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GREAT RECESSION AND CORPORATE RECOVERY: EMPIRICAL EVIDENCE OF THE IMPACT OF FIRMS' INTERNAL CONTROL SYSTEM

A Thesis

by

GBOLAHAN OLADAYO

Submitted in Partial Fulfillment of the

Requirements for the Degree of

MASTER OF BUSINESS ADMINISTRATION

Major Subject: Business Administration

The University of Texas Rio Grande Valley

December 2022

GREAT RECESSION AND CORPORATE RECOVERY: EMPIRICAL EVIDENCE OF THE IMPACT OF FIRMS' INTERNAL CONTROL SYSTEM

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by
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ABSTRACT

Gbolahan, Oladayo, Great Recession and Corporate Recovery: Empirical Evidence of the Impact of Firms' Internal Control System. Master of Business Administration (MBA), December, 2022, 40 pp., 5 tables, references, 39 titles.

In Previous studies, we are made to understand that recession has a detrimental effect on corporate valves. Hence, I investigate substantial evidence that firms with a good internal control system, even during the financial crisis of 2008, were able to minimize redundancies that could have negatively affected the recovery of their company's post-recession. Thus, firms with effective internal control systems are able to recover from negative events significantly faster (as measured by the firm's values) than those without such systems.

DEDICATION

The completion of my master's studies would not have been possible without the love and support of my family. My mother, Victoria Olufunke Oladayo, my sister, Dr. Yetunde Olabosipo Kare-Opaneye, my brother, Dr Kare Olabosipo Opaneye, my wife, Faith Oluwatunmise Aladesuru, my nephews, Oluwatofunmi & Oluwatomisin Kare-Opaneye and my friends, Edozie Chike, Tila Kenneth, Iria Joseph, Solaru Olawole, Dosunmu Fola, Stephen Etolue, wholehearted-ly inspired, motivated and supported me by all means to accomplish this degree. Thank you for your love and patience.

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I would also like to thank my colleagues at the UTRGV library who helped me locate supporting documents for my research. Also, I would like to acknowledge the many volunteers who participated in the research work.

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CHAPTER I

INTRODUCTION

Background to the Study

Internal control system works through the method of checks and balances to ensure there is financial reporting reliability, efficient and effectiveness of operations, compliance with laws and regulations by firms. (Lee, 2019) . It is also a reflection of risk management ability of a firm and form an essential part of its governance mechanisms. Internal controls are related to firms' operation and risk resistance efforts especially required in tackling pressure of survival and development (Zhu and Song, 2021) . Organizations are faced with changes, therefore, internal control which is a dynamic integral process is demanded in order to adapt to any changes as they occur (Rathnayaka Madhushani and Jayasiri, 2021) . Changes can be as a result of or instigated by political, economic, social and environmental phenomena or crises.

On the other hand, a recession is simply a period of economic slowdown which often lasts less than a year. Common attributes of recession are loss of jobs, low production level, industrial shut down and sharp drop in real income of firms (Jarqueline, 2022) . The long and worst economic decline has been attributed to occur during the great recession which began in December, 2007 and lasted till June, 2009. It was a consequence of high-risk mortgages that were bought by many and sold under the disguise of stronger assets which later resulted to economic downturn from their inabilities to repay their loans and that collapsed all institutions in US. It was characterized by the sharp drop in GDP, a scratch in the prices of homes, the rate of unemployment doubled. The similarities of these scenarios were evidenced in so many countries (Jarqueline, 2022). The recession also led to severe contractions in the output of productions

which hit the highest in all the industrialized economies (CIMA, 2010). The first four quarter of the recession saw US corporations slowing their activities in 2007 and in the first quarter of 2008 due to decline the demand for their products. This situation called for a similar approach of downsizing their work forces including the professional and educated employees (Lee, 2019).

The recovery from the great recession took a long time for the modern US macroeconomic life where on the record witnessed a positive job line and a low rate of inflation with an increase in wages, making the recovery the slowest ever in history. The impact of the recession could be felt from the slow increase in economic growth which averaged 2 percent in the four years after its recovery (Jarqueline, 2022). It affected all workers by creating a worse period of job loss which affected them and their families and it was the first-time unemployment would be on the highest in the history of record - keeping since 1948 (CIMA, 2010). Apart from the loss of jobs by some workers, some were offered jobs at reduced working hours which affect their wages and benefits thereon (Jraqueline, 2022). Its effects on the workers who remain in the same job could also be seen in their inability to adjust to know new roles and duties except with the help of training program which can improve their skills requirement for the employment after the recession (CIMA, 2010)

The issues of downsizing affect both firms and workers. As it is more prominent that employees laid off are affected by loss of their earnings, the remaining employees are assigned functions or roles that outside their skills and scope of expertise. This then affected the structure of internal control due to stresses or weaknesses (Lee, 2019). This appeared in form of inability of the internal control to work to ensure that operations of the firms after recession are in line with wealth maximization goals or objectives. The Internal control before and after recession should remain strong if the same level of productivity and profitability would be achieved in order to spur firm value increase.

Controls is to ensure that money is spent and used in a proper manner and amounts as the ways of doing business keep changing. Where the internal control is strong, the post-recessio will witness the introduction of policies, plans, procedures and programs that bring about business

structuring and new developments that keep steady or even cuts costs to increase firm value. The recovery after recession seemed rapid in some quarters but the rate of job loss which was high has been attributed to the austerity measures applied by some firms and an aggravated impact on the employment rate (Jarqueline, 2022) especially in dealing with redundancies. The austerity measures are mainly internal control measures put in line of cutting costs in the post-recession period for purpose of increasing profitability which ultimately may affect frim value. Also, the nature of competition between an advanced and emerging economies have increased the efforts of firms or changed their direction into utilizing their value chains to control cost and leverage capabilities (Chan, Chen and Liu, 2020) especially after the great recession which brought about uncommon synergy and counter strategies among firms.

Proper functioning of Internal control may be affected by circumstances imminent to human nature and which may render the internal control useless (Dimitrijevic, Milovanovic and Stancic, 2015). The global recession posed a threat to the internal control which question its effectiveness after the period. Subsequently, the nature of internal control during the recession may be different from its nature after the recession. This therefore suggests that the effects of the recession may be on a firm internal control as it is expected that for internal control to work effectively, its principles must be adhered to. The principles of internal control are those lines of functions which are shared among employees which are required to be strictly followed to ensure strong control in place. The principles include segregation of duties, authorization, approval, verification and many more, which are evaluated for determining the effectiveness or weakness of internal control system. Also, it is expected that the financial performance of businesses with strong internal control systems to be than those firms with internal control systems and whose firm value is low due to the weak systems (Al-Thuneibat et al., 2015).

Statement of problem

The use of strong internal control systems as mechanisms for ensuring financial reporting quality has been well recognized and therefore they have been adopted for this purpose by firms voluntarily (Altamuro and Beatty, 2010). Therefore, the reliability of a financial statement has

been attributed to system of strong internal control. This implies increased confidence in the financial statements of firms with strong internal control system (Gal and Akisik, 2019). Apart from its impact on the financial statements, internal control can also have impacts persistently on firms (Levtti, 2019 as cited in Gal and Akisik, 2019) which come as results of the various operations of firms. Also, internal control performs an integral function of supporting the risk management (COSO 2016) of firms by ensuring that risk management goals result into achieving performance objectives.

Internal control goals of risk management are the actions and measures deployed in addressing the risks that are possible of affecting firm activities in term of efficiency, economy and efficacy (Briciu et al., 2014). However, its role in the recovery of firms after recession has been not yet been well documented, especially considering the intense competitions among firms after recession and other changes that occurred and affected the usual businesses of virtual all firms. Among such changes is impact of recession in creating redundancies across all sectors, which require stern internal controls to deal with its impact on firm value as result of the recession. Risk management in daily operations of a firm form the point of emphasis of internal control that borders on the need to ensure that efficient operations and realization of firm's development strategy. (Ma, Ju and Zhang, 2022). The use of internal controls to mitigate risks is far from being resolved as evidenced from the continuing scandals and failures of companies in the global sphere (Li, et al., 2016) which occur as result of crisis that may be financial or political socks.

Effective internal controls provide a reasonable protection for firms with effective internal control during a period of downfall and in the occurrence of bad events by weakening the market reaction that can affect their firm value (Wang et al., 2018). The development plan of a firm should be based on its internal control which is also required for efficient management. However, inefficient or lack of internal controls may cause problems for companies even when they are not the only solutions to all problems faced by them. The importance of effective internal control is in their ability to respond to unfavorable conditions by limiting the possible effects they may have on companies through identification and prompt response to tackle such conditions

(Dimitrijevic, Milovanovic and Stancic, 2015).

In developed economies where there are progressive capital markets and in each country valuation of companies happens to be the most important and complicated issues (Gilandeh, Khodabakhshi and Moghanloo, 2016) to deal with especially after the great recession due to changes in all features of companies and presence of uncertainties that affect their firm value. The complexity and increase in the development of economic units, coupled with increased competition and variety of risks that threaten the organizational policies and objectives had led to the establishment of effective internal control to direct the units and deal the mentioned issues (Kim et al., 2015) and which exists to play an integral role in the efficient management system. However, risks and deviations occur in the policies and procedures of firms, but they are covered by effective internal control system which has a significant positive effect on firm value (Gilandeh, Khodabakhshi and Moghanloo, 2016).

Research Questions

The research questions of the study are;

i. Does the strength of a firm's internal control system impact its corporate value?

ii. Do firms pre-recession internal control system impact its post-recession recovery?

Research Objectives

The general objective of the study is to examine the interaction among internal control system, firm value and corporate recovery post-recession. The specific objectives of the study are;

i. to assess the difference in firm value between strong and weak internal control; and

ii. to examine the relationship between sound pre-recession ICS and corporate recovery post-recession.

Significance of the Study

The study will be of beneficial contributions to firms by presenting the factors responsible for difference in firm value of strong and weak internal control system as they are affected by their performance. Also, the study will be useful to firms by serving as a point of improving their knowledge on the impact that weak or strong internal control system can have on the firm value. The findings of the study will give information on the state of firms internal control system before recession and post- recession and serve as the basis upon which subsequent improvement can be made.

The study will be of tremendous benefits to investors in assessing the performance of firms in terms of their efforts to put in place sound internal control system to safeguard their wealth. The findings of study will also bring into light the behaviors of firm value through which investors make decisions on their future investments. The study will serve as a guide to investors to enable them make informed opinions on management efforts on the effectiveness of internal control system to mitigate risks that can affect firm performance and its value in the market. The results on the comparison of firm value between strong internal control firms and weak firms can be used to determine financial healthiness of firms before potential investors make investment decisions.

Outsiders can refer to the study when having financial dealings with firms which can be enhanced with the presence of strong internal control system that gives assurance on the protection of assets and resources. Creditors will find the study useful because it will provide information on the performance of firms which can influence their business relationship and other engagements.

Scope of the Study

The study covers the period between 2005 to 2017 which signifies the pre and post-reces sion periods.

CHAPTER II

REVIEW OF LITERATURE

Internal Control

The concept of internal control has been described from different perspectives which suggest that it is wide in scope and it is therefore defined in several ways in literatures. At the level of firm, internal control simply refers to the process of evaluating the efficiency and effectiveness of a company' strategic and operational goals, assessing the financial reporting reliability, and its ability to adhere to law and regulation (Lashgari, Gawradar & Bakhshayesh, 2015, Chan, Chen& Liu 2020). It reduces the incidence of information and asymmetry and promote information transparency (Chen, Chan, Dong &Zhang, 2016). It is a process that is being affected by some entity directors, management and other personnel who are involved in working towards the achievement of its goals and objectives (Cohen, Dey & Lys 2008). Consequently, the aim of internal control is the reduction of risks of corporate governance, management risk and operational risk (Zhu & Song, 2021) Basically, firms have three main objectives for designing internal control. First, the reliability of financial statement prepared by management. Secondly, effectiveness and efficiency of operation which refers to effective use of resources to firms' goals. Lastly, for ensuring compliance with laws and regulations (Al-Thuneibat, Salamah, Yousef & Basodan, 2015). Similarly, the overall objective of internal control is to enable firms to achieve their goals, and its quality gives a reasonable assurance about the interest of all stakeholders and produce better firm performance (Zhu & Song, 2021). Firms that have strong internal control are expected to have better financial performance than firms those whose internal control is weak and as a result have weak market value (Al-Thuneibat et al., 2015). In the wake of recession, internal

control ensures efficiency of operation and aids firms in recovering swiftly (Zhu & Song, 2021). For internal control to perform its functions and meet its objectives, there must be management readiness in enforcing the practices that promote smooth running and qualify it as either weak or strong. This is only possible if the management show positive attitude and adhere strictly to its oversight, policies and procedures, regarded as the top tone (Shu, Chen, Lin & Chen, 2018).

Components of Internal Control

The framework of COSO, (2013) identified five components of internal control which are control environment, control activities, risk assessment and management, information and communication (Chan, Chen& Liu 2020). The internal control of a firm is affected majorly by the control environment, control activities and information and communication. These components are the core elements that impact on a firm internal control system effectiveness and focus more on the broad aspect of a firm's operations (Chan, Chen& Liu 2020) . Whereas the risk management and monitoring components are useful in dealing with the narrow aspects of a firm affairs and they form the basis for the design and evaluating the internal control (Chan, Chen& Liu 2020)

Control Activities

Control activities are performed by top management levels and functions to ensure that organizational objectives are achieved (Chan, Chen& Liu 2020) . It helps a firm to ensure that necessary actions are put in place to forestall the incidence of risks that may negatively affect it from achieving its objectives (Chen et al., 2016) . Control activities include approval, authorization, verification, reconciliation, review of performance, safeguarding of assets and resources and segregation of duties, performed with the aim of reducing risks, irregularities, misappropriation of assets for purpose of improving accounting quality (Chan, Chen& Liu 2020)

Control Environment

It denotes the attitude, awareness and actions of directors and mangers in ensuring that internal control system of a frim achieves its objectives (Chen et al., 2016) . The control environment sets the basis for processes and requirements, human resources policies and procedure, ethical values, control culture and board and audit committee (Chen et al., 2016) to function successfully, it is the bedrock of designing and establishing principles and disciplines for organization structure and it is the foundation upon which all other components are built (Chan, Chen& Liu 2020). It is impactful in protecting the corporate governance that affects the management. In addition, it ensures that there is corporate financial reporting quality and transparency of information which moderate the information asymmetry between the management and investors (Chan, Chen& Liu 2020.)

A corporate value is better achieved where all workers or employees accept responsibilities with the zeal to bring about improvements that can influence firm value or corporate performance. The inculcated or imbibed ethical values of an organization can spur the eagerness in employees to work for the interests of the corporation. Competence of employees can be achieved after recession which has created a situation of job restructuring and duties changes through training. The redundancies effect of recession can be seen in the loss of personnel who are capable and competent in particular tasks. However, with training, employees are moved to active environment or duties which are created through post-recession innovation of business strategy. However, there is need for control environment that can enforces ethical values and competence (Al-Thuneibat et al., 2015), which may have been lost, to bring about speedy recovery from recession. Control environment is crucial in ensuring that firm's personnel decision making affects the hiring and compensation of executives who are closely connected to or responsible for the formation of corporate strategy, and are in charge of adopting, reviewing and supervising innovation (Chan, Chen& Liu 2020).

Information and Communication

It involves sharing of operational, financial and compliance related information that aid and smoothen the running of business operations (Chan, Chen& Liu 2020). Information required for the purpose of achieving internal control and organizational objectives must be relevant, reliable, accurate, complete and timely, and should be available from both internal and externally sources (COSO, 2013, Chan, Chen& Liu 2020). Therefore, information and communication extend to other outsiders such as shareholders, customers, suppliers, creditors and regulators (Chen et al., 2016). The nature of the information generated affect the decision-making ability of management and impact on the financial report quality (Al-Thuneibat et al., 2015) and thereby it is important that information is value relevant. At all levels, regular communication should be used to create understanding about internal control system, and to pass the outcomes from implementing it in order to ensure that it is properly applied (IFAC 2012 as cited in Al-Thuneibat et al., 2015).

Risk Assessment and Management

Risk assessment involves identifying and analyzing the risks that may hinder firms from accomplishing its objectives. It is used by management to manage various risks at macro-level, industry level and frim specific risk. It forms the basis for risk management behavior of firms (Chen et al., 2016). Risk management is important in regulating management behaviors and entrenching information transparency in a firm. (Ma, Ju & Zhang, 2022). Also, risk management is important for making varying adjustments at different stages of innovation process (Al-Thuneibat et al., 2015).

Monitoring

For other components of internal control to function effectively, there must be monitoring mechanisms in place. Monitoring is the process of assessing the performance of internal control (Chen et al., 2016). It is responsible for assessing the performance of internal control which it

does using ongoing surveillance or separation evaluations (Chan, Chen& Liu 2020). Internal control performance can be monitored through but not limited to regular management, supervisory activities, responsibility accounting, periodic audit, and fraud detections methods.

Great Recession

It has been described as the worse recession than the recession after the second world war II which transformed the economic environment (Kim & Ployhart, 2014). It is similar to the great depression of 1930 because it created the economic turmoil in magnitude (Kalleberg & Wachter, 2017). Great recession is an economic recession which began in late 2007 and lasted several months till 2009. It was a significant decline in economic activities (Kim & Ployhart, 2014), and reduction in the production output which has led to mass redundancies or lay off as result of decline in demand. It was also the cause of the sharp decline in employment which continued even after it was over (Kalleberg & Wachter, 2017).

Recessions occur with no warnings and significantly change the business competitive environment for firms (Kim & Ployhart, 2014). Its impact leaves no firms untouched and create similar problems for firms operating in a competitive atmosphere. In order to tackle the effects of the great recession, particular redundancies, which erupted as an aftermath of its effect by eroding the corporate value, firms are to engage in structural changes and require their workers to learn new skills (Kalleberg & Wachter, 2017) demanded by the need to recover from the recession fast.

Recession is often a rare phenomenon which comes with uncertainties and have the possibilities of changing business strategies and structures particularly those have to do with the how a firm operates its business. The onset of recession comes with significant drop in profitability which is caused by several changes in the market (NBER, 2001). In response to the recession, firms embarked on organizational changes which affect its strategy (Latham & Braun, 2011) particularly in the area of handling redundancies which requires decisions to be made on how to use the human resources of a firm. Redundancies occurs as result of low demand for firm's

goods and services which results into a decline in productivity.

Internal Control and Firm Value

The relationship between internal control system a firm value is viewed from the standpoint of whether strong or weak internal control system affect the value of firm shares or its performance externally. The effect of internal control on firm value surrounds the ways the issues of internal control move to impact on firm value. The issues in internal control that can affect firm value can emanate from the efficient and effective operations on one hand, and risk management ability of the internal control on the other hand. Uncertainties are faced by business entities which comes as risks and opportunities, however, they are present to affect the stakeholder value (COSO, 2004). The uncertainties come in different forms which may be threats of acquisition from strong competitors, regulation forces which can hinder firms' operations individually or affecting companies across industries collectively (Ji, Lu and Qu, 2017) and unexpected phenomena of great changes that can threaten the internal and external performance of firms. The risks must be duly assessed, promptly controlled and properly managed if firm's objectives will be achieved, to sustains its performance and above all increase its firm value to the stakeholders. (Ji, Lu and Qu, 2017)

Internal control plays a preventing role by decreasing earning quality, increasing dividend and firm value Gilandeh, Khodabakhshi and Moghanloo, (2016). Internal control positive impact on firm performance and also increases the valuation of its operation (40), however, firms with weak internal control have the opportunities to manage their earning and create more information noise (Li et al., 2016). The presence of effective internal control can give an assurance about the quality of earnings of firms and improve outsiders' perception (Wang et al., 2018)

Internal control weakness poses risk to the investment of investors which affect the cost of capital and therefore a firm having ICW should be subjected to high cost of capital and its valuation should be lower than firm with effective or strong internal control (Li et al., 2016). As predicted by ((Li et al., 2016) that firms with internal control weakness are expected to have

lower firm value from stock returns. Internal control weakness is simply the deficiency of internal control which can negatively hinder a firm from achieving its objectives and goals as desired (Ji, Lu and Qu, 2017). Also, Ge and McVay, 2005 defined internal control weakness as problems associated with incorrect recognition of revenue and timing issues with the end of the year reporting, lack of segregation of duties and non-compliance with accounting policies and procedures. According to Lin, Chin and Huang (2015), there are two categories of internal control weakness. First, is taking step to discover whether there is an internal control weakness. Second, is to discover the reaction of the market to information of internal control weakness. The second aspect is more relevant to the market values because the announcement of internal control weakness is not usually done as a mandated exercise which must be included in financial report and thus have signaling effect on firm's performance.

When ICW is disclosed to the stakeholders, it is way of revealing the deficiency in internal control which they considered as bad news (Ji, Lu and Qu, 2017). The presence of ICW can affect the market value of firms because of market reaction and the behavior of potential investors which can be in form of their unwillingness to invest in such a firm. Also, the prices of its stocks may be valued low as result of risk of pending loss due to poor performance. However, its disclosure can assist in putting the management on a sound track to ensure that measures are channeled towards its future effectiveness.

The consequences of weakness internal control can be seen in the opportunistic behavior of managers who engage in earnings management which can have negative effects on the reported profits and thereby creating unexpected reduction in the value of firm's stock in the future. The study of Lenard et al., (2016) found positive relationship between firm reporting internal control weakness and real activities manipulation. There is an association between weak internal control and lower accrual quality Ashbaugh-Skaife et al. (2008). Also, the insiders trading gains more profitability from firms with weaknesses in internal control due to agency problem than they get from firms with effective internal control Skaife et al. (2013). There is an association between weak internal control and cost of debts. Tong, Wang and Xu, (2014) found that there

is significant economic effect of internal control has on accounting policies, management guidance, accrual quality and cost of debts.

Lin, Chin and Huang (2015), reported that an effective internal control has the influence of reducing operation risk slightly but with a significant effect on future performance. The study concluded that an increase in managers' block holding after firm discloses weakness in internal control would have effect on the operation efficiency and risk management. This can be related to the acquisition of shares from the investors who are likely to sell their shares as result of in value due to weakness in internal control as may be reacted to by the market. The action of the managers afterwards would serve as a way of protecting their interests which then align with the interest of the firm henceforth. Managers take decisions that either decrease the risks or increase performance of a firm. The outcomes of their decisions affect the market value of their firm. It is expected that the disclosure of internal control weakness should be addressed promptly in order to reduce the risk or increase performance which have the tendency to boost the confidence of investors in investing in the firm (Lin, Chin and Huang 2015).

Internal Control, Firm Value and Great Recession

The role of internal control that revolves around its ability to impact positively on a firm operational efficiency, cost of capital, investment and risk management (Chan, Chen& Liu 2020) and in restoring the corporate value have all been well documented. Internal control system is capable of mitigating the negative effect of economic crisis which inflict damages on firm value and performance (Wang, Xu, Zhang & Shu, 2018) . Firm value is broadly referred to as the operating profit, productivity, growth rate or market value of firm which represents the value derived from external performance. In the event of recession, there are risks caused by economic crisis which requires the internal control to play a role which involved its ability to improve the effectiveness and efficiency of operation, reduction of information symmetry and reduction loss of the crisis and restore normal production (Zhu & Song, 2021) through mitigating the negative effects of redundancies and creating new lines of business or products which can boost the

performance of a firm. Internal control becomes crucial in ensuring efficiency and effectiveness of operational goals, which are embedded in the ways a firm conducts its internal activities. These include selection of employees, diversification of product line, organizational restructuring and reduction of cost of production which can be used to gain competitive advantage and position the firm as having sound internal control.

Hypothesis 1

There is a difference in firm value between strong and week internal control system. The ability of firm to curtail the negative effects of redundancies on firm and its employees which are created by recession requires that internal control should be applied in changing ways and norms after recession to boost internal firm value. For internal control to effectively impact firm operations and bring about progress in firm value, it must be implemented and supported by some ethical principles which are imbibed by a firm. Ethical values provide the platform for an internal control to work or operate effectively and they instill the value of risk management in all employees. Risk management is emphasized by internal control in order to achieve efficiency of operation and promote development strategy of firms (Ma, Ju & Zhang, 2022). Risk management after recession should be a germane focus of top management who are responsible for making strategic decisions in best interest of all stakeholders. However, because of lack of transparency of information, management often make decisions in their own interests even if they involve risks which can be hidden from the investors thereby leading to information asymmetry.

According to (Ma, Ju & Zhang, 2022), firm value is promoted by internal control mechanisms of risk management, corporate governance, internal and external information transparency and disclosure. Empirically, the study (Al-Thuneibat et al., 2015) reported that firms that are well governed are more profitable, have more value and pay more cash to shareholders than firms that are poorly governed.

Hypothesis 2

Sound Pre-recession ICS relates to corporate recovery Post-recession.

Firms participation in a market is followed by fierce competition which implies that apart from the internal threats of redundancies, firms are bound to deal with the threats posed by market competition (Shu, Chen, Lin & Chen, 2018) to bounce back to gain positively from the market to recover after recession. Firm internal control should use its human resources especially the slack resources due to recession to tap into the new areas of activities due to changes in consumer demand, global economy shrinks, increase in unemployment and sharp decline in the profits of firms (Kim & Ployhart, 2014), and the need to confront market competition that may pose a threat. Ability of a firm to deal with market competition to add value in terms of profitability shows that its internal control is strong and sound (Shu et al., 2018).

Redundancies after recession affect both the lower level employees and the topmost managers of firms which signifies that the internal performance of a firm may be eroded, but the external performance of firm is strongly affected by both internal and external factors. New opportunities become inevitable for a firm to take advantage of due to changes in business strategy which demand for more capital and staffing in terms recruiting new employees. However, postrecession recover requires that a firm cut its costs and increase its revenue to increase profit targeted by internal performance of a firm and influenced by internal human resources practices (Kim & Ployhart, 2014). Sound internal control helps in efficient management of resources which can be evident from its ability to control cost and limiting excessive spending in all operations which is the main objectives of its control environment (Al-Thuneibat et al., 2015). In other words, the role of internal control also cuts across assisting the organization to attain financial fitness which transforms into corporate value in the long run. Consequently, internal control goal of minimizing costs and increase revenue that can spur internal performance that is pursued through the use of redundancies created by the recession.

Organizational restructuring which requires that all existing employees go through staffing process is instituted in other to pave way for abilities to adapt into new activities and roles

after recession. In addition, internal control strategic goal of organization which is profitability but being affected by external factors can be realized as cost reduction focus requires that left-over of postrecession staffing be channeled to increase revenue without having to incur costs of embarking on recruiting new employees to compete with the outside competitors. This means the firms that deploy strong internal control to ensure efficient and effective deployment of employees and operations prior to recession will have had access to staff with required general skills for the tasks during prerecession and post-recession, and have higher performance than the competitors who lack employees that can fit into the new areas of business.

CHAPTER III

METHODOLOGY

This chapter covered the research methodology that the study adopted. This chapter contained Data sourcing, population, data analysis techniques, measurement of variables and model specification.

Data Sources

The study used the descriptive research design to collect data on a longitudinal basis over a period between 2005 and 2017. Both descriptive and inferential statistics were performed in the secondary source of gathering data. The data for firm value, internal control and recession were extracted from Compustat, and U.S Bureau of Economic Analysis respectively.

Compustat combines deep history with robust and consistent data standardization into their research and back testing to produce valuable insights. Additionally, Compustat provides insight into company financial performance across many different economic cycles.

The U.S Bureau of Economic Analysis shows Gross Domestic Product, Personal Income, International Trade in Goods and Services, and International Transactions as Principal Federal Economic Indicators. The Bureau of Economic Analysis (BEA) promotes a better understanding of the U.S. economy by providing the most timely, relevant, and accurate economic accounts data in an objective and cost-effective manner.

Data Analysis Techniques

Objective one

To assess the difference in firm value between strong and weak internal control. The study differentiated between the firm value of firms with weak internal control and firms with strong internal control in the pre-recession period and the post-recession period using the t- test data analysis technique. The firm value of the two groups were compared to check the differences using the means and variances. In addition, correlation analysis was conducted to examine the direction of relationship between internal control system and firm value in both pre-recession period and post-recession period. Descriptive statistics were performed and results of mean, median, minimum, maximum, standard deviation and jarque-bera were presented and explained.

Objective Two

To examine the relationship between sound pre-recession ICS and corporate recovery post-recession. The objective was achieved by performing some descriptive statistics and econometric analyses such as correlation analysis and multiple regression analysis. The descriptive statistics provided an overview of the behaviors of the variables in the study. The correlation analysis was carried out to show the degree of relationship among the variables. Lastly, the multiple regression was performed to display the effect of ICS and other control variables on firm value.

Table 1 Measurement of variables

S/N	Variables	Definition	Type	Measurement	A Priori Expectation
1	Market Value	Firm Value Measure	Dependent	Market Value of Earnings	
2	ICW	Internal Control Weakness	Independent	No Author's report, Adverse, Disclaimer, and Delayed filing are indicators that take 0 if company internal control is weak, and 1 otherwise.	$\beta_1 < 0$
3	LEV	Leverage	Control Variable	Debt in Current Liabilities + Debt in Long Term / Assets Total	$\beta_2 < 0$
4	SIZE	Firm Size		Log of Sales	$\beta_3 < 0$
5	ROA	Return on Asset		Net Income / Total Asset	$\beta_4 < 0$

Empirical Methodology

Regression analysis, which is a set of statistical methods used for the estimation of relationships

between a dependent variable and one or more independent variables (Corporate Finance Institute, 2021) was used.

In order to establish the relationship between the sound pre-recession ICS and corporate recovery post- recession, two steps are taken. First, the period of the study was divided into pre and postrecession taking cognizance of the year of the recession occurred. The year 2005 to 2007 signified the period before recession and the period between 2010 and 2017 marked the post-recession years. The two consecutive years, that is 2008 and 2009, were omitted from the analyses because of breaks and instability in activities of firms during those years.

The model on the relationship between sound pre-recession ICS and corporate recovery post-recession was stated as:

Equation 1

$$Mkt\ Value_{it} = \beta_{0t} + \beta_1\ ICW_{it} + \beta_2 GrRec_t + \beta_3 SIZE_{it} + \beta_4 ROA_{it} + \beta_5 lEV_{it} + \epsilon_{it} \quad (1)$$

Equation 2

$$Mkt\ Value_{it} = \beta_{0t} + \beta_1 ICW_{it} * GrRec_{\ t} + \beta_2 SIZE_{it} + \beta_3 ROA_{it} + \beta_4 lEV_{it} + \epsilon_{it} \quad (2)$$

Where:

$Mkt\ Value_{it}$ = $Firm\ Value\ post\text{-}recession\ of\ firm\ i\ in\ year\ t$

ICW_{it} = $Auditor's\ Opinion\ of\ Internal\ Control\ System\ of\ firm\ i\ in\ year\ t$

$GrRec_t$ = $Great\ Recession\ of\ the\ US\ economy\ over\ the\ sample\ period$

LEV_{it} = $Leverage\ of\ firm\ i\ in\ year\ t$

$SIZE_{it}$ = $Firm\ Size\ of\ firm\ i\ in\ year\ t$

ROA_{it} = $Return\ on\ Assest\ of\ firm\ i\ in\ year\ t$

$\epsilon_{i,t}$ = Error Term

CHAPTER IV

DATA ANALYSIS AND INTERPRETATION

This chapter presents the results and it was followed by the discussions of the findings based on the results of the study. The results are presented in sections which began with descriptive statistics of the study variables, presentation of results and the discussions of findings.

Descriptive Statistics of the study variables

The overview of sample statistics of data from the descriptive analysis is presented in Table 4.2. The sample statistics include the mean, standard deviation, maximum and minimum values. The mean value of market value is 6273. Minimum value is 0.0146 and maximum value is 1073391. The mean of market value shows that on the average, shares of firms in the study is worth 6273 million dollars. The minimum value of 0.0146 indicating that a share is worth less than 1 dollar and the maximum value indicates that the total shares of firms are worth 1073391 million dollars.

The mean value of internal control is 0.9414 which indicated that 94% of the sampled firms have sound internal control. The minimum value of 0 indicated that no firm without internal control weakness and maximum of 1 indicated that 1% of firms have internal control weakness. The mean value of log of sale is of 6.4178 showed that some sampled firms have been in existence for more than six years, while the minimum value of -6.9077 indicated that firms have been in operation for at least less than 6 years. The maximum value of 13.11 indicated that for some firms have been in existence for 13 years of the study period. The mean value of return on asset is 0.0300 which showed on the average 3% return can be gotten on the investment in the

firms considered. The minimum value of -78.8 pointed to less than of 78% return on the investment made in the firms while the maximum value of 226.31 showed that more than 226% return can be expected on investment in the firms considered. The leverage mean value is an indication that the sampled firms is composed of 24% of debts to equity on the average. The minimum value gives an indication that no firm without debt as the proportion of its equity. The maximum value indicated that more than 60% proportion of debt in the equity of sampled firms.

Table 2 The Descriptive Statistics of the Study Variables

Variables	Definition	Observations	Mean	Standard Deviation	Minimum	Maximum
Market Value	Market Value	41727	6273.151	24806.94	0.0146	1073391
ICW	Internal Control Weakness	41727	0.9414	0.2348	0	1
GrRec	Great Recession	41727	0.6699	0.4702	0	1
LogSale	Log Sale	41727	6.4178	2.1290	-6.9077	13.1159
ROA	Return on Asset	41727	0.0300	2.4776	-78.8000	226.3104
Lev	Leverage	41727	0.2471788	0.3991473	0	60.41176

The results in Table 4.2 showed that internal control weakness is positive and significantly (β
= 1494, t = 3.10, $P < 0.01$) related to market value measure of corporate recovery. The result suggested that as the internal control increase or reduces as the case may be, the corporate recovery increases or reduces in the same direction. The direct relationship showed firms with sound internal control are able to increase their market value which is evidenced in the ability of such firms to instill control measures that can reduce risks and increase operational efficiency. Gilandeh, Khodabakhshi and Moghanloo (2016) and Gal and Akisik. (2019) found similar result where the internal control has positive and significant impact on market value of Iran and North American firms respectively. Also, Al-Thuneibat et al., (2015) documented a significant relationship between internal control and return asset measure of performance and return on equity. Their findings gave a conclusion that the higher the internal control compliance, the higher the firm performance.

The parameter estimates of great recession is positive and significantly related to mar-ket value (β = 573.8277, t = 2.38, $P < 0.05$) implying that as the recovery from great recession improves, market value increases. This positive relationship can be attributed to opportunities that firms might have taken advantages after the recession. Furthermore, the direct relationship suggests that after great recession, firms were able to managed the risk associated with it by venturing into more new areas of tackling the leftover effects which they are able to turn into positive performance. This supports the fact that firms with sound risk management techniques and efficient operations prior to an adverse event will be in charge effectively to take advantage of it and still perform positively.

Coefficient of logsale is positive and significant (β = 4460, t = 53.29, $P < 0.01$) implying there is direct relationship between firm size and market value. The result is an indication that big firms are more likely to recover from recession than small firms. The size of firms determines their efficiency or give an advantage when risks are being managed. The speed of recovery is also determined by the size of firms which make a big firm to have more market value than small firms.

Previously in Gal & Akisik (2019) and Abdullah and Ahmed (2021), the studies found positive and significant relationship between firm size and market value. However, Ji., Lu and Qud (2017) found negative relationship between firm size and earnings quality.

The parameter estimates of return on asset showed that it is negatively and significantly related to market value (β = -106.12, t = -2.34, P < 0.01). this implies that a decrease in return on asset leads to increase in market value. the more the performance of firm in terms of assets acquisition, the less is its market value which indicates that firms that favor investments in assets are likely to declare less return on equity which is a signal of increase in market value. also, the negative relationship showed that return on assets does not enhance market value. the explanation for this may be due the indirect impact of return on assets on market values which can be felt in the way it boosts firms' performance and enhance their market value.

Parameter estimate of leverage is negative and statistically significant (β =1306.77, t = -4.62, P < 0.01) implying indirect relationship between leverage and market value. this outcome suggests that the more the debts of firms, the less the market value even after recession. The negative relationship can be explained by the need to settle the debt owners which if debts form the major component of the firm capital, it will affect the meagre profits that may likely be made after recession. This can affect the return on equity and reduce the market value of shares during the period of recovery. In Contrast, Gal., G & Akisik., O. (2019) found leverage to adversely affect market value in their study.

Table 3 The Relationship Between Sound Pre-Recession ICS and Corporate Recovery Post-Recession

Variables	Definition	coefficient (β)	standard error	t-statistics	Probability
ICW	Internal Control Weakness	1494.915	481.5209	3.10	0.002
GrRec	Great Recession	573.8277	241.3076	2.38	0.017
Log Sale	Log Sale	4460.073	53.29	83.69	0.000
ROA	Return on Asset	-106.1231	45.42409	-2.34	0.019
Lev	Leverage	-1306.77	282.9951	-4.62	0.000
Constant	Constant	-23816.61	562.5707	-42.34	0.000
R-squared	R-squared	0.1477			
Adjusted R-squared	Adjusted R-squared	0.1476			
F– statistics	F– statistics	1445.71			
Probability (F-statistics)		0.0000			

The Relationship Between the Interaction of Internal Control, Great Recession and Corporate Recovery

Table 4.3. reveals the relationship between internal control and great recession and corporate recovery. Coefficients of interaction between internal control and great recession is positive and statistically significant ($\beta = 814.3829$, $t = 3.45$, $P < 0.01$). this implies that sound internal control is capable of combating the negative effects of recession and impact positively on market value. the result further suggests or indicates that firms that have sound internal control would strive efficiently by deploying all measures of bringing the unexpected rivalry and competition under control in a bid to gain more from the opportunities that are coveted by other firms. The efforts of sound internal control are well appreciated if it could hasten the recovery from the recession and provide more hopes of increase in the market value of firms. The positive relationship between sound internal control and great recession having positive impact on market value explains the situation whereby firms that can manage risks and increase operational efficiency to tackle the menace of recession. The finding of the study supported the study of Gal & Akisik (2019) which found positive and significant relationship between internal control and integrated reporting and concluded that the internal control is able to affect reduce the negative impact of integrated reporting on market value.

Parameter estimates of Logsale is positive and significantly related to market value ($\beta = 4464$, $t = 83.82$, $P < 0.01$). the direct relationship indicates that Logsale can increase the market value of firms. Instituting sound internal control is possible for big firms which have enough resources in terms of personnel and technologies to carry out the functions it requires. The technology acquisitions of big firms may be also enhancing the workability of sound internal control system and play integral roles in ensuring the flexibilities of changes after an unpleasant occurrence like great recession. Size of firms can also assist the relationship between internal control and great recession. Big firms have the tendency to recover from recession because of the presence of sound internal control which is the bedrock of big firms' existence.

Coefficient of return on assets is negative and statistically significant ($\beta = -106.08$, $t = -2.34$, $P < 0.05$), implying an indirect relationship between return on asset and market value when the internal control is being positively related to great recession. The meaning of this association is that where the sound internal control is able to affect great recession, the performance of a firm in terms of assets is negative and thereby reducing its market value. the possible explanation for is that as firms is struggling to reduce the effect of great recession through internal control, they investment more on the assets that can improve their operations in the existing business and the new opportunities provided by the recession. This therefore mean that the performance of the firm will not come in form of increase in market value but in their ability to increase return on assets. This often the case where a lot of investment and reinvestment is required by firms that are just recovering from the negative impact of any form risk that might have eroded their profit.

The coefficient of leverage is negative and significantly related to market value of firms ($\beta = -1329$, $t = -4.70$, $P < 0.001$). The indirect relationship between showed that as the debt proportion in the capital of firms increases, the shares value reduces. This explains the situation whereby the relationship between internal control and great recession is not able to ameliorate the negative impacts of the recession through internal control ability to stabilize the capital components which can be found in the way debts are likely to be the main sources of funds after the recession. During recession, a large of chunk of businesses faced the problem of funds shortage which were only revived by the availability of funds or new capital through financial institution which saw them depending on debts and working towards the repayment. The presence of debts affects the profits of firms which could have given back as return on equity. The findings of this is line with Madhushani& Jayasiri (2021) who found negative relationship between leverage and return on equity in their study.

Table 4 The Relationship Between the Interaction of Internal Control, Great Recession and Corporate Recovery Post-Recession

Variables	Definition	Coefficient (β)	standard error	t-statistics	Probability
Interaction	Interaction	814.3829	235.8488	3.45	0.001
Log Sale	Log Sale	4464.456	53.25926	83.82	0.000
ROA	Return on Asset	-106.0861	45.4257	-2.34	0.020
Lev	Leverage	-1329.679	282.6568	-4.70	0.000
Constant	Constant	-22570.49	374.8472	-60.21	0.000
R-squared	R-squared	0.1476			
Adjusted R-squared	Adjusted R-squared	0.1475			
F–statistics	F–statistics	1805.72			
Probability (F-statistics)		0.0000			

CHAPTER V

SUMMARY AND CONCLUSION

Summary

Internal control plays an integral role in any firm, especially in the wake of unexpected events which may have adverse impact on the smooth running of operations and businesses. The great recession is an example of a happening that threatened the existence and performance of major firms in the world. It forced firms across the world to suspend their normal businesses and also eroded firm value which shareholders could not benefit from. The interplay between internal control and great recession is however opined as capable of affecting market value. The implication of this is that the impact of the great recession depends on firms internal control functions of ensuring efficient operations and management of risks. To this end, this study examined the relationship between internal control, great recession and market value on one hand, and examined the relationship between the interaction of internal control and great recession and market value on another hand.

The study covered 13 years which spanned from 2005 to 2017. The population of the study included all firms whose data can be found in the Compustat of US. The sample size of the study comprised 3209 firms given forty – one thousand, seven hundred and seventy-two (41,727) observations. The secondary data collected covers the indicators such as market value, internal control, great recession, log of sale, leverage and return on asset. The data collected were ana-lyzed using descriptive statistics and panel regression analytical technique.

The estimated relationship between internal control, great recession and market value result showed that internal control weakness is positive and significantly ($\beta = 1494$, $t = 3.10$, $P < 0.01$) related to market value measure of corporate recovery. Great recession is positive and significantly related to market value ($\beta = 573.8277$, $t = 2.38$, $P < 0.05$). LogSale is positive and significant ($\beta = 4460$, $t = 53.29$, $P < 0.01$) implying there is direct relationship between firm size and market value. Return on asset showed that it is negatively and significantly related to market value ($\beta = -106.12$, $t = -2.34$, $P < 0.01$). However, leverage is negative and statistically significant ($\beta =1306.77$, $t = -4.62$, $P < 0.01$) implying indirect relationship between leverage and market value.

In addition, the relationship between the interaction of internal control and great recession, and market value showed that interaction between internal control and great recession is positive and statistically significant ($\beta = 814.3829$, $t = 3. 45$, $P < 0.01$). LogSale is positive and significantly related to market value ($\beta = 4464$, $t = 83.82$, $P < 0.01$). Return on assets is negative and statistically significant ($\beta = -106. 08$, $t = -2.34$, $P < 0.05$). Leverage is negative and significantly related to market value of firms ($\beta =-1329$, $t = -4. 70$, $P < 0.001$).

Recommendations

Based on the findings of the study, the following recommendations are made:

1. There should be future study looking at the Impact of the quality of accounting informa tion system on the internal control effectiveness during the sample period 2005 to 2017
2. Firms should observe or institute the components of sound internal control in their activ ities which are capable of ensuring that functions are performed in the right manner and according to the objectives of firms.
3. The needs for the achievement of sound internal control system should be communicated and reinforced as parts of the ethical culture of firms which can be passed onto employ ees from employees, and used to guide their behaviors in the organization.

4. Firms should focus on the good opportunities as result of the recession which affect the market value positively as shown by the result.
5. The big firms should take the advantages accrue to them in terms of technology know-how, economies of scale to increase their profits through minimization of costs of operat ions to boost market value.
6. The return on assets of firms should be utilized to increase the return on equity through judicious use its proceeds to increase market value.
7. The management of firms should make stern efforts to take advantage of positive effect of leverage on market value to turn around their performance so the returns on equity will be maximized using left over from cheap cost of capital that might have been granted by financial institutions after the recession.
8. Internal control should form the basis upon which objectives of firms should be targeted where its goals coincide with other unexpected happenings as it capable of reducing the direct impact of such on the ultimate objective of wealth maximization.

Conclusion

From the findings of the study, it is evidenced that most of the studied firms complied or disclosed their internal control based on the criteria of filling, showing no adverse or disclaimer in their reports. Also, it could be concluded that there is positive and significant relationship between internal control, great recession and market value. This confirmed the strict adherence of firms to internal control system rules such as Sarbanes Oxley acts. Also, the implication of the findings is that internal controls can improve the market value of firms by impacting on their performance. In the same vein, the study concludes that sound internal control can act efficiently in reducing the negative effects of great recession on market value, which could be seen from the positive relationship between them. It therefore suggests that whether great recession affected firms positively or negatively, it is a function of sound or weak internal control of a firm.

The analysis and conclusions of this study have stimulated some intellectual insights; however, certain caveats must be taken into consideration when interpreting its findings and

analyses. By analyzing only firms in the United States during the study period, this study established the parameters for when and where evidence can be generalized. It is my opinion that these are fertile research grounds for future studies, with my study providing a starting point for future research. Additionally, virtually all empirical designs are susceptible to omitted variable bias. The fixed effect regression analysis is intended to address this concern econometrically, however, it does not provide a sufficient remedy conceptually. Future research will provide further insight.

REFERENCES

Altamuro., J & Beatty., A. (2010). How Does Internal Control Regulation Affect Financial Reporting? *Journal of Accounting and Economics*, *49,* 58 –74.

Ashbaugh-Skaife H, Collins D. W., Kinney W. R Jr, LaFong., R. (2008). The Effect of SOX Internal Control Deficiencies and Their Remediation on Accrual Quality. Account Rev 83(1), 217–250

Ali Abedalqader Al-Thuneibat., A. Al-Rehaily., A. Basodan., Y. A. (2015). The Impact of Internal Control RequEirements on Profitability of Saudi Shareholding Companies", *International Journal of Commerce and Management,* 25(2), 1-37.

Briciua., S., Danescu A. C., Tatiana Danescu., T. &, Prozana., M.A. (2014). Comparative Study of Well-Established Internal Control Models. Procedia Economics and Finance 15, 1015 – 1020

Brown, N. C., Pott, C., & Wömpener, A. (2014). The Effect of Internal Control and Risk Management Regulation on Earnings Quality: Evidence from Germany. *Journal Of Accounting and Public Policy*, 33, 1–31.

Chan, K. C., Chen, Y. & Liu., B. (2020). The Linear and Non-Linear Effects of Internal Control and Its Five Components on Corporate Innovation: Evidence from Chinese Firms Using the COSO Framework. *European Accounting Review,* 1-34

Chen, J., Chan, K. C., Dong., W. & Zhang., F. (2016). Internal Control and Stock Price Crash Risk: Evidence from China, *European Accounting Review,* 1-29

CIMA, (2010) The Impact of Economic Recession on Business Strategy Planning in UK Company. *Research Executive Summary Series*, *6 (9),* 1-12

Cohen, D., Dey, A., & Lys, T., (2008). Real and Accrual-Based Earnings Management in The Pre- and Post-Sarbanes Oxley Periods. *Accounting Review, 77,* 757–787.

Committee of Sponsoring Organizations of the Treadway Commission (COSO) (2004i). Enterprise risk management — Integrated framework (2004), Jersey City.

Committee of Sponsoring Organization (COSO). (2013). Internal Control–Integrated Framework, Executive Summary.

Committee of Sponsoring Organizations of the Treadway Commission. (2016). Enterprise Risk Management: Aligning Risk with Strategy and Performance. NY: COSO.

Dimitrijevic., D., Milovanovic V., & Stancic., V (2015). The Role of a Company's Internal Control System in Fraud Prevention. E-Finance". 11 (3), 34 – 44

Gal., G & Akisik., O. (2019). The Impact of Internal Control, External Assurance, and Integrated Reports on Market Value. *Corporate Social Responsibility and Environmental Management, 1-14*

Gilandeh., Z.R., Khodabakhshi., N. & Moghanloo., A.P. (2016). Studying the Effectiveness of the Internal Control System on the Corporate Value and Dividend in Listed Companies Tehran Stock Exchange. *Journal of Economics and Finance. 7*(4), 92-98

Henk., O. (2020). Internal Control Through the Lens of Institutional Work: A Systematic Literature Review. *Journal of Management Control,* 1-35

IFAC, (2012a), "Evaluating and Improving Internal Control in Organizations", http://www.ifac.org/site/default/files/publications.

Ji., X, Lu., W & Wen Qud, (2017). Voluntary Disclosure of Internal Control Weakness and Earnings Quality: Evidence from China: *The International Journal of Accounting. 1-18.*

Kalleberg., A. L. & Wachter., T. V. (2018). The U.S. Labor Market During and After the Great Recession: Continuities and Transformations. *HHS Public Access. 1-22*

Lashgari, Z., Gawradar, A. Bakhshayesh E. (2015) Internal Control Weakness and Accruals Quality in Companies Listed on Tehran Stock Exchange, Procedia - *Social and Behavioral Sciences, 207, 454 – 461*

Latham, S. F., & Braun, M. R. (2011). Economic Recessions, Strategy and Performance: A Synthesis. *Journal of Strategy and Management, 4, 96–115.*

Lawler, E. E., Levenson, A., & Boudreau, J. W. (2004). HR Metrics and Analytics: Use and Impact. *Human Resource Planning, 24, 27–35*

Lee., H. (2019). The Effect of Internal Control Environment on the Value Relevance of Earnings. *Investment Management and Financial Innovations, 16(2)*, 182-194.

Levitt, A. (2019). The SEC Threatens to Go Soft on Internal Controls. *The Wall Street Journal*, 19.

Ma, Q., Ju, L., & Zhang, Z. (2022). Innovation Input and Firm Value: Based on the Moderating Effect of Internal Control. *Sustainability.* 1-24.

Madhushani., R.R.P & Jayasiri N.K. (2021) Impact of Internal Control on Financial Performance: Evidence from Sri Lanka. *Global Review of Accounting and Finance 12 (1) 16– 27*

National Bureau of Economic Research. The NBER's Business Cycle Dating Committee. 2010. Available at: www.nber.org/cycles/recessions.html;

Skaife HA, Veenman D, Wangerin D (2013). Internal Control Over Financial Reporting and Managerial Rent Extraction: Evidence from The Profitability of Insider Trading. J Account Econ 55:91–110

Tong, Y., Wang., M & Xu., F. (2014). Internal Control, Related Party Transactions and Corporate Value of Enterprises Directly Controlled by Chinese Central Government. *Journal of Chinese Management, 1(1),* 1- 14.

Wang, F., Xu., L. Zhang., L & Shu., W. (2018). Political Connections, Internal Control and Firm Value: Evidence from China's Anti-Corruption Campaign. *Journal of Business Research, 86, 53-67*

Youngsang, Kim., Y. & Robert E. Ployhart, R. E., (2014). The Effects of Staffing and Training on Firm Productivity and Profit Growth Before, During, and After the Great Recession. *Journal of Applied Psychology, 99, (3), 361–389*

Zhu., P. & Song., J. (2021). The Role of Internal Control in Firms' Coping with the Impact of the COVID-19 Pandemic: Evidence from China, *Sustainability*, 1-22

APPENDIX

APPENDIX

Table 5 Definition of Variables

S/N	Variables	Definition	Type	Measurement	A Priori Expectation
1	Market Value	Firm Value Measure	Dependent	Market Value of Earnings	
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3	LEV	Leverage	Control Variable	Debt in Current Liabilities + Debt in Long Term / Assets Total	$\beta_2 < 0$
4	SIZE	Firm Size		Log of Sales	$\beta_3 < 0$
5	ROA	Return on Asset		Net Income / Total Asset	$\beta_4 < 0$

BIOGRAPHICAL SKETCH

Gbolahan Olaoluwa Oladayo is an ambitious young man and a high achiever who is committed to success and continuous learning. He obtained a Master's degree in Business Administration MBA from University of Texas Rio Grande Valley (UTRGV) in December 2022. He also had a bachelor's degree in Accounting from Babcock University, Nigeria in 2010.

Gbolahan has a passion to help businesses thrive through an analytical and comprehensive review of their financial and non-financial metrics, hence, he looks forward to sharing his knowledge of this topic to help other students understand how corporate organizations were able to navigate the infamous great recession of 2008.

Gbolahan has always been intrigued by the world of business and finance, and this led him to work as a corporate and investment banker, where he offered financial advisory services in form of investment, lending and international trade transactions to multinational organizations for 10 years. During this period, Gbolahan also earned relevant professional qualifications as a Chartered Accountant in his home country.

As an avid learner, Gbolahan intends to obtain a Ph.D. in Accounting in the earliest future. Asides the world of business and finance, Gbolahan is the coordinator of the Nigerians Association in UTRGV, a role that he holds in high esteem and derives joy in, during his tenure, he has assisted several Nigerians navigate life properly in the Valley.

In his leisure, Gbolahan enjoys swimming, watching and playing soccer. His permanent email address is: gbolaoladayo@gmail.com.