden information happens when agents have knowledge that the principal does not have and the agent has an opportunity to keep the knowledge hidden from the principal, all other factors held responsible. Hidden knowledge has the effect of allowing the agent to 'shirk' or minimize efforts to the disadvantage of the principal. Agency theory has implications for why corporate governance best practice structures can provide productivity benefits and competitive advantages to organizations, based on the convention that corporate governance is

required to ensure agent action is directed toward the principal interests (Aimone & Butera, 2016).

Despite this, agency theory is not without flaws. The agency theory fails to account for many of the complexities and challenges that agents confront in carrying out the principal's tasks and assignments. Furthermore, the control devices proposed in relation to agency theory are not only costly, but too ineffective economically, since shareholders' interest protection strategies can interfere with the implementation of strategic decisions, restrict collective activities, change investment plans, and neglect other stakeholder interests, resulting in a reduction in their economic value development endeavor (Segrestin & Hatchuel, 2011).

Suitability of agency theory to this research is because it clarifies in what way management, as the agent, is supposed to fulfill their perfect fiduciary duty of acting in principals' best interests and to prepare and offer principals with financial reports. As a result, agency theory is thought to provide a sound theoretical basis for the research's primary objective, which is the affiliation between corporate governance and budgetary control.

2.2.2 Stakeholder Theory

Freeman (1984) came up with the theory with the intention of being utilized as a management tool. However, since then it has progressed into a firm theory with a lot of explanatory power. The stakeholder theory is a methodological framework for organizational ethics and management that focuses on ethical as well as moral ideologies in the management of public and private organizations. Stakeholder theory stresses the importance of maintaining a balance of stakeholders' interests as the primary determinant of organizational strategy.

The single-valued objective supposition, according to which advantages go to a firm's stakeholders, is a source of criticism for this theory. According to Jensen (2016), there are additional ways to assess an organization's performance apart from the benefits stakeholders receive. The factors comprise flow of information from top administration to lower-level employees, the work conditions, and interpersonal relationships inside the company.

Stakeholder theory is applicable to this research since it provides support for agency theory, which failed to capture all other important stakeholders who depend on financial results to make economic decisions, like regulators, creditors, staff, financial analysts, as well as potential investors, among others. It lays a theoretical basis for understanding how various individuals and entities both inside as well as outside of a firm need accurate information, in compliance with code of corporate governance and legal requirements, it may be guaranteed. As a result, the theory is supposed to include theoretical reasons for all of the practical objectives so that, in case the directors board as well as management have all stakeholders' interests at heart, they can completely comply with corporate governance code as well as guarantee that performance results provided to stakeholders are correct, pertinent, and represent the correct condition of the firm.

2.2.3 Stewardship Theory

The stewardship theory was pioneered by Donaldson and Davis (1991). It emerges as a critical counterpoint to agency theory. A manager's principal purpose, as per stewardship theory, is to maximize the company's output, since a manager's passion for success as well as achievement is gratified whenever the firm performs effectively. This theory counters the agency theory by arguing that managerial opportunism is

unimportant. Stewardship and agency theory mainly differ in that, stewardship theory substitutes the absence of confidence that agency theory relates to with reverence for authority and the desire of managers to behave ethically. According to stewardship theory, managers in publicly held firms are discouraged from operating against the interests of shareholders by their concern for their own reputations and career development, so agency costs should be naturally reduced (Donaldson & Davis, 1991). Because of detailed understanding of organizational operations, like access to data as well as technical skills, an insider-dominated board, according to Muth and Donaldson (1998), is more successful. Compensation incentivizes shareholders' agents to work for the good of all stakeholders. True stewards and executives follow corporate governance code as well as regulatory directives, and disclosing the true earnings quality to stakeholders (Chen et al., 2016).

Scholars critiquing stewardship theory like Pastoriza and Ario (2018), argue that stewardship theory is oversimplified and impractical because people are predisposed to become stewards owing to situational and psychological reasons. These factors do not affect all managers as the question arises: where there is a misalignment between the company's management theory and the manager's psychological features, what then happens to the organizational pursuit? Additionally, stewardship theory proclaims that becoming steward emanates simply from a rational procedure, but it is unclear which fundamental mechanisms lead a person to choose. The question is how a person can determine whether or not he has a steward's nature. It's critical to figure out the kind of inner drive that motivates a person to look besides his own self-interest and resolve inter-motivational conflict within himself (Daodu, Nakpodia & Adegbite, 2017).

Stewardship theory is pertinent to the research since it complements stakeholder theory, which captures all other important stakeholders other than management who depend on financial results to make economic decisions, like shareholders, regulators, creditors, staff, financial analysts, as well as potential investors, among others. It offers a theoretical framework for understanding how successful stewards, who are managers of firms, manage their own careers via performing their duties with utmost dignity, an absolute need for any company's compliance with corporate governance guidelines, and the disclosure of correct, appropriate, as well as useful reports to all interested parties at regular intervals without placing any stakeholder at a disadvantage.

2.3 Determinants of Budgetary Control

Budgetary control is determined by a number of factors. These variables can either be internal or external. The internal factors include corporate governance, management efficiency, firm size and firm age.

2.3.1 Corporate Governance

Jensen and Meckling (1976) states that managers only keep their self- interests in mind and the maximization of shareholder value is conditional to having efficient governance structures that will punish wrongful acts. Additionally, the stewardship theory holds that governance problems do not always originate from executives; rather, these challenges stem from the choices of regulators and investors who are working toward their own goals of achieving self-fulfillment (Donaldson & Davis, 1991).

Freeman (1984) state that managers only keep their self- interests in mind and the maximization of the goals of the firm is conditional to having efficient governance structures that will punish wrongful acts. Additionally, the stewardship theory holds that governance problems do not always originate from executives; rather, these

challenges stem from the choices of regulators and investors who are working toward their own goals of achieving self-fulfillment (Donaldson & Davis, 1991). The two theories agree that effective corporate governance can enhance budgetary control.

2.3.2 Management Efficiency

Management efficiency, as a budgetary control determinant, is a qualitative measure indicated by staff quality, the effectiveness as well as efficiency of internal controls, and management systems effectiveness (Athanasoglou, Sophocles & Matthaois, 2009). Quality of management impacts operational expenses, which in turn has an impact on a business's bottom line. As a result, management efficiency has a significant impact on budgetary control (Kusa & Ongore, 2013).

The efficiency of management of a business is determined by the research conducted by Olalere et al. (2015) as the capacity of the company to provide high-quality goods and services at the lowest feasible cost to consumers. Higher competitiveness and improved resource utilization seem to be supported by management efficiency. The use of operational efficiency as a measure of management efficiency in firms is often seen in the literature on firm performance. Other outside influences and qualities may affect a manager of a firm's operational control (Sarkis, 2000). Many in the industry say that a firm's decision makers should improve the company's physical assets' overall profitability (Saleh, 2015).

2.3.3 Firm Size

The economies of scale amount that a company earns are proportional to its size. Bigger firms have the higher chances of getting exposed to the pressure of the public. This implies that bigger firms are more likely to practice budgetary control to avoid public scrutiny compared to small firms. Regardless of their size, huge corporations might lose

control of their strategic as well as operational activities, resulting in a decrease in efficiency (Burca & Batrinca, 2015).

Large corporations have more market power. Besides, they can diversify their portfolios more. They are also more prone to suffer from organizational wastage if the company grows rapidly. The size of the company has a substantial impact on the quantity of cash flow that can be invested. The number of employees, property owned, and sales volume are all important factors to consider when defining the firm's size (Almajali et al., 2012).

2.3.4 Financial Leverage

Based on the sort of debt and in what manner finance managers utilize finances, financial leverage can be beneficial or cause financial distress. As per Salazar, Soto and Mosqueda, (2012) prudent usage and deployment of borrowed funds results in enhanced compliance. Essentially, debt financing is anticipated to have an effect on a company's working capital amounts, that in turn affects the degree of compliance with budgetary allocations (Eckbo, 2008).

The trade-off hypothesis includes the fact that the use of debt has tax benefits for a business. This is one of two pairs of conclusions; other study has shown that higher leverage causes share values to fluctuate more when sensitive information is involved; a company's ultimate fate depends on issues that are kept secret from the general public (Nyamboga, Omwario & Muriuki, 2014).

2.4 Empirical Review

Local as well as global researches have determined the link between corporate governance and budgetary control, the objectives, methodology and findings of these studies are discussed.

2.4.1 Global Studies

Freinkman and Plekhanov (2019) investigated the link between budgetary decentralization and public services quality in Russia's areas. The study population was the 17 regions in Russia while a generalized method of moments was utilized. The findings revealed that fiscal decentralization has no significant impact on key secondary education inputs like schools, computers, or the availability of pre-schooling, but has a substantial positive impact on average examination results after controlling for key observable inputs and regional government education spending. Decentralization has a positive impact on the quality of municipal utility provision, according to the research. The study did not establish how corporate governance influences budgetary control.

Afzalur (2019) investigated if board independence has an impact on the economic performance of Bangladeshi listed firms. This research uses a simultaneous equation approach to monitor the possible endogeneity problem by using data from 135 Dhaka Stock Exchange listed firms and accounting and market performance indicators. According to this report, board independence and firm economic results do not have a positive relationship. In addition, board size has a major positive effect on both board independence and firm results, according to this report. Although board independence is a key feature of corporate board practices in many developed countries, it may still be a mirage in Bangladesh. This study was performed in Bangladesh which has a difference socio-cultural and economic environment from Kenya where the current study will be undertaken.

Musa and Adutwumwaa (2021) examined the influence of various corporate governance structures such as board size, board independence, board gender diversity and CEO duality on the financial performance of rural banks in Ghana. The study

collected secondary data from the annual report of 30 rural banks for a 10-year period spanning 2010 to 2019. The result shows that there was a positive but statistically insignificant association between CEO duality and ROA and ROE. The study further reveals a positive association between board size and ROA and ROE even though that of ROA was statistically insignificant. Also, board independence was found to be a significant determinant of rural bank financial performance. This study focused on CG and financial performance leaving a gap on budgetary control which will be the focus of the current study.

Schubert and Kirsten (2021) examine the effect of budgeting control on the financial performance of SMEs in Germany. The study used the quantitative technique where data was gathered from the local business owner of SMEs located in Germany's three cities Munich, Berlin and Stuttgart because they have a high number of SMEs. Surveys were self-administered and also sent out to the business owners. The research instruments adopted included questionnaires and the interview guide. The study found that budgetary control integrates the organization's strategic planning with budgets and processes of cost control. The budgetary control also identifies the budgeting /financial skills required for better decision-making and identifies key financial indicators for the business and how and when to monitor them. The social and economic setting of Germany is different from Kenya where the current study will be conducted.

Kyere and Ausloos (2021) sought to examine empirically the impact of good corporate governance on financial performance of United Kingdom non-financial listed firms. Agency theory and stewardship theory serve as the bases of a conceptual model. Five corporate governance mechanisms are examined on two financial performance indicators, return on assets and Tobin's Q, employing cross-sectional regression

methodology. The conclusion drawn from empirical test so performed on 252 firms listed on London Stock Exchange for the year 2014 indicates a positive or a negative relationship, but also sometimes no effect, of corporate governance mechanisms impact on financial performance. This study was conducted among listed firms in United Kingdom whose nature of operations and social economic environment is different from that of government agencies in Kenya, which are the focus of the current study.

Jermias, Fu, Fu and Chen (2022) sought to examine the design and implementation of enterprise risk management (ERM) in three large Chinese state-owned enterprises. This study adopts a field study approach to analyze the risk assessment and risk-return matching of ERM. A field study was carried out over three years from 2008 to 2011 in three Chinese state-owned enterprises. The findings revealed that all three companies use budgetary control to identify risks, analyze each risk to determine the potential consequences, determine the acceptable levels of risk, develop a risk mitigation plan and monitor the activities in all business processes that may change the levels of risks continuously. The study presents a conceptual gap as it did not relate corporate governance with budgetary control.

2.4.2 Local Studies

Koech (2018) examined determinants of effective CG among state corporations found in Kenya. The study targeted managers from the 187 corporations and regression method analysed the data. The research exclusively utilized primary data gathered via semi-structured questionnaires. Findings showed that corporate governance had a positive relation to board characteristics among the corporations. This research failed to focus on CG influence on other variables such as budgetary control which will be the focus of the current research.

Mwangi (2018) studied audit committee characteristics impact on financial reporting quality in Kenya's Non-Commercial State Corporations. The goal of the study was to determine the impact of audit committee independence, diversity, financial competency, as well as meetings on financial reporting quality. The study used a 72 state non-commercial corporations census sample and used a descriptive research design. In addition, descriptive and inferential analysis approaches were used in the research. The research's conclusions revealed that audit committee meetings had a statistical substantial link with financial reporting quality. Nevertheless, the previous research focused on financial reporting, while the current research's scope will be contextually confined to budgetary control.

Saddimbah (2019) aimed to establish corporate governance effect on Kenya's CSCs financial performance. All the 54 commercial state corporations in Kenya were the population of the study. A period of 5 years between January 2014 and December 2018 was studied through gathering of secondary data. Descriptive cross-sectional research design was employed while multiple linear regressions model was applied in analysis of the association between the variables. The study revealed that board committees, firm size and liquidity established positive and statistically significant values for this study while board size, board independence and management efficiency produced positive but statistically insignificant values for this study. The research presents a conceptual gap as budgetary control was not considered.

Rono (2019) aimed to determine the impact of board gender diversity on Kenya's commercial bank's business performance. The research was done via an explanatory research design with a population of 146 workers and a sample of 106 respondents. Purposive sampling technique was deployed for this particular study and a closed-ended

questionnaire was utilized in primary data collection. Regression analysis was conducted. The conclusions indicate that board gender diversity and business performance have a strong as well as substantial relationship. The research discovers that board gender diversity is crucial for leadership capacity building in the organization. The research presents a conceptual gap as other structures of CG were not considered.

Miruka (2020) pursued to find corporate governance impact on Kenyan banks financial performance. Precisely, the study focused on board independence effect on financial NIC bank's performance. 135 employees at 8 NIC bank branches within Nairobi Central Business District served as the research population. Stratification was done based on three management levels: Managers, head of departments and operations staff where a sample of 101 employees was sampled. A questionnaire was utilized for data collection while 81 responded. The data analysis was performed via SPSS while the results presented in Figures and Tables. The study revealed that an independent board results in candid discussion of pertinent issues and positively impacts on performance. The research reveals a conceptual gap as it concentrated on only one aspect of CG.

Kipkirui (2020) sought to establish effect of budget absorption on the performance of county government. Budget absorption was supported by planning, organizing and a quality expenditure control tool. The research focused on the forty-seven counties. The secondary data was obtained from KNBS and CoB. The results revealed that budget ensures efficiency and effectiveness to the limited allocated resources. Budget is a management and regulation tool used to effectively manage the public funds with the aim of efficiently optimizing financial realization performance targets. The study

presents a conceptual gap as the impact of corporate governance on budgetary control was not explored.

Abang'a, Tauringana, Wang'ombe and Achiro (2021) focuses on the effect of aggregate and individual corporate governance factors on the financial performance of state-owned enterprises (SOEs) in Kenya. The research uses balanced panel data regression analysis on a sample of 45 SOEs in Kenya for a four-year period (2015–2018). The panel data analysis results show that board meetings, board skill and gender diversity individual provisions of corporate governance are significantly and positively associated with capital budget realization ratio (CBRR). Moreover, the study finds that aggregate corporate governance disclosure index, board sub-committees, board size and independent non-executive directors are positive but insignificantly related to CBRR. The research presents a conceptual gap as other aspects of CG were not considered.

2.5 Summary of the Literature Review

The theoretical reviews showed the predicted relation between corporate governance attributes and budgetary control. The theories reviewed in this study are namely; agency theory, stakeholder theory and the stewardship theory. Major influencers of budgetary control have also been discussed. The chapter also covers empirical review and a conceptual framework showing the hypothesized relationships.

Various empirical studies have been analysed in this section. Inconclusive and contradictory findings on the variables studied makes it difficult to precisely conclude the relationship between corporate governance and budgetary control. At the conceptual level, the studies reviewed have studied different variables. The relationships tested

varied from study to study. Due to different definitions and operationalisation, the findings differed and the conclusions obtained conflicted.

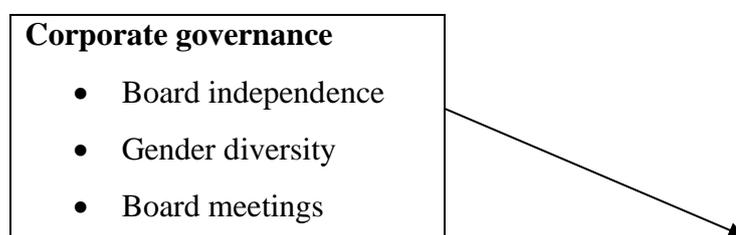
Contextually, foreign, regional and local studies were identified and discussed. However, the majority of the studies reviewed were from foreign regions. This made it difficult to extrapolate findings to the Kenyan economy. Methodologically, data collection, sampling and data analysis methods differed. The results therefore obtained were inconclusive. All this leaves a study gap that this research aims at filling.

2.6 Conceptual Framework

Displayed in figure 2.1 is the predicted relation between the variables. The predictor variable is corporate governance given by board independence, gender diversity and board meetings. A more independent board is likely to provide a better oversight role leading to enhanced budgetary control. Having more women in the board have also been hypothesized to enhance budgetary control while an increase in number of board meetings ensures better monitoring leading to enhanced budgetary control. The control variables are management efficiency, firm size and leverage. The response variable is budgetary control given by the ratio of actual expenditure to budgeted expenditure.

Independent variables

Dependent variable



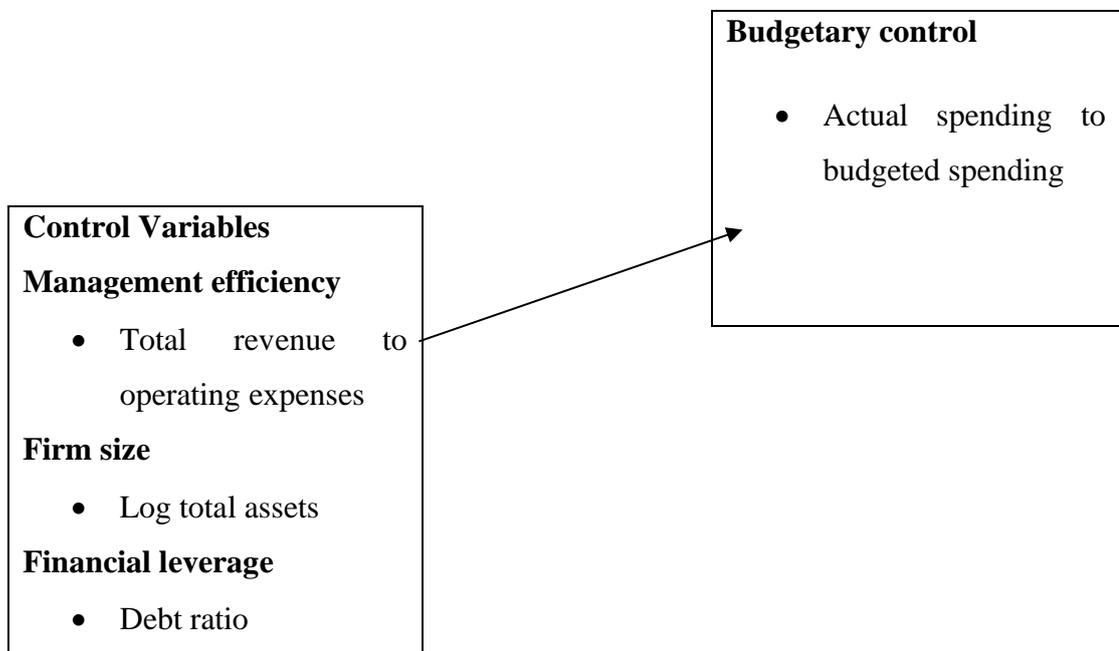


Figure 2.1: The Conceptual Model

Source: Researcher (2022)

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The chapter describes the approaches utilized in accomplishing the study objective which was to establish how corporate governance affects budgetary control among government agencies in Kenya. In particular, the study highlights the; the design, data collection, and analysis.

3.2 Research Design

A descriptive design was adopted to determine how corporate governance and

budgetary control among commercial state corporations relate. This design was appropriate since the nature of the phenomena was of key interest to the researcher (Khan, 2008). It was also sufficient in defining the interrelationships of the phenomena. This design also validly and accurately represented the variables thereby giving sufficient responses to the study queries (Cooper & Schindler, 2014).

3.3 Population

A population is all observations from a collection of interest like events specified in an investigation (Burns & Burns, 2008). The research population was all the 94 government agencies in Kenya as at 31st December 2021 (Appendix II).

3.4 Data Collection

Secondary data was relied on in this investigation which was extracted from annual published financials of the government agencies from 2017 to 2021 and captured in data collection forms. The reports were extracted from the Office of the Auditor General financial publications and individual government agencies reports. The specific data collected included budgeted spending and actual spending for budgetary control; total board members and non-executive directors for board independence; women directors and total board members for gender diversity; the number of meetings for board meetings; total assets for firm size; operating expenses and total revenue for management efficiency, and total debt and total assets for leverage.

3.5 Data Analysis

SPSS software version 24 was used to analyze the data. Tables and graphs presented the findings quantitatively. Descriptive statistics were employed in the calculation of measures of central tendency and dispersion and combined with standard deviation for every variable. Inferential statistics relied on correlation and regression. Correlation

determined the extent of the link between the research variables and a regression determined cause and effect among variables. A multivariate regression linearly determined the relation between the dependent and independent variables.

3.6.1 Diagnostic Tests

The diagnostic tests to be performed are outlined in Table 3.1

Table 3.1: Diagnostic Tests

Assumption	Description	Test	Interpretation	Treatment
Normality	To verify normal distribution, the test is conducted	Shapiro–Wilk test	If p values are above 0.05, the variables are normally distributed	application of square roots or logs to non-normality
Linearity Test	There is linearity when there is a linear link between the variables.	ANOVA test	A linear relationship exists where the alpha values are < 0.05	Use of the reciprocal method
Multicollinearity	The phenomenon known as multicollinearity occurs when there is a connection between many variables, which then leads to the standard errors distorting the regression analysis.	VIF Test	Multicollinearity exist where the VIF > 10	Eliminate highly correlated variables.
Heteroscedasticity	to determine whether the model's or the errors' variance is different for each observation	Breusch–Pagan test	Heteroscedasticity exist where the p-value $p < 0.05$)	Use Natural log of variables
Autocorrelation	To determine the value of a single variable by considering other variables that are connected to it.	Breusch-Godfrey test.	If p-values are lower than 0.05, autocorrelation is present.	Hildreth-Lu Procedure
Stationarity test	In order to evaluate whether or not a time series variable has a unit root and whether or not it is stationary	ADF test	If p values are below 0.05, unit roots exist.	Use Natural log of variables

Hausman specification test	To differentiate between fixed-effects and random-effects models and identify the optimal one	Hausman test	Use fixed effects model if p value is less than 0.05 and random effects if otherwise	Use natural log of variables
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3.6.2 Analytical Model

The following equation was applicable:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \varepsilon$$

Where: Y = Budgetary control measured as the ratio of actual spending to budgeted spending

β_0 = y intercept of the regression equation.

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6$ = are the regression coefficients

X_1 = Board independence as measured by percentage of the non-executive directors in proportion to the total number of directors

X_2 = Gender diversity as measured by the ratio of women in the board to total board members

X_3 = Board meeting as measured by the number of meetings in a given year

X_4 = Management efficiency as measured by ratio of total revenue to total operating expenses

X_5 = Firm size as measured by the natural logarithm of total assets

X_6 = leverage measured as the ratio of total debt to total assets

ε = error term

3.6.3 Tests of Significance

Parametric tests determined the general model and variable's significance. The F-test determined the model's relevance and this was achieved using ANOVA, while a t-test determined the relevance of every variable.

CHAPTER FOUR: DATA ANALYSIS RESULTS AND FINDINGS

4.1 Introduction

This section presents descriptive statistics, outcomes and interpretations of various tests namely; test of normality, Multicollinearity, heteroskedasticity tests, autocorrelation and stationarity test. The chapter also presents the results of Pearson correlation and regression analysis.

4.2 Descriptive Statistics

This part presents the descriptive findings from the collected figures. The descriptive results include mean and standard deviation for each of the research parameters. The analyzed figures were gotten from the auditor general's office reports and individual government agencies annual reports for 5 years (2017 to 2022). The number of observations is 470 (94*5) as all the 94 government agencies provided complete data for the 5 year period. The outcomes are as shown in Table 4.1

Table 4.1: Descriptive Results

	N	Minimum	Maximum	Mean	Std. Deviation
Budgetary control	470	.0074	3.2957	1.066063	.5392629
Board independence	470	.0000	1.0000	.878377	.1114934
Gender diversity	470	.1714	.6000	.480566	.0775161
Board meetings	470	4.0000	48.0000	8.417021	7.4163802
Managerial efficiency	470	.0160	19.4060	2.798930	2.5625468
Firm size	470	7.4176	11.7045	9.557811	.9912329
Leverage	470	.0246	1.4193	.468166	.2409649
Valid N (listwise)	470				

Source: Research Findings (2022)

4.3 Diagnostic Tests

Diagnostic tests done by the researcher to ensure the assumptions of Classic Linear Regression Model (CLRM) are not violated and to obtain suitable models for examining in the consequence that the CLRM hypotheses are infringed. Consequently, the pre and post approximation analysis were carried out before processing regression model. This tests were namely; normality, Multicollinearity, heteroskedasticity, autocorrelation and stationarity. The study refrained from factitious regression results by getting this analysis.

4.3.1 Normality Test

The normality of data can be tested using various methods. The following methods are often used include the Shapiro–Wilk test and Kolmogorov–Smirnov test. The Shapiro–Wilk test is best for small sample sizes ($n < 50$ samples), while it can also be used on more extensive samples selections, whereas the Kolmogorov–Smirnov test is best for $n < 50$ samples. As a result, the study used the Kolmogorov–Smirnov test as the numerical method of determining normality. Null hypothesis for these tests states that the data was obtained from a normally distributed population. The hypothesis is rejected when P-value is less than 0.05, and the figures are said to be not normally distributed.

Table 4.2: Test for Normality

	Kolmogorov-Smirnov	P-value
Budgetary control	4.588	0.300
Board independence	7.303	0.401
Gender diversity	5.428	0.504
Board meetings	3.763	0.515
Managerial efficiency	4.153	0.427
Firm size	5.239	0.500
Leverage	5.145	0.401

Source: Research Findings (2022)

From Table 4.2 results, all the study variables have a p value more than 0.05 and therefore were normally distributed.

4.3.2 Multicollinearity Test

Multicollinearity occurs when the independent variables in a regression model are significantly linked. Multicollinearity was assessed using the VIF and tolerance indices. When the VIF value is higher than ten and the tolerance score is less than 0.2, multicollinearity is present, and the assumption is broken. The VIF values are less than 10, indicating no problem with multicollinearity.

Table 4.3: Multicollinearity

Variable	Collinearity Statistics	
	Tolerance	VIF
Board independence	0.357	2.803
Gender diversity	0.378	2.645
Board meetings	0.426	2.345
Managerial efficiency	0.354	2.827
Firm size	0.366	2.734
Leverage	0.381	2.623

Source: Research Findings (2022)

4.3.3 Heteroskedasticity Test

The residual variance from the model must be constant and unrelated to the independent variable in linear regression models calculated using the Ordinary Least Squares (OLS) method(s). Homoskedasticity refers to constant variance, whereas heteroscedasticity refers to non-constant variance. The study used the Breusch-Pagan/Cook-Weisberg test to determine if the variation was heteroskedastic. The hypothesis implies constant variance, indicating that the data is homoscedastic. The outcomes are as shown in the table below.

Table 4.4: Heteroskedasticity Results

Breusch-Pagan / Cook-Weisberg test for heteroscedasticity		
chi2(1)	=	0.8114
Prob > chi2	=	0.6013

Source: Research Findings (2022)

Table above reveals that the hypothesis was accepted since the p-value was 0.6013, which was important to ($p > 0.05$). As a result, the dataset had homoskedastic variances. Since the P-values of Breusch-Pagan's test for homogeneity of variances were more

than 0.05. The test therefore confirmed homogeneity of variance. The data can therefore be used to conduct panel regression analysis.

4.3.4 Autocorrelation Test

Serial correlation, also known as autocorrelation, makes the standard errors of coefficients appear to be less than in linear panel data models, resulting in higher R-squared and erroneous hypothesis testing. Autocorrelation was verified via Durbin-Watson test. If the Durbin-Watson test results in a value close to 2, the error terms of regression variables are uncorrelated (i.e. between 1 and 3). The figure will be better if it is nearer to 2. The outcomes are presented in the table below.

Table 4.5: Test of Autocorrelation

Durbin Watson Statistic
2.017

Source: Research Findings (2022)

The Durbin-Watson value was 2.017, according to the findings in Table 4.5. The fact that the Durbin-Watson statistic was near to 2 demonstrates that the error terms of regression variables are uncorrelated.

4.3.5 Stationarity Test

The research variables were subjected to a group data unit-root test to establish if the data was stationary. This test was Levin-Lin Chu unit root test. At a standard statistical significance level of 5%, the test was compared to their corresponding p-values. The null hypothesis for this test states that every group has a unit root while the alternative hypothesis states that at least one panel are stationary. The table below shows Levin-Lin Chu unit root test outcomes.

Table 4.6: Levin-Lin Chu unit-root test

Levin-Lin Chu unit-root test			
Variable	Statistic	p value	Comment
Budgetary control	6.4722	0.0000	Stationary
Board independence	7.3975	0.0000	Stationary
Gender diversity	6.2126	0.0000	Stationary
Board meetings	8.2031	0.0000	Stationary
Managerial efficiency	7.8718	0.0000	Stationary
Firm size	6.8447	0.0000	Stationary
Leverage	6.8132	0.0000	Stationary

Source: Research Findings (2022)

As demonstrated by the above table this test concludes that the figures are stationary at a statistical significance level of 5% as the p-values all fall below 0.05.

4.3.6 Hausman Test

When using panel data, it is necessary to establish if a fixed or random effect model is more desirable. For the purpose of choosing the best panel regression model, the Hausman specification test was used. In essence, a Hausman specification test determines if the unique errors have a relationship to the regressors, with the null hypothesis being that they do not (random effect is preferred). Fixed effects were utilized when the P-value was significant (below 0.05), while random effects were used otherwise. The outcomes of the Hausman test are shown in the table below.

Table 4.7: Hausman Test Results

chi2(6)	P-Value
0.06	0.8437

Null Hypothesis: The appropriate model is Random Effects

Source: Research Findings (2022)

4.4 Correlation Results

To determine the degree and path of link of each predictor variable and the response variable, correlation analysis was carried out. The correlation findings in the table

below shows correlation nature among the research variables in relation to greatness and path.

Table 4.8: Correlation Results

		Budgetary control	Independence	Gender diversity	Board meetings	Management efficiency	Firm size	Leverage
Budgetary control	Pearson Correlation	1						
	Sig. (2-tailed)							
Independence	Pearson Correlation	.321*	1					
	Sig. (2-tailed)	.021						
Gender diversity	Pearson Correlation	.069	-.076	1				
	Sig. (2-tailed)	.388	.298					
Board meetings	Pearson Correlation	.257*	.433**	-.001	1			
	Sig. (2-tailed)	.028	.000	.991				
Management efficiency	Pearson Correlation	.033	.162*	.089	.152*	1		
	Sig. (2-tailed)	.485	.025	.222	.037			
Firm size	Pearson Correlation	.344*	.079	.049	-.061	.111	1	
	Sig. (2-tailed)	.019	.281	.498	.406	.127		
Leverage	Pearson Correlation	-.562**	.088	.106	.076	-.013	.124	1
	Sig. (2-tailed)	.000	.229	.147	.301	.854	.089	

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

c. Listwise N=470

Source: Research Findings (2022)

The correlation outcomes disclose board independence has a weak positive as well as significant link with budgetary control (value of r is 0.321) at 5 percent significance level. Board meetings also has a weak positive as well as significant link with budgetary control (value of r is 0.257) at 5 percent significance level. Both gender diversity and management efficiency do not have a significant effect on budgetary control. The outcomes disclose that leverage and budgetary control have a negative as well as significant correlation (value of r is =-0.562) at 5 % significance level. The correlation

results also reveal a positive relationship between size of the firm and budgetary control (r value of 0.344) at a significance level of 5%.

4.5 Regression Results

To know the degree to which budgetary control is described by the chosen variables, regression analysis was used. In the table below the regression's findings were displayed. Through the conclusions as epitomized by the R^2 , the studied independent variables explained variations of 0.2836 in budgetary control among government agencies in Kenya. This suggests that other factors account for 71.64% of the variability in budgetary control among government agencies in Kenya, while the six variables account for 28.36% of those variations. The significance level of the data was 0.000, according to Table 4.9's ANOVA results, which proposes that the model is the best choice for drawing conclusions about the variables.

Table 4.9: Regression Results

Budgetary control	Coef.	Std. Err.	P>t
Board independence	0.2981*	0.0091	0.0000
Gender diversity	0.0561	0.0052	0.6342
Board meetings	0.2183*	0.0037	0.0006
Managerial efficiency	0.0341	0.0021	0.6831
Firm size	0.2733*	0.0053	0.0000
Leverage	-0.5625*	0.0074	0.0000
_cons	0.2849*	0.0083	0.0000
Model Summary			

R-squared	0.2836
Wald chi2(6)	13.64
Prob > chi2	0.0000

* p<0.05

Source: Research Findings (2022)

The coefficient of regression model was as below;

$$Y = 0.2849 + 0.2981X_1 + 0.2183X_2 + 0.2733X_3 - 0.5625X_4$$

Where:

Y = Budgetary control X₁ =Board independence; X₂=Board meetings; X₃= Firm size;

X₄ = Financial leverage

4.6 Discussion of Research Findings

This research aimed to demonstrate how corporate governance affects budgetary control among government agencies in Kenya. The research used a descriptive plan while the 94 government agencies in Kenya were the population. Data was collected from all the 94 government agencies. The research depended on secondary data which was gotten from Office of the Auditor General and individual government agencies annual reports. The precise characteristics of corporate governance taken into consideration were; independence, gender diversity and meetings. The control variables were firm size and leverage. Descriptive and inferential statistics were used in the analysis of data. The outcomes are elaborated in this part.

The correlation outcomes disclose board independence has a weak positive as well as significant link with budgetary control. Board meetings also have a weak positive as well as significant link with budgetary control. Both gender diversity and management efficiency do not have a significant effect on budgetary control. The outcomes disclose that leverage and budgetary control have a negative as well as significant correlation.

The correlation results also reveal a positive relationship between size of the firm and budgetary control.

Multivariate regression outcomes revealed that the R-squared was 0.2836 suggesting that 28.36% of changes in budgetary control of government agencies in Kenya are due to the six variables selected for this study. This means that variables not considered explain 71.64% of changes in budgetary control of government agencies in Kenya. The overall model was statistically significant and had a p value of 0.000 that is below the 0.05 significance level. This suggests that the overall model had the required goodness of fit.

The multivariate regression analysis further revealed that individually, both board independence and board meetings had a positive and substantial effect on budgetary control of government agencies in Kenya as shown by (β value is 0.2981, p value is 0.0000) and (β value is 0.2183, p value is 0.0006) correspondingly. Board gender diversity unveiled a positive influence though not statistically significant on budgetary control of government agencies in Kenya. The control variable firm size displayed a positive and significant budgetary control of government agencies in Kenya influence as shown by (β value is 0.2733, p value is 0.0000) while leverage displayed a negative and substantial budgetary control influence as shown by ($\beta=-0.5625$, $p=0.0000$).

These outcomes agree with Musa and Adutwumwaa (2021) who examined the influence of various corporate governance structures such as board size, board independence, board gender diversity and CEO duality on the financial performance of rural banks in Ghana. The study collected secondary data from the annual report of 30 rural banks for a 10-year period spanning 2010 to 2019. The result shows that there was a positive but statistically insignificant association between CEO duality and ROA and

ROE. The study further reveals a positive association between board size and ROA and ROE even though that of ROA was statistically insignificant. Also, board independence was found to be a significant determinant of rural bank financial performance.

The results also concur with Abang'a, Tauringana, Wang'ombe and Achiro (2021) who focuses on the effect of aggregate and individual corporate governance factors on the financial performance of state-owned enterprises in Kenya. The research uses balanced panel data regression analysis on a sample of 45 SOEs in Kenya for a four-year period (2015–2018). The panel data analysis results show that board meetings, board skill and gender diversity individual provisions of corporate governance are significantly and positively associated with capital budget realization ratio (CBRR). Moreover, the study finds that aggregate corporate governance disclosure index, board sub-committees, board size and independent non-executive directors are positive but insignificantly related to CBRR.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter includes a summary of statistical findings, conclusions drawn from these data, study contributions, and policy recommendations for each research hypothesis. The chapter also discusses the study's limitations and potential research prospects.

5.2 Summary

The study aimed at examining how corporate governance impact budgetary control of Kenyan government agencies. The parameters chosen for this analysis are; board independence, gender diversity, board meetings, management efficiency, firm size and leverage. A descriptive study design was chosen. The data gathered was secondary in nature from office of the auditor general and was analyzed by both descriptive and inferential statistics. Yearly data for 94 government agencies for five years from 2017 to 2021 was obtained from their annual reports.

The correlation outcomes disclose board independence has a weak positive as well as significant link with budgetary control. Board meetings also have a weak positive as well as significant link with budgetary control. Both gender diversity and management efficiency do not have a significant effect on budgetary control. The outcomes disclose that leverage and budgetary control have a negative as well as significant correlation. The correlation results also reveal a positive relationship between size of the firm and budgetary control.

Multivariate regression outcomes revealed that the R-squared was 0.2836 suggesting that 28.36% of changes in budgetary control of government agencies in Kenya are due to the six variables selected for this study. This means that variables not considered explain 71.64% of changes in budgetary control of government agencies in Kenya. The overall model was statistically significant and had a p value of 0.000 that is below the 0.05 significance level. This suggests that the overall model had the required goodness of fit.

The multivariate regression analysis further revealed that individually, both board independence and board meetings had a positive and substantial effect on budgetary

control of government agencies in Kenya. Board gender diversity unveiled a positive influence though not statistically significant on budgetary control of government agencies in Kenya. The control variable firm size displayed a positive and significant budgetary control of government agencies in Kenya influence while leverage displayed a negative and substantial budgetary control influence.

5.3 Conclusions

The goal of the research was to find out corporate governance related to budgetary control among government agencies in Kenya. The study results showed that board independence had a positive and significant effect on budgetary control. This may mean that the higher proportion of independent non-executive and executive directors increased board effectiveness in monitoring managerial opportunism and preventing self-interest thereby consequently, increased budgetary control.

The findings indicated that board meetings had a positive and significant effect on budgetary control. This may imply that government agencies whose board meets more frequently are likely to have better budgetary controls compared to boards with fewer meetings. This tendency can be explained by the fact that more frequent board meetings imply close monitoring of management actions.

Furthermore the outcomes showed that leverage has a significant negative effect on budgetary control. This suggests that having high level of debt in firms compared to assets is expected that their budgetary control record is low. This tendency can be explained by the fact that high debt levels contribute to an increase in interest expense. The research also showed that the size of the firm affects budgetary control positively. This implies that government agencies with more assets are likely to have better budgetary controls.

5.4 Recommendations for Policy and Practice

This research revealed that board independence influenced government agencies' budgetary control positively. The study recommends that the policy makers of government agencies should formulate and implement relevant board independence strategies as an independent board has been found to be more effective. Similarly, the research suggests that the government should assess the suitability of the current board requirements for government agencies to ensure they have enough legislation guiding them on board independence.

The research showed that board meetings affected budgetary control of government agencies positively. The recommendation from the research is that policy makers of government agencies to make sure they hold adequate number of board meetings in a year as this will enable them to monitor management effectively leading to a rise in budgetary control.

Moreover, the research showered that leverage affects budgetary control of government agencies negatively. This research proposes that government agencies should put forward assessment mechanism that is effective to prevent high level of debts in their books. The research proposes that government agencies should try to increase their asset base as big government agencies are likely to achieve better budgetary control than small government agencies.

5.5 Limitations of the Study

This study was only conducted for five years between 2017 and 2021 due to time and cost constraints. There is no surety for the study findings to hold beyond the period studied. Furthermore, it is uncertain whether the findings would hold beyond 2021. Also because of constraints in time and finance, the research was only done on public

firms, there is no surety for the study findings to hold if commercial or not-for-profit firms were examined.

The focus was on various factors which are thought to influence budgetary control among Kenyan government agencies. The study specifically examined six explanatory factors. Though, in certainty, there is presence of other variables probable to influence budgetary control among Kenyan government agencies including internal like internal controls whereas others are beyond the control of the firm like inflationary pressures as well as political stability.

The data quality was the main restriction for this research. It is impossible to conclusively conclude that the study's findings accurately reflect the current reality. It was presumed that figures utilized in the research are accurate. Due to the current conditions, there has also been a great deal of incoherence in the data measurement. The research used secondary data rather than primary data. Due to the limited availability of data, only some of the budgetary control drivers have been considered.

The data analysis was performed using regression models. Due to restrictions associated with using the model, like inaccurate findings resultant from changes from the varying value, the researchers are not be able to generalize the conclusions precisely. A regression model cannot be performed using the prior model after data is added to it.

5.6 Suggestions for Further Research

This research concentrated on government agencies in Kenya. Further studies can focus on a wide scope by covering other firms in the Kenyan public sector to agree or differ with the results of the current research. Further, this research focused on three aspects of corporate governance namely; board independence, gender diversity and meetings

frequency. Future studies should focus on other corporate governance attributes that were not considered in this study.

The current research scope was restricted to five years; more research can be done past five years to determine whether the results might persist. Thus, inherent future studies may use a wider time span that can either support or criticize the current research conclusions. The scope of the study was additionally constrained in terms of context where Kenyan government agencies were examined. Further studies can be extended to other firms to establish if they complement or contradict the current study findings. Researchers in the East African region, the rest of Africa, and other global jurisdictions can too perform the research in these establishments to make sure the current research conclusions will persist.

The research only used secondary data; alternate research may use primary data sources such in-depth questionnaires and structured interviews given to practitioners and stakeholders. These can then affirm or criticize the results of the current research. The research used multiple linear regression and correlation study; future research could use other analytic techniques such factor analysis, cluster analysis, granger causality, discriminant analysis, and descriptive statistics, among others.

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APPENDICES

Appendix I: Government Agencies in Kenya

1. Agricultural Development Corporation (ADC) in Kenya
2. Betting Control And Licensing Board in Kenya
3. Bomas of Kenya Limited
4. Brand Kenya Board in Kenya
5. Capital Markets Authority (CMA) in Kenya
6. Central Bank Of Kenya

7. Coffee Board of Kenya
8. Coffee Research Foundation in Kenya
9. Commission on Revenue Allocation in Kenya
10. Communications Commissions of Kenya (CCK)
11. Constituencies Development Fund Board in Kenya
12. Economic Stimulus Program in Kenya
13. eGovernment Kenya
14. Energy Regulatory Commission (ERC) in Kenya
15. Ethics and Anti-Corruption Commission (EACC) in Kenya
16. Export Promotion Council in Kenya
17. Higher Education Loans Board (HELB) in Kenya
18. Huduma Kenya Secretariat
19. Independent Boundaries And Electoral Commission (IEBC) in Kenya
20. Judges and Magistrates Vetting Board in Kenya
21. Judiciary Training Institute in Kenya
22. Kenya Airports Authority
23. Kenya Broadcasting Corporation
24. Kenya Bureau of Standards (KBS)
25. Kenya Civil Aviation Authority
26. Kenya Coconut Development Authority
27. Kenya Ferry Services Limited
28. Kenya Film Commission
29. Kenya Flower Council
30. Kenya Forest Service
31. Kenya ICT Board

32. Kenya Law Reform Commission (KLRC)
33. Kenya Maritime Authority
34. Kenya Medical Supplies Agency (KEMSA)
35. Kenya National Bureau of Statistics (KNBS)
36. Kenya National Commission for UNESCO
37. Kenya National Commission of Human Rights (KNCHR)
38. Kenya National Disaster Operation Centre (NDOC)
39. Kenya National Examinations Council (KNEC)
40. Kenya National Highways Authority (KENHA)
41. Kenya National Trading Corporation Limited
42. Kenya Plant Health Inspectorate Services (KEPHIS)
43. Kenya Ports Authority (KPA)
44. Kenya Revenue Authority (KRA)
45. Kenya Roads Board
46. Kenya Sugar Board
47. Kenya Tourist Board
48. Kenya Urban Roads Authority (KURA)
49. Kenya Valley Development Authority (KVDA)
50. Kenya Wildlife Service (KWS)
51. Kenya Yearbook Editorial Board
52. LAPFUND in Kenya
53. Media Council of Kenya
54. Medical Practitioners and Dentists Board in Kenya
55. National Crime Research Centre in Kenya
56. National Aids Control Council in Kenya

57. National Cereals and Produce Board (NCPB) in Kenya
58. National Council for Law Reporting in Kenya
59. National Council for Persons Persons With Disabilities in Kenya
60. National Council for Population and Development in Kenya
61. National Environment Management Authority (NEMA)
62. National Gender and Equality Commission (NGEC) in Kenya
63. National Hospital Insurance Fund (NHIF) in Kenya
64. National Intelligence Service (NIS) in Kenya
65. National Irrigations Board in Kenya
66. National Land Commission in Kenya
67. National Museums of Kenya
68. National Police Service Commission in Kenya
69. National Social Security Service (NSSF) in Kenya
70. National Transport and Safety Authority in Kenya
71. Non-Governmental Organization Cordination Board in Kenya
72. Nyayo Tea Zones Development Corporation in Kenya
73. Office of Attorney General and Department of Justice in Kenya
74. Office of the Auditor General
75. Office of The Controller of Budget in Kenya
76. Office of The Director of Public Prosecution in Kenya
77. Parliamentary Service Commission in Kenya
78. Pest Control Products Board in Kenya
79. Postal Corporation of Kenya
80. Privatization Commission in Kenya
81. Public Service Commission of Kenya

82. Retirement Benefits Authority in Kenya
83. Salaries and Remuneration Commission in Kenya
84. Tana and Athi River Development Authority (TARDA) in Kenya
85. Tea Board of Kenya
86. Teachers Service Commission in Kenya
87. The Commission on Administrative Justice (Office of The Ombudsman)
88. The Judiciary of Kenya
89. The Kenya National Disaster Operation Centre (NDOC)
90. The Sacco Societies Regulatory Authority (SASRA) in Kenya
91. Tourism Fund in Kenya
92. Transition Authority (TA) in Kenya
93. Vision 2030 Delivery Secretariat in Kenya
94. Youth Enterprise Development Fund in Kenya

Source: KNBS (2021)

Appendix II: Research Data

Agency	Year	Budgetary control	Board Independence	Gender diversity	Board meetings	Managerial efficiency	Firm size	Leverage
1	2017	0.7526	0.7270	0.3273	4.0000	3.0320	9.5574	0.5125
1	2018	0.7788	0.8890	0.4889	4.0000	2.8680	9.5688	0.4556
1	2019	0.9003	0.9000	0.5000	4.0000	2.9310	9.6281	0.6756
1	2020	1.2190	0.9000	0.5000	4.0000	2.2490	9.6183	0.7448
1	2021	0.7812	0.9000	0.5000	4.0000	2.9310	9.6281	0.7232
2	2017	1.5348	0.9440	0.5444	4.0000	0.6040	9.4296	0.2742
2	2018	1.2537	0.9440	0.5440	4.0000	3.4630	9.6281	0.3254
2	2019	1.8550	0.9440	0.5440	4.0000	0.9970	9.4463	0.2887
2	2020	1.6321	0.9440	0.5440	4.0000	2.1730	9.4038	0.2953
2	2021	3.2957	0.8890	0.4889	4.0000	1.7660	9.0069	0.2754
3	2017	0.6206	0.8750	0.4750	4.0000	2.9090	9.0343	0.6428
3	2018	0.6118	0.8750	0.4750	4.0000	5.9580	9.0504	0.6662
3	2019	1.1138	0.8750	0.4750	4.0000	11.6480	9.5945	0.6639
3	2020	1.0363	0.8750	0.4750	4.0000	7.5030	9.6034	0.6526
3	2021	1.5372	0.8750	0.4750	4.0000	2.1230	9.6372	0.6372
4	2017	1.4935	0.8890	0.4889	4.0000	3.2370	9.5945	0.1158
4	2018	1.1013	0.9230	0.3140	4.0000	2.3880	9.6034	0.1323
4	2019	0.7508	0.9230	0.3140	4.0000	4.4010	9.6372	0.1656
4	2020	0.8794	0.9000	0.3140	4.0000	2.8330	9.6842	0.1472
4	2021	1.1345	0.9350	0.3143	4.0000	3.4630	9.6389	0.1270
5	2017	0.5897	0.9230	0.3143	4.0000	4.3110	9.7991	0.7007

Agency	Year	Budgetary control	Board Independence	Gender diversity	Board meetings	Managerial efficiency	Firm size	Leverage
5	2018	0.6198	0.9230	0.4180	4.0000	3.3780	9.7447	0.6912
5	2019	0.5994	0.8180	0.4180	9.0000	3.8290	9.6962	0.7020
5	2020	0.7079	0.8180	0.4182	4.0000	2.6740	9.6347	0.6503
5	2021	0.5240	0.8180	0.4330	4.0000	2.8280	9.6876	0.5377
6	2017	1.8238	0.8890	0.4330	4.0000	6.7450	9.7189	0.7331
6	2018	1.5769	0.9090	0.4330	4.0000	3.5950	9.7057	0.6613
6	2019	1.1119	0.9090	0.4330	4.0000	3.7640	9.7118	0.5954
6	2020	1.2749	0.9090	0.4333	4.0000	1.7660	9.7567	0.6081
6	2021	1.3443	0.9090	0.4333	4.0000	2.9090	9.7672	0.5497
7	2017	0.9830	0.8570	0.4333	4.0000	1.9450	9.9838	0.3826
7	2018	1.0618	0.8570	0.4570	4.0000	2.5700	10.1201	0.3554
7	2019	1.7404	0.9090	0.4570	4.0000	1.6720	10.1146	0.4025
7	2020	1.2006	0.9090	0.4571	4.0000	1.7660	10.1325	0.5734
7	2021	0.9407	0.9090	0.4571	4.0000	2.9090	10.1599	0.5605
8	2017	1.3215	0.9170	0.4667	4.0000	3.4270	9.0069	0.2890
8	2018	0.7600	0.9170	0.4670	4.0000	3.9180	9.0343	0.5506
8	2019	0.6879	0.9170	0.4670	4.0000	3.2480	9.0504	0.4309
8	2020	0.9920	0.9170	0.4750	4.0000	1.7660	9.5945	0.7651
8	2021	1.0697	0.9170	0.4750	4.0000	2.9090	9.6034	0.5803
9	2017	0.2677	0.8890	0.4750	4.0000	5.9580	9.6372	0.2478
9	2018	0.3491	0.8890	0.4750	4.0000	11.6480	9.6842	0.2405
9	2019	0.3323	0.8890	0.4750	4.0000	7.5030	9.5951	0.3577
9	2020	0.2661	0.8890	0.4750	4.0000	2.1230	9.6130	0.2284

Agency	Year	Budgetary control	Board Independence	Gender diversity	Board meetings	Managerial efficiency	Firm size	Leverage
9	2021	0.3119	0.8890	0.4889	4.0000	3.2370	9.6555	0.2211
10	2017	1.1178	1.0000	0.4889	4.0000	3.4630	9.6842	0.5144
10	2018	1.1099	1.0000	0.4889	4.0000	0.8190	10.0604	0.5296
10	2019	0.9898	1.0000	0.4889	4.0000	0.9260	10.0086	0.5866
10	2020	0.8495	0.9000	0.4889	4.0000	0.7700	10.0009	0.6934
10	2021	1.0610	0.9000	0.4889	4.0000	0.9010	10.1075	0.6071
11	2017	0.8533	0.9090	0.4889	4.0000	3.4630	8.8134	0.5346
11	2018	0.9362	0.9090	0.4889	4.0000	0.9420	8.8214	0.5924
11	2019	0.1414	0.9090	0.4889	4.0000	0.9660	9.4490	0.5076
11	2020	0.1037	0.9090	0.4889	4.0000	0.9380	9.4478	0.6935
11	2021	1.1535	0.9090	0.4889	4.0000	1.7660	9.4564	0.7629
12	2017	0.2616	1.0000	0.4889	4.0000	2.9090	8.9602	0.7952
12	2018	0.2229	1.0000	0.4890	4.0000	0.5580	8.9534	0.7848
12	2019	0.2479	1.0000	0.4890	13.0000	0.6760	8.9455	0.6970
12	2020	0.2867	1.0000	0.4890	8.0000	0.6820	8.9318	0.6677
12	2021	0.2803	1.0000	0.4990	8.0000	0.8270	8.9304	0.6829
13	2017	0.8533	1.0000	0.4990	4.0000	1.6950	8.1348	1.3073
13	2018	0.9362	0.9090	0.4990	4.0000	2.2790	8.0923	1.2291
13	2019	1.1535	0.9090	0.4990	4.0000	1.3030	8.0443	1.0328
13	2020	0.5988	0.9090	0.4990	4.0000	1.5940	8.0898	0.8101
13	2021	0.8328	0.9090	0.4990	4.0000	1.4380	8.1323	0.7456
14	2017	0.9120	1.0000	0.5000	4.0000	0.9220	7.8548	0.1556
14	2018	1.0407	0.8330	0.5000	4.0000	2.2790	9.5945	0.1738

Agency	Year	Budgetary control	Board Independence	Gender diversity	Board meetings	Managerial efficiency	Firm size	Leverage
14	2019	0.6973	0.8750	0.5000	4.0000	1.3030	9.6034	0.3356
14	2020	1.0418	0.8750	0.5000	4.0000	1.5940	9.6372	0.3222
14	2021	0.9047	0.8750	0.5000	4.0000	1.4380	9.6842	0.3771
15	2017	0.5927	0.8750	0.5090	4.0000	3.4630	7.7020	0.3930
15	2018	1.1535	1.0000	0.5090	4.0000	0.6680	7.7144	0.4443
15	2019	0.6937	1.0000	0.5090	4.0000	0.6980	7.7122	0.3845
15	2020	0.7149	1.0000	0.5090	4.0000	0.3850	7.7065	0.3275
15	2021	0.5761	0.8750	0.5090	4.0000	1.7660	7.7205	0.2696
16	2017	1.1737	0.8750	0.5090	4.0000	2.9090	8.1061	0.1425
16	2018	0.9834	1.0000	0.5090	4.0000	1.3930	8.1106	0.1037
16	2019	1.3268	0.8330	0.5090	4.0000	1.1270	8.0923	0.0904
16	2020	1.1912	0.8330	0.5090	4.0000	0.5680	8.0443	0.1881
16	2021	1.2957	0.8330	0.5090	4.0000	7.5030	8.0898	0.2950
17	2017	2.6058	0.8330	0.5090	4.0000	2.1230	8.0621	0.5820
17	2018	1.9871	0.8330	0.5091	4.0000	3.2370	9.0214	0.5287
17	2019	1.7572	0.8330	0.5091	4.0000	1.6630	9.0689	0.5689
17	2020	1.5740	0.9000	0.5091	4.0000	1.6800	9.1018	0.4618
17	2021	1.5548	0.9000	0.5091	4.0000	1.4450	9.0822	0.5065
18	2017	1.3073	0.8890	0.5091	4.0000	3.4630	9.0815	0.4366
18	2018	1.2215	0.8890	0.5167	4.0000	6.6880	8.0898	0.4653
18	2019	2.6804	0.8890	0.5167	4.0000	5.3770	8.0999	0.4858
18	2020	2.2625	0.8890	0.5167	4.0000	6.1550	8.2119	0.4953
18	2021	0.6313	0.8990	0.5167	4.0000	1.7660	8.2197	0.6154

Agency	Year	Budgetary control	Board Independence	Gender diversity	Board meetings	Managerial efficiency	Firm size	Leverage
19	2017	1.2513	0.8990	0.5167	4.0000	2.9090	9.4042	1.0060
19	2018	1.0568	0.8990	0.5230	4.0000	1.8790	9.4217	0.7975
19	2019	1.2442	0.8990	0.5230	4.0000	1.8500	9.4387	0.9662
19	2020	0.9423	0.8990	0.5231	4.0000	1.7660	9.0822	0.3658
19	2021	1.0481	0.8990	0.5231	4.0000	2.9090	9.0815	0.4455
20	2017	1.0131	0.8890	0.5350	4.0000	0.8370	9.0308	1.4193
20	2018	1.1560	0.8890	0.6000	4.0000	1.6260	9.0800	0.8674
20	2019	1.5957	0.8890	0.6000	4.0000	1.2750	9.2456	0.5202
20	2020	1.3150	0.8890	0.6000	4.0000	1.2140	9.3814	0.4751
20	2021	1.0811	0.8890	0.6000	4.0000	1.7660	9.3840	0.4664
21	2017	1.1535	0.7140	0.6000	4.0000	2.9090	8.4939	0.3808
21	2018	0.7844	0.7140	0.6000	4.0000	3.2030	8.5184	0.3826
21	2019	1.0194	0.7140	0.6000	4.0000	1.0680	8.4976	0.3937
21	2020	0.8533	0.7140	0.6000	4.0000	0.3580	8.4543	0.4708
21	2021	0.9362	0.7140	0.6000	4.0000	1.7660	8.4661	0.2786
22	2017	1.1157	0.8670	0.6000	4.0000	2.9090	8.9270	0.2851
22	2018	0.0074	0.8670	0.6000	4.0000	1.0100	8.9301	0.2948
22	2019	1.2995	0.8670	0.6000	4.0000	0.8890	8.6917	0.2659
22	2020	1.1102	0.8570	0.6000	15.0000	1.0220	8.7865	0.2797
22	2021	0.8008	0.8570	0.6000	4.0000	1.7660	8.7889	0.2771
23	2017	0.9872	0.7140	0.3143	4.0000	2.9090	7.4864	0.2403
23	2018	0.7481	0.8180	0.4182	4.0000	0.9710	7.4960	0.2615
23	2019	0.7565	0.8180	0.4182	4.0000	1.0410	7.5256	0.2405

Agency	Year	Budgetary control	Board Independence	Gender diversity	Board meetings	Managerial efficiency	Firm size	Leverage
23	2020	0.7018	0.8180	0.4182	4.0000	0.9890	7.5147	0.2165
23	2021	0.6975	0.8180	0.4182	4.0000	3.4630	7.5216	0.8202
24	2017	0.6772	1.0000	0.6000	5.0000	6.0830	10.2290	0.8878
24	2018	0.9922	1.0000	0.6000	13.0000	5.8530	10.2290	0.8005
24	2019	0.8564	1.0000	0.6000	13.0000	4.9340	10.2151	0.8552
24	2020	0.3208	0.9170	0.5167	16.0000	1.7660	10.2136	0.8684
24	2021	1.1535	0.9170	0.5167	16.0000	2.9090	9.5945	0.0783
25	2017	2.5763	0.9170	0.5167	16.0000	5.9580	9.6034	0.0910
25	2018	2.2844	0.9170	0.5167	16.0000	11.6480	9.6372	0.1478
25	2019	0.2538	0.9170	0.5167	16.0000	7.5030	9.6842	0.1914
25	2020	0.2260	0.9170	0.5170	16.0000	2.1230	9.7096	0.2388
25	2021	0.2058	0.9170	0.5170	16.0000	3.2370	9.7190	0.2651
26	2017	0.8533	0.8570	0.4571	16.0000	3.2480	10.1964	0.2212
26	2018	0.9362	0.8750	0.4750	16.0000	3.2220	10.3638	0.2289
26	2019	0.7533	0.8750	0.4750	16.0000	2.7290	10.4447	0.2535
26	2020	2.0736	0.8750	0.4750	16.0000	3.0340	10.4050	0.3028
26	2021	0.8535	0.8570	0.4571	16.0000	1.3400	10.5568	0.2939
27	2017	1.3268	0.8750	0.4750	4.0000	4.9060	9.8312	0.2801
27	2018	1.1912	0.9380	0.5380	4.0000	4.6370	9.8067	0.2843
27	2019	1.2957	0.9380	0.5375	4.0000	4.0010	9.8239	0.3822
27	2020	2.6058	0.9230	0.5231	4.0000	4.1460	9.8671	0.2833
27	2021	1.9871	0.9380	0.5380	4.0000	3.4630	9.8722	0.2710
28	2017	1.7572	0.8570	0.4571	4.0000	0.7430	9.4852	0.2674

Agency	Year	Budgetary control	Board Independence	Gender diversity	Board meetings	Managerial efficiency	Firm size	Leverage
28	2018	1.1535	0.9290	0.5290	4.0000	0.8000	9.5127	0.2358
28	2019	1.1457	0.9290	0.5286	4.0000	0.5700	9.4943	0.2410
28	2020	1.3058	0.8890	0.4889	17.0000	0.7070	9.5169	1.1388
28	2021	1.5680	0.8890	0.4890	4.0000	1.7660	9.5389	0.9389
29	2017	1.6418	1.0000	0.6000	4.0000	2.9090	10.0409	0.7282
29	2018	1.4860	1.0000	0.6000	4.0000	1.2520	10.0500	0.6733
29	2019	0.9118	1.0000	0.6000	4.0000	1.1920	10.0697	0.5869
29	2020	0.7956	1.0000	0.6000	4.0000	1.3170	10.3161	0.4759
29	2021	0.6188	1.0000	0.6000	4.0000	3.4630	10.3702	0.4368
30	2017	1.0494	0.9000	0.5000	25.0000	1.7010	10.1783	0.3876
30	2018	0.7956	0.9000	0.5000	25.0000	1.4210	10.1503	0.3467
30	2019	0.6495	0.9000	0.5000	25.0000	1.1890	10.1436	0.3458
30	2020	0.6850	0.9000	0.5000	25.0000	1.0190	10.1289	0.3484
30	2021	0.8274	0.9000	0.5000	25.0000	1.0100	10.1102	0.3469
31	2017	0.6214	0.8000	0.4000	16.0000	0.5550	8.5639	0.3099
31	2018	1.2494	0.8000	0.4000	16.0000	0.4200	8.5142	0.3569
31	2019	0.9985	0.8000	0.4000	21.0000	0.2830	8.4468	0.3686
31	2020	1.4241	0.8000	0.4000	21.0000	1.7660	9.0822	0.6834
31	2021	1.5200	0.8000	0.4000	21.0000	2.9090	9.0815	0.6793
32	2017	0.5531	0.9090	0.5091	8.0000	10.5890	10.5075	0.5936
32	2018	0.7350	0.9090	0.5091	11.0000	10.5130	10.5557	0.7626
32	2019	0.5475	0.9090	0.5091	21.0000	7.2280	10.5854	0.7537
32	2020	0.8323	0.9090	0.5091	13.0000	8.6760	10.6308	1.0875

Agency	Year	Budgetary control	Board Independence	Gender diversity	Board meetings	Managerial efficiency	Firm size	Leverage
32	2021	1.2338	0.9090	0.5091	22.0000	7.3910	10.6470	1.0535
33	2017	0.8533	1.0000	0.6000	22.0000	1.7660	7.7275	1.0108
33	2018	0.9362	1.0000	0.6000	12.0000	2.9090	7.7574	0.9063
33	2019	0.7038	1.0000	0.6000	12.0000	0.0180	7.7613	0.8892
33	2020	1.5759	1.0000	0.6000	5.0000	0.0160	7.4176	0.5301
33	2021	1.5392	1.0000	0.6000	5.0000	0.0380	7.5227	0.5264
34	2017	2.2120	0.7500	0.3500	5.0000	4.3590	8.6573	0.5370
34	2018	2.2265	0.7500	0.3500	5.0000	1.1390	8.6635	0.4524
34	2019	2.2665	0.7500	0.3500	5.0000	1.6380	8.8257	0.4029
34	2020	3.0110	0.7500	0.3500	5.0000	1.0580	8.8449	0.0457
34	2021	1.2633	0.8330	0.4333	5.0000	1.7660	8.8516	0.0748
35	2017	1.1535	0.7140	0.3143	12.0000	2.9090	9.0069	0.0748
35	2018	1.0683	0.7140	0.3143	12.0000	5.9580	9.0343	0.0843
35	2019	0.7225	0.8180	0.4182	12.0000	11.6480	9.0504	0.3640
35	2020	0.5202	0.8180	0.4182	12.0000	7.5030	9.5945	0.5597
35	2021	1.1515	0.8180	0.4182	12.0000	2.1230	9.6034	0.5245
36	2017	0.9985	0.8180	0.4182	5.0000	3.2370	9.6372	0.5261
36	2018	0.8278	0.8000	0.4000	5.0000	4.7060	9.1347	0.5548
36	2019	0.8314	0.8750	0.4750	5.0000	4.9840	9.2296	0.0246
36	2020	0.6253	0.8750	0.4750	5.0000	3.2880	9.2356	0.7179
36	2021	0.9044	0.8750	0.4750	5.0000	1.7660	9.2578	0.7097
37	2017	0.6952	0.8750	0.4750	4.0000	2.9090	10.1901	0.6361
37	2018	0.7589	0.8750	0.4750	4.0000	1.2160	10.2649	0.5670

Agency	Year	Budgetary control	Board Independence	Gender diversity	Board meetings	Managerial efficiency	Firm size	Leverage
37	2019	1.1507	0.5710	0.1714	4.0000	1.3500	10.2786	0.4912
37	2020	0.4991	0.5710	0.1714	4.0000	1.4780	10.3039	0.4925
37	2021	0.6157	0.5710	0.1714	4.0000	4.3590	10.3271	0.4482
38	2017	0.9182	0.5710	0.1714	4.0000	1.1310	9.5439	0.4229
38	2018	1.3433	0.7140	0.3143	4.0000	4.3590	9.6576	0.4367
38	2019	1.6103	0.8890	0.4889	4.0000	0.8600	9.7325	0.4861
38	2020	1.8041	0.8890	0.4889	4.0000	1.1350	9.7469	0.3917
38	2021	1.6465	0.8890	0.4889	4.0000	4.3590	9.7767	0.2804
39	2017	1.3569	0.8890	0.3273	4.0000	0.8640	10.7175	0.5297
39	2018	0.5875	0.8890	0.4889	4.0000	2.4990	10.7793	0.4680
39	2019	1.0541	0.8890	0.5000	4.0000	1.4500	10.8103	0.4500
39	2020	1.5925	0.8890	0.5000	4.0000	1.3850	10.8390	0.4420
39	2021	2.1825	0.8890	0.5000	4.0000	4.3590	10.8514	0.3410
40	2017	1.6103	0.9410	0.5444	14.0000	1.5650	11.3983	0.2830
40	2018	1.8041	0.9330	0.5440	14.0000	2.0900	11.5347	0.4000
40	2019	0.8533	0.9330	0.5440	14.0000	1.7280	11.5644	0.3180
40	2020	0.9362	0.9330	0.5440	14.0000	1.9920	11.5760	0.3990
40	2021	1.1110	0.9330	0.4889	14.0000	1.9140	11.5790	0.4000
41	2017	1.4241	0.9380	0.4750	12.0000	1.2950	10.7001	0.3350
41	2018	1.5200	0.9380	0.4750	12.0000	1.9140	10.8529	0.3260
41	2019	0.5531	0.9380	0.4750	12.0000	3.2940	11.0386	0.3380
41	2020	0.7350	0.9380	0.4750	12.0000	1.7660	11.0467	0.3760
41	2021	0.5475	0.9380	0.4750	12.0000	2.9090	11.0621	0.3370

Agency	Year	Budgetary control	Board Independence	Gender diversity	Board meetings	Managerial efficiency	Firm size	Leverage
42	2017	0.8323	0.9170	0.4889	12.0000	5.8810	10.8368	0.4600
42	2018	1.2338	0.9170	0.3140	12.0000	2.7560	10.8687	0.6790
42	2019	0.8533	0.9230	0.3140	9.0000	5.6050	10.9694	0.4140
42	2020	0.9362	0.9380	0.3140	9.0000	4.7460	11.1078	0.7370
42	2021	0.7038	0.9410	0.3143	6.0000	4.9100	11.1336	0.5460
43	2017	0.7526	0.9090	0.3143	14.0000	4.6470	11.3426	0.3900
43	2018	0.7788	0.9090	0.4180	15.0000	4.4090	11.4350	0.4400
43	2019	0.9003	0.9090	0.4180	15.0000	3.7830	11.4735	0.4200
43	2020	1.2190	0.9090	0.4182	15.0000	3.4750	11.5201	0.3800
43	2021	0.7812	0.9090	0.4330	39.0000	3.1760	11.5272	0.2300
44	2017	1.5348	0.8180	0.4330	4.0000	4.3590	10.0111	0.2020
44	2018	1.2537	0.8180	0.4330	4.0000	16.2400	10.0959	0.3680
44	2019	1.8550	0.8890	0.4330	4.0000	19.4060	10.0762	0.3310
44	2020	1.6321	0.8180	0.4333	4.0000	2.3550	9.0069	0.3080
44	2021	3.2957	0.8330	0.4333	4.0000	3.0470	9.0343	0.2800
45	2017	0.6206	0.9170	0.4333	12.0000	3.0010	9.0504	0.2110
45	2018	0.6118	0.9170	0.4570	12.0000	2.8070	9.5945	0.4600
45	2019	1.1138	0.9170	0.4570	12.0000	2.9730	9.6034	0.3400
45	2020	1.0363	0.9170	0.4571	12.0000	2.8340	9.6372	0.3040
45	2021	1.5372	0.9170	0.4571	12.0000	4.3590	9.6792	0.2910
46	2017	1.4935	0.9290	0.4667	10.0000	0.1390	8.9182	0.3370
46	2018	1.1013	0.9290	0.4670	10.0000	0.2500	8.9688	0.3760
46	2019	0.7508	0.9290	0.4670	10.0000	0.1900	8.9169	0.6790

Agency	Year	Budgetary control	Board Independence	Gender diversity	Board meetings	Managerial efficiency	Firm size	Leverage
46	2020	0.8794	0.9170	0.4750	10.0000	7.5030	10.8687	0.4140
46	2021	1.1345	0.9170	0.4750	10.0000	2.1230	10.9694	0.7370
47	2017	0.5897	0.9170	0.4750	4.0000	3.2370	11.1078	0.5460
47	2018	0.6198	0.9170	0.4750	4.0000	0.3360	10.2379	0.3900
47	2019	0.5994	0.9170	0.4750	4.0000	0.2030	10.2565	0.3400
47	2020	0.7079	0.9170	0.4750	4.0000	0.2220	10.2517	0.4400
47	2021	0.5240	0.9170	0.4889	4.0000	1.7660	10.2589	0.6040
48	2017	1.8238	0.8890	0.4889	12.0000	2.9090	9.8724	0.4800
48	2018	1.5769	0.8890	0.4889	41.0000	0.9550	9.8680	0.4000
48	2019	1.1119	0.8890	0.4889	36.0000	0.4430	9.9872	0.3400
48	2020	1.2749	0.8890	0.4889	48.0000	0.6770	9.9770	0.2400
48	2021	1.3443	0.9090	0.4889	48.0000	2.2790	9.0069	0.2300
49	2017	0.9830	0.9090	0.4889	10.0000	1.3030	9.0343	0.2020
49	2018	1.0618	0.8890	0.4889	10.0000	1.5940	9.0504	0.3680
49	2019	1.7404	0.8750	0.4889	10.0000	1.4380	9.5945	0.3310
49	2020	1.2006	0.8750	0.4889	10.0000	1.0130	9.6034	0.3080
49	2021	0.9407	0.8750	0.4889	10.0000	4.3590	9.6372	0.2800
50	2017	1.3215	0.0000	0.4889	4.0000	3.4250	9.5905	0.5125
50	2018	0.7600	0.0000	0.4890	4.0000	4.0500	9.6823	0.4556
50	2019	0.6879	0.9090	0.4890	4.0000	0.8140	9.6825	0.6756
50	2020	0.9920	0.9090	0.4890	4.0000	0.7200	9.7151	0.7448
50	2021	1.0697	0.7780	0.4990	4.0000	2.2790	9.0069	0.7232
51	2017	0.2677	0.7780	0.4990	10.0000	1.3030	9.0343	0.2742

Agency	Year	Budgetary control	Board Independence	Gender diversity	Board meetings	Managerial efficiency	Firm size	Leverage
51	2018	0.3491	0.8750	0.4990	10.0000	1.5940	9.0504	0.3254
51	2019	0.3323	0.8890	0.4990	10.0000	1.4380	9.5945	0.2887
51	2020	0.2661	0.8000	0.4990	10.0000	1.0130	9.6034	0.2953
51	2021	0.3119	0.8750	0.4990	10.0000	1.7660	9.6372	0.2754
52	2017	1.1178	0.8330	0.5000	4.0000	2.9090	11.1057	0.6428
52	2018	1.1099	0.8330	0.5000	4.0000	1.2210	11.1161	0.6662
52	2019	0.9898	0.8330	0.5000	4.0000	1.3140	11.1775	0.6639
52	2020	0.8495	0.8330	0.5000	4.0000	7.5030	10.8687	0.6526
52	2021	1.0610	0.8330	0.5000	4.0000	2.1230	10.9694	0.6372
53	2017	0.8533	0.9290	0.5090	4.0000	3.2370	11.1078	0.1158
53	2018	0.9362	0.9290	0.5090	4.0000	1.5370	10.7852	0.1323
53	2019	0.1414	0.9290	0.5090	4.0000	1.3200	10.8404	0.1656
53	2020	0.1037	0.9290	0.5090	4.0000	1.5260	10.8721	0.1472
53	2021	1.1535	0.9290	0.5090	4.0000	1.7660	10.8885	0.1270
54	2017	0.2616	0.9380	0.5090	16.0000	2.9090	11.1266	0.7007
54	2018	0.2229	0.9380	0.5090	16.0000	1.3550	11.3671	0.6912
54	2019	0.2479	0.9380	0.5090	17.0000	1.1880	11.4857	0.7020
54	2020	0.2867	0.9380	0.5090	20.0000	1.1880	11.6915	0.6503
54	2021	0.2803	0.9380	0.5090	20.0000	4.3590	11.7045	0.5377
55	2017	0.8533	0.9090	0.4889	4.0000	3.4630	8.8134	0.5346
55	2018	0.9362	0.9090	0.4889	4.0000	0.9420	8.8214	0.5924
55	2019	0.1414	0.9090	0.4889	4.0000	0.9660	9.4490	0.5076
55	2020	0.1037	0.9090	0.4889	4.0000	0.9380	9.4478	0.6935

Agency	Year	Budgetary control	Board Independence	Gender diversity	Board meetings	Managerial efficiency	Firm size	Leverage
55	2021	1.1535	0.9090	0.4889	4.0000	1.7660	9.4564	0.7629
56	2017	0.2616	1.0000	0.4889	4.0000	2.9090	8.9602	0.7952
56	2018	0.2229	1.0000	0.4890	4.0000	0.5580	8.9534	0.7848
56	2019	0.2479	1.0000	0.4890	13.0000	0.6760	8.9455	0.6970
56	2020	0.2867	1.0000	0.4890	8.0000	0.6820	8.9318	0.6677
56	2021	0.2803	1.0000	0.4990	8.0000	0.8270	8.9304	0.6829
57	2017	0.8533	1.0000	0.4990	4.0000	1.6950	8.1348	1.3073
57	2018	0.9362	0.9090	0.4990	4.0000	2.2790	8.0923	1.2291
57	2019	1.1535	0.9090	0.4990	4.0000	1.3030	8.0443	1.0328
57	2020	0.5988	0.9090	0.4990	4.0000	1.5940	8.0898	0.8101
57	2021	0.8328	0.9090	0.4990	4.0000	1.4380	8.1323	0.7456
58	2017	0.9120	1.0000	0.5000	4.0000	0.9220	7.8548	0.1556
58	2018	1.0407	0.8330	0.5000	4.0000	2.2790	9.5945	0.1738
58	2019	0.6973	0.8750	0.5000	4.0000	1.3030	9.6034	0.3356
58	2020	1.0418	0.8750	0.5000	4.0000	1.5940	9.6372	0.3222
58	2021	0.9047	0.8750	0.5000	4.0000	1.4380	9.6842	0.3771
59	2017	0.5927	0.8750	0.5090	4.0000	3.4630	7.7020	0.3930
59	2018	1.1535	1.0000	0.5090	4.0000	0.6680	7.7144	0.4443
59	2019	0.6937	1.0000	0.5090	4.0000	0.6980	7.7122	0.3845
59	2020	0.7149	1.0000	0.5090	4.0000	0.3850	7.7065	0.3275
59	2021	0.5761	0.8750	0.5090	4.0000	1.7660	7.7205	0.2696
60	2017	1.1737	0.8750	0.5090	4.0000	2.9090	8.1061	0.1425
60	2018	0.9834	1.0000	0.5090	4.0000	1.3930	8.1106	0.1037

Agency	Year	Budgetary control	Board Independence	Gender diversity	Board meetings	Managerial efficiency	Firm size	Leverage
60	2019	1.3268	0.8330	0.5090	4.0000	1.1270	8.0923	0.0904
60	2020	1.1912	0.8330	0.5090	4.0000	0.5680	8.0443	0.1881
60	2021	1.2957	0.8330	0.5090	4.0000	7.5030	8.0898	0.2950
61	2017	2.6058	0.8330	0.5090	4.0000	2.1230	8.0621	0.5820
61	2018	1.9871	0.8330	0.5091	4.0000	3.2370	9.0214	0.5287
61	2019	1.7572	0.8330	0.5091	4.0000	1.6630	9.0689	0.5689
61	2020	1.5740	0.9000	0.5091	4.0000	1.6800	9.1018	0.4618
61	2021	1.5548	0.9000	0.5091	4.0000	1.4450	9.0822	0.5065
62	2017	1.3073	0.8890	0.5091	4.0000	3.4630	9.0815	0.4366
62	2018	1.2215	0.8890	0.5167	4.0000	6.6880	8.0898	0.4653
62	2019	2.6804	0.8890	0.5167	4.0000	5.3770	8.0999	0.4858
62	2020	2.2625	0.8890	0.5167	4.0000	6.1550	8.2119	0.4953
62	2021	0.6313	0.8990	0.5167	4.0000	1.7660	8.2197	0.6154
63	2017	1.2513	0.8990	0.5167	4.0000	2.9090	9.4042	1.0060
63	2018	1.0568	0.8990	0.5230	4.0000	1.8790	9.4217	0.7975
63	2019	1.2442	0.8990	0.5230	4.0000	1.8500	9.4387	0.9662
63	2020	0.9423	0.8990	0.5231	4.0000	1.7660	9.0822	0.3658
63	2021	1.0481	0.8990	0.5231	4.0000	2.9090	9.0815	0.4455
64	2017	1.0131	0.8890	0.5350	4.0000	0.8370	9.0308	1.4193
64	2018	1.1560	0.8890	0.6000	4.0000	1.6260	9.0800	0.8674
64	2019	1.5957	0.8890	0.6000	4.0000	1.2750	9.2456	0.5202
64	2020	1.3150	0.8890	0.6000	4.0000	1.2140	9.3814	0.4751
64	2021	1.0811	0.8890	0.6000	4.0000	1.7660	9.3840	0.4664

Agency	Year	Budgetary control	Board Independence	Gender diversity	Board meetings	Managerial efficiency	Firm size	Leverage
65	2017	1.1535	0.7140	0.6000	4.0000	2.9090	8.4939	0.3808
65	2018	0.7844	0.7140	0.6000	4.0000	3.2030	8.5184	0.3826
65	2019	1.0194	0.7140	0.6000	4.0000	1.0680	8.4976	0.3937
65	2020	0.8533	0.7140	0.6000	4.0000	0.3580	8.4543	0.4708
65	2021	0.9362	0.7140	0.6000	4.0000	1.7660	8.4661	0.2786
66	2017	1.1157	0.8670	0.6000	4.0000	2.9090	8.9270	0.2851
66	2018	0.0074	0.8670	0.6000	4.0000	1.0100	8.9301	0.2948
66	2019	1.2995	0.8670	0.6000	4.0000	0.8890	8.6917	0.2659
66	2020	1.1102	0.8570	0.6000	15.0000	1.0220	8.7865	0.2797
66	2021	0.8008	0.8570	0.6000	4.0000	1.7660	8.7889	0.2771
67	2017	0.9872	0.7140	0.3143	4.0000	2.9090	7.4864	0.2403
67	2018	0.7481	0.8180	0.4182	4.0000	0.9710	7.4960	0.2615
67	2019	0.7565	0.8180	0.4182	4.0000	1.0410	7.5256	0.2405
67	2020	0.7018	0.8180	0.4182	4.0000	0.9890	7.5147	0.2165
67	2021	0.6975	0.8180	0.4182	4.0000	3.4630	7.5216	0.8202
68	2017	0.6772	1.0000	0.6000	5.0000	6.0830	10.2290	0.8878
68	2018	0.9922	1.0000	0.6000	13.0000	5.8530	10.2290	0.8005
68	2019	0.8564	1.0000	0.6000	13.0000	4.9340	10.2151	0.8552
68	2020	0.3208	0.9170	0.5167	16.0000	1.7660	10.2136	0.8684
68	2021	1.1535	0.9170	0.5167	16.0000	2.9090	9.5945	0.0783
69	2017	2.5763	0.9170	0.5167	16.0000	5.9580	9.6034	0.0910
69	2018	2.2844	0.9170	0.5167	16.0000	11.6480	9.6372	0.1478
69	2019	0.2538	0.9170	0.5167	16.0000	7.5030	9.6842	0.1914

Agency	Year	Budgetary control	Board Independence	Gender diversity	Board meetings	Managerial efficiency	Firm size	Leverage
69	2020	0.2260	0.9170	0.5170	16.0000	2.1230	9.7096	0.2388
69	2021	0.2058	0.9170	0.5170	16.0000	3.2370	9.7190	0.2651
70	2017	0.8533	0.8570	0.4571	16.0000	3.2480	10.1964	0.2212
70	2018	0.9362	0.8750	0.4750	16.0000	3.2220	10.3638	0.2289
70	2019	0.7533	0.8750	0.4750	16.0000	2.7290	10.4447	0.2535
70	2020	2.0736	0.8750	0.4750	16.0000	3.0340	10.4050	0.3028
70	2021	0.8535	0.8570	0.4571	16.0000	1.3400	10.5568	0.2939
71	2017	1.3268	0.8750	0.4750	4.0000	4.9060	9.8312	0.2801
71	2018	1.1912	0.9380	0.5380	4.0000	4.6370	9.8067	0.2843
71	2019	1.2957	0.9380	0.5375	4.0000	4.0010	9.8239	0.3822
71	2020	2.6058	0.9230	0.5231	4.0000	4.1460	9.8671	0.2833
71	2021	1.9871	0.9380	0.5380	4.0000	3.4630	9.8722	0.2710
72	2017	1.7572	0.8570	0.4571	4.0000	0.7430	9.4852	0.2674
72	2018	1.1535	0.9290	0.5290	4.0000	0.8000	9.5127	0.2358
72	2019	1.1457	0.9290	0.5286	4.0000	0.5700	9.4943	0.2410
72	2020	1.3058	0.8890	0.4889	17.0000	0.7070	9.5169	1.1388
72	2021	1.5680	0.8890	0.4890	4.0000	1.7660	9.5389	0.9389
73	2017	1.6418	1.0000	0.6000	4.0000	2.9090	10.0409	0.7282
73	2018	1.4860	1.0000	0.6000	4.0000	1.2520	10.0500	0.6733
73	2019	0.9118	1.0000	0.6000	4.0000	1.1920	10.0697	0.5869
73	2020	0.7956	1.0000	0.6000	4.0000	1.3170	10.3161	0.4759
73	2021	0.6188	1.0000	0.6000	4.0000	3.4630	10.3702	0.4368
74	2017	1.0494	0.9000	0.5000	25.0000	1.7010	10.1783	0.3876

Agency	Year	Budgetary control	Board Independence	Gender diversity	Board meetings	Managerial efficiency	Firm size	Leverage
74	2018	0.7956	0.9000	0.5000	25.0000	1.4210	10.1503	0.3467
74	2019	0.6495	0.9000	0.5000	25.0000	1.1890	10.1436	0.3458
74	2020	0.6850	0.9000	0.5000	25.0000	1.0190	10.1289	0.3484
74	2021	0.8274	0.9000	0.5000	25.0000	1.0100	10.1102	0.3469
75	2017	0.6214	0.8000	0.4000	16.0000	0.5550	8.5639	0.3099
75	2018	1.2494	0.8000	0.4000	16.0000	0.4200	8.5142	0.3569
75	2019	0.9985	0.8000	0.4000	21.0000	0.2830	8.4468	0.3686
75	2020	1.4241	0.8000	0.4000	21.0000	1.7660	9.0822	0.6834
75	2021	1.5200	0.8000	0.4000	21.0000	2.9090	9.0815	0.6793
76	2017	0.5531	0.9090	0.5091	8.0000	10.5890	10.5075	0.5936
76	2018	0.7350	0.9090	0.5091	11.0000	10.5130	10.5557	0.7626
76	2019	0.5475	0.9090	0.5091	21.0000	7.2280	10.5854	0.7537
76	2020	0.8323	0.9090	0.5091	13.0000	8.6760	10.6308	1.0875
76	2021	1.2338	0.9090	0.5091	22.0000	7.3910	10.6470	1.0535
77	2017	0.8533	1.0000	0.6000	22.0000	1.7660	7.7275	1.0108
77	2018	0.9362	1.0000	0.6000	12.0000	2.9090	7.7574	0.9063
77	2019	0.7038	1.0000	0.6000	12.0000	0.0180	7.7613	0.8892
77	2020	1.5759	1.0000	0.6000	5.0000	0.0160	7.4176	0.5301
77	2021	1.5392	1.0000	0.6000	5.0000	0.0380	7.5227	0.5264
78	2017	2.2120	0.7500	0.3500	5.0000	4.3590	8.6573	0.5370
78	2018	2.2265	0.7500	0.3500	5.0000	1.1390	8.6635	0.4524
78	2019	2.2665	0.7500	0.3500	5.0000	1.6380	8.8257	0.4029
78	2020	3.0110	0.7500	0.3500	5.0000	1.0580	8.8449	0.0457

Agency	Year	Budgetary control	Board Independence	Gender diversity	Board meetings	Managerial efficiency	Firm size	Leverage
78	2021	1.2633	0.8330	0.4333	5.0000	1.7660	8.8516	0.0748
79	2017	1.1535	0.7140	0.3143	12.0000	2.9090	9.0069	0.0748
79	2018	1.0683	0.7140	0.3143	12.0000	5.9580	9.0343	0.0843
79	2019	0.7225	0.8180	0.4182	12.0000	11.6480	9.0504	0.3640
79	2020	0.5202	0.8180	0.4182	12.0000	7.5030	9.5945	0.5597
79	2021	1.1515	0.8180	0.4182	12.0000	2.1230	9.6034	0.5245
80	2017	0.9985	0.8180	0.4182	5.0000	3.2370	9.6372	0.5261
80	2018	0.8278	0.8000	0.4000	5.0000	4.7060	9.1347	0.5548
80	2019	0.8314	0.8750	0.4750	5.0000	4.9840	9.2296	0.0246
80	2020	0.6253	0.8750	0.4750	5.0000	3.2880	9.2356	0.7179
80	2021	0.9044	0.8750	0.4750	5.0000	1.7660	9.2578	0.7097
81	2017	0.6952	0.8750	0.4750	4.0000	2.9090	10.1901	0.6361
81	2018	0.7589	0.8750	0.4750	4.0000	1.2160	10.2649	0.5670
81	2019	1.1507	0.5710	0.1714	4.0000	1.3500	10.2786	0.4912
81	2020	0.4991	0.5710	0.1714	4.0000	1.4780	10.3039	0.4925
81	2021	0.6157	0.5710	0.1714	4.0000	4.3590	10.3271	0.4482
82	2017	0.9182	0.5710	0.1714	4.0000	1.1310	9.5439	0.4229
82	2018	1.3433	0.7140	0.3143	4.0000	4.3590	9.6576	0.4367
82	2019	1.6103	0.8890	0.4889	4.0000	0.8600	9.7325	0.4861
82	2020	1.8041	0.8890	0.4889	4.0000	1.1350	9.7469	0.3917
82	2021	1.6465	0.8890	0.4889	4.0000	4.3590	9.7767	0.2804
83	2017	1.3569	0.8890	0.3273	4.0000	0.8640	10.7175	0.5297
83	2018	0.5875	0.8890	0.4889	4.0000	2.4990	10.7793	0.4680

Agency	Year	Budgetary control	Board Independence	Gender diversity	Board meetings	Managerial efficiency	Firm size	Leverage
83	2019	1.0541	0.8890	0.5000	4.0000	1.4500	10.8103	0.4500
83	2020	1.5925	0.8890	0.5000	4.0000	1.3850	10.8390	0.4420
83	2021	2.1825	0.8890	0.5000	4.0000	4.3590	10.8514	0.3410
84	2017	1.6103	0.9410	0.5444	14.0000	1.5650	11.3983	0.2830
84	2018	1.8041	0.9330	0.5440	14.0000	2.0900	11.5347	0.4000
84	2019	0.8533	0.9330	0.5440	14.0000	1.7280	11.5644	0.3180
84	2020	0.9362	0.9330	0.5440	14.0000	1.9920	11.5760	0.3990
84	2021	1.1110	0.9330	0.4889	14.0000	1.9140	11.5790	0.4000
85	2017	1.4241	0.9380	0.4750	12.0000	1.2950	10.7001	0.3350
85	2018	1.5200	0.9380	0.4750	12.0000	1.9140	10.8529	0.3260
85	2019	0.5531	0.9380	0.4750	12.0000	3.2940	11.0386	0.3380
85	2020	0.7350	0.9380	0.4750	12.0000	1.7660	11.0467	0.3760
85	2021	0.5475	0.9380	0.4750	12.0000	2.9090	11.0621	0.3370
86	2017	0.8323	0.9170	0.4889	12.0000	5.8810	10.8368	0.4600
86	2018	1.2338	0.9170	0.3140	12.0000	2.7560	10.8687	0.6790
86	2019	0.8533	0.9230	0.3140	9.0000	5.6050	10.9694	0.4140
86	2020	0.9362	0.9380	0.3140	9.0000	4.7460	11.1078	0.7370
86	2021	0.7038	0.9410	0.3143	6.0000	4.9100	11.1336	0.5460
87	2017	0.7526	0.9090	0.3143	14.0000	4.6470	11.3426	0.3900
87	2018	0.7788	0.9090	0.4180	15.0000	4.4090	11.4350	0.4400
87	2019	0.9003	0.9090	0.4180	15.0000	3.7830	11.4735	0.4200
87	2020	1.2190	0.9090	0.4182	15.0000	3.4750	11.5201	0.3800
87	2021	0.7812	0.9090	0.4330	39.0000	3.1760	11.5272	0.2300

Agency	Year	Budgetary control	Board Independence	Gender diversity	Board meetings	Managerial efficiency	Firm size	Leverage
88	2017	1.5348	0.8180	0.4330	4.0000	4.3590	10.0111	0.2020
88	2018	1.2537	0.8180	0.4330	4.0000	16.2400	10.0959	0.3680
88	2019	1.8550	0.8890	0.4330	4.0000	19.4060	10.0762	0.3310
88	2020	1.6321	0.8180	0.4333	4.0000	2.3550	9.0069	0.3080
88	2021	3.2957	0.8330	0.4333	4.0000	3.0470	9.0343	0.2800
89	2017	0.6206	0.9170	0.4333	12.0000	3.0010	9.0504	0.2110
89	2018	0.6118	0.9170	0.4570	12.0000	2.8070	9.5945	0.4600
89	2019	1.1138	0.9170	0.4570	12.0000	2.9730	9.6034	0.3400
89	2020	1.0363	0.9170	0.4571	12.0000	2.8340	9.6372	0.3040
89	2021	1.5372	0.9170	0.4571	12.0000	4.3590	9.6792	0.2910
90	2017	1.4935	0.9290	0.4667	10.0000	0.1390	8.9182	0.3370
90	2018	1.1013	0.9290	0.4670	10.0000	0.2500	8.9688	0.3760
90	2019	0.7508	0.9290	0.4670	10.0000	0.1900	8.9169	0.6790
90	2020	0.8794	0.9170	0.4750	10.0000	7.5030	10.8687	0.4140
90	2021	1.1345	0.9170	0.4750	10.0000	2.1230	10.9694	0.7370
91	2017	0.5897	0.9170	0.4750	4.0000	3.2370	11.1078	0.5460
91	2018	0.6198	0.9170	0.4750	4.0000	0.3360	10.2379	0.3900
91	2019	0.5994	0.9170	0.4750	4.0000	0.2030	10.2565	0.3400
91	2020	0.7079	0.9170	0.4750	4.0000	0.2220	10.2517	0.4400
91	2021	0.5240	0.9170	0.4889	4.0000	1.7660	10.2589	0.6040
92	2017	1.8238	0.8890	0.4889	12.0000	2.9090	9.8724	0.4800
92	2018	1.5769	0.8890	0.4889	41.0000	0.9550	9.8680	0.4000
92	2019	1.1119	0.8890	0.4889	36.0000	0.4430	9.9872	0.3400

Agency	Year	Budgetary control	Board Independence	Gender diversity	Board meetings	Managerial efficiency	Firm size	Leverage
92	2020	1.2749	0.8890	0.4889	48.0000	0.6770	9.9770	0.2400
92	2021	1.3443	0.9090	0.4889	48.0000	2.2790	9.0069	0.2300
93	2017	0.9830	0.9090	0.4889	10.0000	1.3030	9.0343	0.2020
93	2018	1.0618	0.8890	0.4889	10.0000	1.5940	9.0504	0.3680
93	2019	1.7404	0.8750	0.4889	10.0000	1.4380	9.5945	0.3310
93	2020	1.2006	0.8750	0.4889	10.0000	1.0130	9.6034	0.3080
93	2021	0.9407	0.8750	0.4889	10.0000	4.3590	9.6372	0.2800
94	2017	1.3215	0.0000	0.4889	4.0000	3.4250	9.5905	0.5125
94	2018	0.7600	0.0000	0.4890	4.0000	4.0500	9.6823	0.4556
94	2019	0.6879	0.9090	0.4890	4.0000	0.8140	9.6825	0.6756
94	2020	0.9920	0.9090	0.4890	4.0000	0.7200	9.7151	0.7448
94	2021	1.0697	0.7780	0.4990	4.0000	2.2790	9.0069	0.7232

