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Corporate Failures: A Pathological Exposition of the Global Financial Industry

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This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

Large-scale business failures marked the beginning of the twenty-first century, which culminated into the global financial crisis. The most well-known disaster, Enron, exposed evidence of corporate greed, fraud, and financial manipulation. The year 2023 also brought with it historic business collapses, with big banks collapsing one after another. This study looked into the primary reasons why companies fail and offered solutions to improve the situation. For this study, a desk research approach was employed whereby materials from previously conducted surveys, articles, journals, documents from public libraries, the internet, and other sources were reviewed. From the findings of the study, it is concluded that the major endogenous factor that leads to corporate failure revolves around bad/poor corporate governance as well as poor risk management practices. Frequent

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changes in government policies (i.e. exogenous) is a major cause of corporate failures. It is recommended that organizations should eschew multi-disciplinary approach to corporate governance, including economics, psychology, sociology, and law. There should be strong collaboration and co-operation between the Chief Executive Officer (CEO) and Chief Finance Officer (CFO) in order to strengthen corporate governance through maximised stakeholder value, transparency and accountability and efficient capital allocation.

Keywords: Corporate failure; corporate governance; economic distress; endogenous; exogenous.

1. INTRODUCTION

Corporate failures has been a subject of contemporarv discourse amonast various spheres of profession such as economists, bankers, creditors. equity shareholders, accountants. marketing and management experts, etc [1]. This is so because large-scale business failures marked the beginning of the twenty-first century, which culminated into the global financial crisis [2]. The most well-known disaster, Enron, exposed evidence of corporate greed, fraud, and financial manipulation [3]. The year 2023 also brought with it historic business collapses, with big banks collapsing one after another. Commentators from both domestic and foreign media have also shown interest in the subject. The reason is that a corporate failure can cause instability in the economy in a number of ways, including raising the rate of poverty, increasing unemployment by forcing workers into the labour market, depriving people, especially creditors of their rightful income, escalating crime, and lowering tax revenue. The impact of corporate behaviour on capital markets and society at large has been emphasised by a number of large corporation collapses and corporate scandals. These failures have brought attention to the need for regulators to reconsider regulatory frameworks and enforcement, as well for corporations to restructure their as organisational structures and prioritise business ethics [4].

According to Pricewaterhouse Coopers [5], financial instability or scandal-driven corporate failures have gravely detrimental effects on all parties involved, including workers, creditors, investors, auditors, regulators, capital markets, and partners in the company. The effects worsen when these incidents coincide with economic strain, as they did during the most recent financial crises, or when they affect the entire industry. This may have far-reaching detrimental consequences within a nation or even have ripple effects throughout other nations and sectors. Events of this nature typically have far-

reaching consequences, ranging from the collapse of entire industries to long-term harm to an organization's reputation that erodes the confidence of market participants [6].

A corporate strategy is an effective instrument for identifying and growing a company's values, Indeed [7]. Businesses establish and define longterm objectives targeted at success and progress using corporate strategy. An organisation can improve overall revenues and financial stability by having a clear understanding of what a business strategy is. All corporate entities are required to develop corporate strategies and implement the different decision-making processes that will define the business strategy it plans to pursue, as well as the kind of financial and human resources it plans to arrange according to reliability suitably ingrained in the environment's moral culture and intended to cultivate the mindset of the staff to offer their utmost in terms of output, create the main policy strands and the plan necessary to accomplish the stated goals and objectives and construct and make visible its aims and objectives, particularly through research and development initiatives [1].

1.1 The Concept of Corporate Failure

For many writers and jurisdictions, corporate failure is perceived differently. Mohammed [8] defines corporate failures as the collapse or bankruptcy of a commercial entity. These might due to financial mismanagement, occur mishandling of finances, or external factors like behaviour, in consumer economic shifts downturns, or unforeseen catastrophes like A company's natural disasters. workers, shareholders, and other stakeholders, as well as the economy as a whole, may suffer greatly from a corporate failure. In the United States, the word "bankruptcy" refers to a company's collapse, whereas in Australia, "insolvency" usually refers to a corporate entity's state of bankruptcy, with "bankruptcy" being reserved for individuals [2] Althman et al. [9] point out that business failure

may be associated with a corporation declaring bankruptcy or de-listing for a variety of reasons, such as a merger or liquidation. The appointment of a receiver or administrator to help the business escape financial difficulties may also be part of it. When creating the initial Z-score bankruptcy prediction model, Althman [10] defined failure fairly narrowly as those businesses that file for bankruptcy, ending their operations and going out of business.

Failure in the context of a business corporation, refers to any circumstance ranging from the simple incapacity to generate a profit to the total depletion of assets followed by bankruptcy and liquidation [11]. Calomiris and Gorton [12] define corporate failure as an unfavourable circumstance or flaw in an organization's set-up that makes it difficult to accomplish objectives and aspirations. According to Monica and Ali [13], failure is defined as the act of failing at something, giving up on something, operating below the official, acceptable standards, going bankrupt, or becoming insolvent. According to Argenti [14] corporate failures connotes that the company's performance is so bad that it will eventually have to call in the receiver, stop trading, or enter voluntary liquidation. According to Dun and Bradstreet (1974), a corporate failure is defined as a business ceasing operations due to a bankruptcy assignment, a loss to creditors, or a legal action involving reorganisation or rearranging. In terms of banking, Ezeudoli (1997) and Ologun (1994) define corporate failure as a bank's incapacity to fulfil its responsibilities to its clients, shareholders, and the general public as a result of operational flaws or defects that make the bank illiquid and insolvent. Corporate failure has universal components and a common process, regardless of the viewpoint. That is to say, it's a process that starts with financial humiliation, progresses through operational issues, and culminates in litigation. . Corporate failure may not necessary mean cessation of solely, operation and liquidation but. when a concern fails to meet its obligation to its customers, management, shareholders, government and indeed economy in general [11].

1.2 Objectives

The main objectives of this study is chronicle major corporate failures in the recent past, the major causes of these failures and suggest ways of stemming future occurrences. It is a pathological exposition to corporate failures.

2. Theoretical Review/ Theoretical Framework

2.1 Agency Theory

Alchian and Demsetz introduced the Agency theory, which has its roots in economic theory, in 1972, and Jensen and Meckling expanded on it in 1976. The relationship between principals such as shareholders and agents such as company executives and managers is defined as the agency theory.

According to this theory, the shareholders, who are the company's owners or principals, hire the agents to do the work. The directors or managers, who represent the shareholders, receive authority from the principals to administer the company (Matono et al. 2023). Agency theory's popularity, however, is influenced by two reasons, according to Daily, Dalton, and Canella's (2015) argument. The approach is conceptually straightforward at first and limits the actors in a firm to just two: managers and shareholders. According to the agency hypothesis, shareholders anticipate that agents will behave and make judgements that are in the principals' best interests.

Agency difficulties, such as managers working for their own advantage rather than the benefit of the firm's owners, can result from a misalignment of interests between shareholders and managers, according to agency theory (Jensin & Meckling, 1976). The agent might not always operate in the principals' best interests.

Despite these shortcomings, agency theory was presented as a means of separating ownership and control [15]. It has been proposed that agents will prioritize projects with high returns and a set wage without an incentive component instead of offering variable incentive payments. While this is an accurate assessment, it does not eliminate or even reduce corporate misconduct. In this case, the positivist approach is used, with the agents being controlled by principal-created rules with the goal of maximizing shareholder value. As a result, this theory adopts a more individualistic viewpoint [16].

In the sense that there is a conflict of interest between the agent (company executives and managers) and the principal (shareholders), this study is related to agency theory. Because corporate failure often arise from conflict of interest of managers of business vis a vis the expectation of the shareholders. According to Owolabi [17], the current result of metamorphosis of the agency theory is corporate governance.

2.2 Signalling Theory

In 1973, Michael Spence proposed the Signalling Theory. It states that retailers provide signals to customers that help them determine the calibre of the goods. The argument is based on the idea that workers used their education to communicate to employers what kind of candidate they were for a job. Nowadays, sellers use signalling in marketplaces to help buyers assess the quality of their goods; this is known as signalling. When there are differences in the amount of knowledge that buyers and sellers have about the good or service, signalling theory could be helpful. Sellers employ a variety of signalling strategies based on the kind of goods. As an illustration of the product's dependability, warranties and guarantees are employed.

The signalling theory makes three assumptions: signals can be used to increase the efficiency of information transmission; signals can convey advantageous information that cannot be obtained in any other way; and signals can be credible even when they have nothing to do with pay-offs or aligned interests. Signalling theory has been used in a number of disciplines, including management, linguistics, and where people or organisations economics. exchange information to affect other people's views or behaviour. According to the notion, it is the sender's responsibility to decide how to communicate information, and the receiver's responsibility to understand the signal.

In a variety of research scenarios, management researchers have utilised signalling theory to elucidate the impact of information asymmetry. Such corporate governance research demonstrates how CEOs use the observable statements their financial quality of to potential communicate to investors the unobservable quality of their companies [18]. Signalling theory has been utilised by diversity of scholars to describe how companies utilise diverse boards to convey to a variety of organisational stakeholders that they are committed to social ideals [19]. Scholars have studied the sianallina value of board characteristics [20], top management team (TMT) characteristics (Lester et al, 2006), venture capitalist and angel investor presence [21] and founder involvement [22] Signalling

theory is widely used in the literature on entrepreneurship. Human resource management is another field where signalling theory is crucial. Several studies have looked at signalling that takes place throughout the hiring process [23].

Even while signalling theory has become more popular in management research, there isn't yet a succinct overview of it in the management literature. Because of this, when discussing the fundamental ideas of the theory, management researchers nearly always cite either Spence's (1973) analysis of signalling in labour markets or Ross's [24] investigation of managerial incentives as signals. The fundamental ideas of signalling theory have, however, become less distinct over time [25] leading some to contend that the theory is not well-defined [26].

According to Ross'[24] managers use accounting figures to communicate their objectives to investors who use decision-making accounting Signalling theory connotes that statistics. managers who anticipate significant potential growth would signal those expectations through released financial statements. Even managers of companies with poor financials would signal good news in order to maintain a high position among stakeholders. The signalling theory explains why the corporation wants to provide third parties access to financial statement data [27]. According to Yuliastari at al [28], signalling theory refers to a strategy used by management of a firm to let investors know how they view the company's prospects.

Managers of businesses with negative news may want to publish such news in order to protect reputation their and stay ahead of the competition for risk capital. The rational implication of the signalling principle is that all management is encouraged to announce potential earnings forecasts, and if customers trust the signal, share prices will rise and the business will benefit. The signalling principle is also one of the key theories employed by companies to both defend and discourage customers and the general public from preparing unqualified financial statements [29].

Signalling theory and this research are related in that it offers a signal of the manager's confidence in the company's future prospects, which can be evaluated by the degree to which the manager applies good corporate governance principles in the preparation of financial statements so that the organization can continue to operate into a foreseeable future.

2.3 Stakeholders Theory

In 1984, Freeman created the Stakeholder Theory, which covers morality and values in corporate management. The interconnected relationships between a company's customers. suppliers, employees, investors, communities, and other stakeholders are emphasized by the stakeholder theory, a perspective on capitalism. The idea is that a business should produce value for all parties involved, not just shareholders. It also addresses commercial ethics. Freeman's acclaimed book critically Strategic Management: A Stakeholder Approach analyzes and models the stakeholder groups in an organization and discusses approaches for management to take into account those groups' interests. According to stakeholder theory, everyone who is in any way impacted by the organization or how it operates is a stakeholder, including staff members, clients, vendors, local communities, environmental organizations, governmental organizations, and more. Quintana, Urquia and Jalon [30] asserts that businesses should work to treat all of these stakeholders fairly in order to succeed in the long run.

As a basis for future study and growth in the research and published works of many experts, the theory has emerged as a key factor in the study of business ethics. Since the 1980s, the theory's popularity has grown significantly, with scholars all over the world questioning the longterm viability of focusing on shareholders' wealth as the most fundamental goal of business.

Supporters of stakeholder theory contend that it may be divided into a number of stakeholder theories, each of which has a normative core and is connected to how businesses should be run and how managers should behave, according to Freeman [31] In order to show how enterprises engage with their stakeholder groups, descriptive technique is used. Then the use of the instrumental approach to assess the association between stakeholder group orientations and performance. Furthermore. the theory recommends attitudes, structures, and practices through its normative managerial and approaches [32].

Most critics, including Teppo [33], believe that stakeholder theory is void and provides an unrealistic view of how organizations work. The main argument is that stakeholder theory does not pass the test of scientific rigour and thus cannot be considered a science. What is the function of stakeholder theory if it does not belong to the field of science? Is it a purely normative discourse motivated by ethical concerns? Is it a framework that assists managers in dealing with an increasingly complex environment?

Stakeholder theory is important to this study because it proposes that businesses should consider stakeholders' interests in order to maximize company wealth and the overall advantages of all stakeholders, regardless of the criticisms made at it [32,31]. Researchers in governance, marketing, and strategy support a focus on important stakeholder groups. The consumer has been one of the marketing concept's most significant stakeholders because they were one of the first ones to be discovered [31].

2.4 Sustainability Theory

The International Think Thank Organisation-Club of Rome published a paper in 1972 titled Limits to Growth, which popularised the concept of sustainability. In an effort to establish sustainability as a standard for global action, the International Union for Conservation of Nature, in partnership with the World Wildlife Foundation and the U.N. Environment Programme, produced the World Conservation Strategy in 1980. The 1987 World Commission on Environment and Development report, Our Common Future, often referred to as the Brundtland Report after its chair, former Norwegian prime minister Gro Harlem Brundtland, brought the phrase sustainable development to the attention of the general public on a global scale. Sustainable development is defined as development that meets present needs without compromising the ability of future generations to meet their own needs, as it was famously defined [34].

One of the assumptions of sustainability theory is eco-justice, which implies that equality should exist both within and between generations. Intergenerational equality is long-term oriented and acknowledges that resource consumption shouldn't have an impact on the standard of living of coming generations. Meeting the needs of all present occupants is a key component of intragenerational equity. Accordingly, policies must take into account poverty and ensure that all residents have access to essential supplies of food, water, and shelter. Eco-efficiency is another, emphasising the economical use of resources to reduce their environmental impact. Though the notion of sustainability originally took account global development at the into governmental level, it is meant to apply to organisations and businesses as well, since corporations control most of the earth's resources. This indicates that until organisations take into account how their operations influence the environment and society, no progress towards sustainability will be made. An organisation must turn a profit in order to stay in business, but if it wants to do so sustainably, it must think about how to do so without endangering society or the environment.

Environmental sustainability refers to the measurement of change in the resource base that supports existing populations. The renewal capacities of natural resources are determined by growth and development cycles, which can be altered through technology innovations. Economic sustainability is the ability of an organization to generate revenue to maintain itself in a market economy and produce a surplus to invest in other areas such as security, research and development, infrastructure, and social safety nets. Social sustainability relates to the soundness, richness and flexibility of organizations and institutions that govern access to and transmission of resources. Supporting institutional sustainability does not mean sustaining specific institutions or organizations, but helping people to build and strengthen frameworks legislative, regulatory and financial that allow sound institutions to flourish.

dismissed sustainability Critics have as conceptually meaningless, or at least too susceptible to competing ideas to be politically useful. Critics further opine that that sustainability is an inclusive and ambiguous concept precisely because it brings society's ecological dependency into moral relation with its economic and political systems. However, supporters of sustainability assert that it produces a significant discursive arena for a new kind of moral and political debate. The very fact that debate about what should be sustained occurs as a practical political question indicates new dimensions of human responsibility and reflects new conditions of jeopardy.

Sustainability issues have an increasing influence on the business environment. The crux of sustainability is the ability of corporation to remain in business for a foreseeable future and continue to be relevant in the environment. Apart from making profit, there is a need to take into account the social and environmental performance and to consider how "greenhouse gas emission" is generated by entities impacts on its information systems. While shareholders are traditionally seen as the most important stakeholders with regard financial to performance, sustainability accounting tends to consider broader range of stakeholders' interest, and that underpins the relevance of this theory to the study.

3. METHODOLOGY

Desk research approach is used for this study. Desk research is a kind of research where the material is taken from previously conducted surveys, papers, journals and documents from public libraries, websites, and other sources. A few organisations also keep data that's useful for studies. It is an approach to study that makes use of pre-existing data. To make the inquiry more effective overall, these are gathered and summarised. The desk review method is used since the majority of the data is easily accessible. The necessary data are gathered and used from a variety of sources. Since the necessary data is easily obtainable and inexpensive when taken from reliable sources, the procedure is less costly and time-consuming. Organisations and businesses can determine the efficacy of primary research by utilising the data gathered from secondary or desktop research. Since data is readily available, desk research can be completed more quickly. Depending on the researcher's goal and the volume of data needed, it can be accomplished in a few weeks.

4. LITERATURE / EMPIRICAL REVIEW

Some specific cases of corporate failures are discussed in this section, highlighting why they failed.

4.1 The Silicon Valley Bank- (SVB)

Founded in 1983, SVB ranked 16th among all banks in the United States prior to its demise. They were experts at banking and funding venture capital-backed start-ups, mostly in the technology sector. According to Hetler [35] numerous tech leaders conducted business there, along with venture capital firms. The Federal Deposit Insurance Corporation (FDIC) reports that as of the end of 2022, SVB, a Silicon Valley-based financial institution, has \$209 billion in assets. Roughly half of all venture-backed technology and healthcare start-ups in the United States were financed by SVB. For the tech industry, SVB was the go-to bank because they helped start-ups that other banks wouldn't take on because of their greater risk. Because customers spent a lot of money on devices and digital services during the epidemic in 2020, it was a lucrative time for internet corporations. SVB's services were required to keep tech businesses' funds for business needs like payroll during their financial infusion. Much of these deposits were invested by the bank, as banks usually do [35].

A significant portion of Silicon Valley Bank's bank deposits were placed in agency mortgagebacked securities and long-term U.S. treasuries. But when interest rates rise, the value of bonds and Treasury securities declines. The Federal Reserve began raising interest rates in 2022 in an effort to fight inflation, which caused SVB's bond holdings to decline. If SVB had hung onto those bonds until their maturity date, they would have been able to recoup its cash. In the past, Silicon Valley Bank made short-term loans. To increase yield, they switched to long-term assets like treasuries in 2021, but they did not use shortterm investments to hedge their liabilities in order to facilitate speedy liquidations. They could not sell their assets without suffering a significant loss, thus they were bankrupt for several months. Many bank customers withdrew money when economic issues affected the tech sector, and venture financing started to dry up. The deposits were locked up in long-term investments, thus SVB lacked the cash on hand to sell them. They began selling their bonds at a steep discount, which upset investors and customers. The bank failed 48 hours after revealing the asset sale [35].

Barr [36] outlined the four main factors that contributed to SVB's demise in a report published by the Federal Reserve System Board of Governors. The board of directors and management of Silicon Valley Bank failed to manage risks; supervisors failed to recognise the full extent of vulnerabilities as the bank grew in size and complexity; supervisors failed to take appropriate action to ensure that vulnerabilities were promptly fixed by Silicon Valley Bank; and, lastly, the Board's tailoring approach in response to the Economic Growth, Regulatory Relief, and Consumer Protection Act (EGRRCPA) and a change in the supervisory policy's stance hindered effective supervision by reducing standards, adding complexity, and encouraging a less assertive supervisory approach.

4.2 The Signature Bank

Buchwald [37] assert that two days after the collapse of the Silicon Valley Bank (SVB), the biggest retail banking failure since the 2008 global financial crisis, regulators closed New York-based lender Signature Bank. The Federal Deposit Insurance Corporation (FDIC) has formed a bridge bank to handle the accounts of Signature Bank customers. According to the FDIC (2023), Signature Bank had 40 branches across the US and had total assets worth \$110.4 billion and deposits totalling \$82.6 billion as of December 31, 2022. The tech-friendly bank had significant exposure to cryptocurrency and is said to have been impacted by the sudden collapse of SVB.

Signature Bank started operations back in 2001 and grew to become one of the few banks to hold funds from cryptocurrency investors and startups. After the Silicon Valley Bank shut down, Signature Bank's business customers started enquiring if their deposits were safe as they had more than \$250,000 in their accounts while the FDIC only assures funds up to \$250,000, reported The New York Times. Buchwald [37] opine further that soon, the Signature Bank witnessed a surge in withdrawals as depositors started pulling their money from the lender, the report added, citing a person with knowledge of the matter. The bank also witnessed its stocks tanking along with that of some of its peers. As per regulatory filings of Signature Bank, more than \$79 billion of its total deposits of nearly \$88 billion were uninsured at the end of last year. The bank started accepting deposits of crypto assets in 2018 and suffered from the collapse of Sam Bankman-Fried's crypto exchange FTX in November 2022.

Crypto companies helped Signature Bank increase its deposits as the lender's 27% deposits in early 2022 belonged to digital assets clients. After the FTX crisis, Signature Bank decided to sever ties with some crypto clients but failed to retain investors, according to NDTV Newsdesk [38]. The shares of Signature Bank slumped 23% on Friday. Anxious customers soon started moving their funds from the lender to other banks amid the panic caused by the SVB collapse. Buchwald [37] opine that the collapse of Signature Bank was due to poor management, as contained in a report from the Federal Deposit Insurance Corporation (FDIC). Bank management did not always heed FDIC examiner concerns, and was not always

responsive or timely in addressing FDIC supervisory recommendations. In particular, bank management did not fully understand the risks associated with accepting crypto deposits, which comprised more than 20% of its total deposits. Signature Bank had \$110 billion in assets at the end of 2022, making it the 29th-largest US bank. The FDIC said the bank was over-reliant on uninsured deposits, which accounted for 90% of overall deposits at the end of 2022, according to FDIC quarterly banking data.

4.3 The First Republic Bank

According to Associated Press [39] First Republic grew rapidly through deposits from wealthy individuals and companies. It used those deposits to make large loans, including jumbo mortgages, when interest rates were at historically low levels in hopes of then convincing customers to expand into more profitable products like wealth management. Many of the bank's accounts had deposits well over the federally-insured \$250,000. Once Silicon Valley Bank went under, clients pulled their money, fearful their deposits were in danger. Depositors withdrew more than \$100 billion in few days in mid-March 2023.

The Federal Reserve's fast increase in interest rates caused the huge loans listed on First Republic's books to lose value. Therefore, the bank would incur a loss if it attempted to sell the loans in order to raise capital. Silicon Valley Bank had failed due to similar causes. First Republic intended to liquidate under-performing assets. such as the low-interest mortgages it offered to affluent customers. Additionally, it declared that it will lay off as much as 25% of its personnel, which at the end of 2022 numbered roughly 7,200 people. However, many felt that those initiatives came too little, too late. Narea [40] assert that the collapse of First Republic Bank was due to poor management and inadequate risk management practices.

4.4 Credit Suisse

In 2023, the Credit Suisse crisis report was released by the Swiss Financial Market Supervisory Authority, (also known as FINMA). An analysis of Credit Suisse's strategy, company performance, management choices, risk management, and crisis preparedness was done in the report between 2008 and 2023. It also looked at FINMA's efforts with the bank in terms of supervision. Credit Suisse lost the trust of its investors, customers, and the markets as a result of frequent scandals, poor execution of its strategic emphasis areas, and managerial mistakes. Midway through March 2023, there was a risk of immediate insolvency due to the huge volume of client fund withdrawals that followed. Prompt action was taken by the Confederation, the Swiss National Bank (SNB), and FINMA to ensure Credit Suisse's solvency and facilitate Union Bank of Switzerland's (UBS) acquisition of the company. Thus, the authorities' objectives of safeguarding the bank's creditors and guaranteeing financial stability were fulfilled.

In the context of its supervisory efforts, FINMA took extensive and intrusive steps well before the crisis to address the shortcomings, namely in the corporate governance, risk management, and risk culture of the bank. Additionally, starting in the summer of 2022. FINMA requested that the a number of emergency bank execute preparedness steps. On the one hand, it demands a more robust legal framework, notably tools like the Senior Managers Regime, the authority to levy fines, and stricter corporate governance regulations. However, FINMA also modified its supervisory strategy in some instances and intensified its assessment of the readiness of stabilisation measures for implementation.

4.5 Diamond Bank, Polaris Bank, Keystone Bank and Union Bank

Nelson [41] reported that a persistent breach of governance corporate rules particularly manifested in avoidable exposure to oil and gas sector, leading to huge non performing loans (NPL), board disharmony resulting in wrong decisions, brought Diamond Bank to its knees. Besides, a recurring insistence to take decisions on some issues of importance rooted in ownership mentality irrespective of assessed consequences, aggravated board politics and hastened the collapse of the bank. The sudden fall of the retail banking giant with N1.55 trillion in total assets at September 2018, and loss in share price from N7 to N1.37 in five years, alongside offshore operations surely attest to failed decisions and consequences of poor corporate governance.

As reported by Nwachukwu [42] the Central Bank of Nigeria (CBN) officially dissolved the Board and Management of three prominent banks-Union Bank, Keystone Bank, and Polaris Bank. The press release dated January 10, 2024, indicates that this action was a direct result of the banks' non-compliance with critical regulatory provisions. The implicated provisions, Section 12(c), (f), (g), (h) of the Banks and Other Financial Institutions Act, 2020, cover a range of regulatory and governance expectations. The CBN cited several concerns leading to this decision, including regulatory non-compliance, failures in corporate governance, disregarding the conditions under which their licenses were granted and involvement in activities threatening financial stability.

4.6 Causes of Corporate Failures

Numerous variables, both exogenous and endogenous, have been linked to corporate failure. Exogenous elements are those that are not directly controlled by the failing firm and endogenous are those peculiar to the failing firm. The exogenous factors are as follows.

4.6.1 Exogenous factors

Economic Distress: According to CFI [43] even the most astute board cannot influence every aspect of a company's success; one factor that is outside of their control is the state of the economy. Economic volatility in the environment has the power to completely obliterate sales and have a negative impact on an organization's operations and performance, frequently leading to failure or even collapse. A 70% decline in oil prices and a downturn in China's economy at the beginning of 2016 caused a 17% increase in the number of UK enterprises experiencing serious financial difficulties. More than 268,000 UK enterprises entered financial difficulties as a result of a perfect storm of unfavourable economic conditions, according to Begbies Traynor's Red Flag Alert [44]. Many of the hardest-hit industries were also ones that had the biggest impact on the country's overall economic growth.

Otubelu et al [45] enumerated some exogenous factors that cause corporate failures. They are discussed below.

Fatality: This is what is commonly referred to as an "act of God," a natural occurrence that could directly contribute to failure. Disasters such as earthquakes, tidal waves, flooding, crises, and other unrest can destroy a business venture and all of its realistic chances of success.

Change in Demand for A Company's Product: A company may collapse if public demand for a product changes as a result of improved products or changes in technology.

Stern Competition: Nothing poses a greater threat, shock, or dread to a firm than a competitor possessing a superior product. Due to competition, a large number of businesses have closed after losing market share to competitors.

Frequent Policy Changes by Government: Governmental actions are comparable to natural occurrences. Governments have the power to pass laws that define or forbid specific economic activities or even impose strict rules, all of which might be fatal to a business. Additional instances of legislative actions that might result in business failures include the imposition of onerous taxes, minimum wage, the loss of tariff protection, and higher tariffs on necessities. Furthermore, laws in neighbouring nations may cause business failures if they negatively impact their neighbours.

Socio-economic and political Unrest: A company's success is somewhat determined by the environment in which it operates. The success or failure of a commercial venture might be impacted by an environment that is marked by unmanageable social unrest, an unstable political climate, or frequent changes in macroeconomic policy.

4.6.2 Endogenous factors

As a result of various recent corporate failures, CFO [46] identified key endogenous factors responsible.

Ineffective Boards: The most obvious cause of company failure is an ineffective board, and there are several indicators that a board has outgrown its current level of knowledge. Failures have frequently been caused by obvious talent gaps, a lack of knowledge in key business domains, and non-executive directors' (NEDs') incapacity to hold senior executives accountable [47-49]. As pointed out in the case of SVB, the Board of Directors and management failed to manage their risk. The Board did not provide effective supervision to the management who in turn, did not fully appreciate the extent of vulnerability of SVB.

Complexity in the organisational system: While complicated procedures can be useful in certain situations, excessive complexity is frequently the primary cause of business failure. Even in the most smoothly operating complicated system, it can be guite challenging to fix problems once they start to show up. This frequently causes a chain reaction that affects every part of the project or business. Airbus and its disastrous A380 project serve as an illustration of this. Everything about the Airbus complex, A380 project was from the sophisticated design to the IT, procurement procedure. cross-border supply chain production, assembly, and political balancing between CEOs in France and Germany. The aircraft was intended to be a remarkable feat of human engineering. The completion was postponed by more than two years, resulting in an increase in budget to over \$16 billion.

Poor Communication: The channel of communication in every organization should be fairly obvious. However, poor communication has consistently been the main cause of company demise. Ultimately, an organisation cannot be led by even the most proficient board if it is not kept informed. When vulnerabilities were found in the SVB instance, insufficient action was taken because of poor communication.

Risk Blindness: The incapacity of boards to handle risk in the same manner as they handle opportunity and reward is a major factor in why they frequently fail. For businesses, this risk blindness contributes to a host of issues. When issues are disregarded due to risk blindness, they have more time to develop and fester. The sneaky thing about blindness is that it gives the impression that everything will get better (if I ignore it, it will go away), but in reality, it makes things worse. When a problem is tiny, it is usually much easier to solve. The Signature Bank started accepting cryptocurrency deposits without a full analysis of the risks involved, a clear case of risk blindness.

Bad Corporate Culture: Another significant factor contributing to corporate failure is a bad company culture. Companies that prioritise maximising profits over all other considerations frequently cultivate cultures of double standards, which in turn encourages questionable risk-taking. According to Nelson [41] Diamond Bank collapsed due to a pattern of repeated violations of corporate governance regulations, which included avoidable exposure to the oil and gas industry, massive non-performing loans (NPL), and board discord that led to poor judgements.

Technological Disruption: While technological innovation has greatly advanced business and

made supply and demand chains simpler, it has also presented enormous problems for market incumbents. Business executives who do not exploit emerging technology to stay competitive frequently watch as their entire organization implodes due to complacency.

Information Glass Ceiling: A common cause of corporate failure is the existence of an information glass ceiling, when risk management or internal audit teams neglect to disclose risks originating from higher up in the organisational structure. Executives frequently disregard warning signs produced by audit procedures when there is an information glass ceiling, or information is extensively filtered by the time it reaches the board level. According to Narea [40] insufficient risk management procedures and sub-par management were the main causes of First Republic Bank's demise.

Inadequate Working Capital: A company with inadequate capital will most likely fail. Boards frequently find it difficult to get financing and keep working capital levels high enough to support operations during times of financial difficulty. Under-capitalized businesses are unable to purchase necessary fixed assets or allocate profits to the acquisition of assets, which ultimately results in underutilization of capacity and failure. The fact that First Republic Bank was unable to obtain more capital was one of the factors contributing to its demise.

Excessive Debts: This could be caused by a mismatch in the credit policy, business growth without sufficient working capital, the purchase of fixed assets using short-term notes, or even the result of insufficient banking facilities.

Uninformed Dividend Payout: Dividend policy that does not strike a balance between payout and retention for future growth often eventually lead to corporate failure. Retained earnings are the cheapest fund for an organization.

Fraud and Embezzlement: Otubelu et al. [45] assert that a significant embezzlement or fraud may result in a company failing. When senior managers engage in this kind of fraud or embezzlement, it escalates in severity. Many factors can lead to fraud. An instance of this may be the firm failing due to the directors or their allies selling properties to it at an excessive price.

Earnings Management: management often engaged in earnings management activities to post higher profit figure than what it should be, for reasons of bonuses, higher salaries and good corporate image.If unchecked, earnings management will affect operations and eventually lead to corporate failure.

4.7 Discussion of Empirical Literature Review

Essien et al.'s [50-52] investigation focused on the aviation sector in Nigeria and the connection between creative accounting methods and company failure. A corporate failure was an endogenous variable, and the proxies for creative accounting were income smoothing, policy choice. accounting and artificial transactions. The ongoing insolvency of air transport companies, some of whom were virtually bankrupt on arrival, provided as the inspiration for this study. The results showed that creative accounting has a positive effect on corporate failure. Based on the research findings, this study concluded that creative accounting techniques have significant effect on corporate failure. Similarly, Tokoni et al. [53-55] examined Creative Accounting and Corporate Failure in Nigeria, a Managers Perception in Listed Manufacturing Companies. Forty three (43) Listed Manufacturing Companies on the Nigerian Exchange Group make up the study's population. The study had 39 participants in its sample. The three main conclusions were that artificial transactions, income smoothening, and accounting policy choice all had a significant impact on corporate failure. Hence, the study recommended that the practice of Creative Accounting should be considered a punishable offence by the law and therefore accounting bodies and other regulatory authorities need to adopt strict measure to stop the practice and punish offenders.

According to findings from a recent assessment, corporate governance failures were a major factor in the demise of more than 70% of Nigeria's defunct enterprises during the previous 20 years, according to Otubelu et al. [45]. It was discovered that good corporate governance is more important for a company's survival than market share, turnover volume, and asset size. Perhaps as a result of the recent wave of highprofile company failures, there is a revived interest in corporate governance standards globally, and demand for these practices is at an all-time high. No matter how old an institution is,

corporate governance errors can nonetheless depress a highly profitable corporation, according to disclosures from Nigeria's banking, insurance, and media sectors. For example, concerns over corporate governance have lately led to the failure of several banks, including Diamond Bank in Nigeria and Signature Bank in the United States. Corporate governance standards were allegedly violated by the executive management and board of these organisations, who were accused of improperly handling investor funds, disregarding due process, and making biased choices, Otubelu et al. [45].

Nairametrics [56-58] reported a classical instance of how corporate failure might result from government regulations (an exogenous element). The Expatriate Employment Levy (EEL) of \$10,000 and \$15,000 for staff and directors, respectively, was recently imposed by federal government. After that. the the Manufacturers Association of Nigeria (MAN) disclosed that 335 manufacturing firms experienced financial hardship and 767 closed their doors in 2023. It called the levy a punitive measure for investors. MAN further asserts that this will result in an unjustified and unparalleled increase in the cost of conducting business in Nigeria, particularly for manufacturers. The study goes on to say that the sector's capacity utilisation has decreased to 56%, that the interest rate is practically above 30%, that there is foreign exchange available to import no materials or manufacturing machine raw inventory, and that the real growth rate has fallen to 2.4%. The Expatriate Employment Levy was widely criticised and has now been put on hold.

The study conducted by Kofarbai and Yauri [59,60] examined the relationship between Corporate Governance, Risk Management, and Bank Failures in Nigeria. The research design used was ex-post, and the study made use of a panel data report that included the annual financial statements of the four sampled banks from 2014 to 2019. The study concluded that the repeated failures of Nigerian banks can be attributed to a failure to adhere to the strict corporate governance codes imposed by the regulators as well as blatant abuse of risk management principles. The study made several recommendations, including encouraging board diversity by nominating female directors to achieve gender parity and imposing severe penalties on the board and management of any bank that failed.

In a 2023 study, The Institute of Chartered Accountants of England and Wales (ICAEW) identified three factors; behaviour, best practices, and outside insights, that should be taken into account in order to prevent corporate failures. Behaviour encompasses a variety of factors, including stakeholder interactions, corporate culture, risk appetite, ethical decision-making, and behavioural biases. These domains are recognised to impact organisational results and have a role in business mav failure. Organisations should begin by inquiring about the mapping and analysis of these elements that have been completed as well as the resolution of any issues that have arisen.

On best practices, studies have indicated that nations possessing robust shareholder rights typically exhibit reduced incidences of corporate failure. Comparative studies of various corporate governance models and practices across the globe are made possible by international and cross-cultural study on corporate governance. Organisations can benefit from this by improving their understanding of good governance and by identifying methods that are both culturally particular and broadly applicable. Prior to incorporating these insights into the regulatory system, considerable time will need to pass. Within their own networks, organisations may want to inquire about the best governance procedures. What are the reasons behind the perception that a specific method is exclusive to a cultural or national setting, and are there any applicable lessons?

When it comes to Outside Insight, the main concern ought to be what could be utilised in an alternative setting. Innovative insights into the causes, forecast, and prevention of corporate failure are being provided by integrating ideas from a variety of domains, including economics, psychology, sociology, and law. Α multidisciplinary approach is encouraging innovation and ongoing improvement in addressing this crucial issue by providing academics with a more thorough and robust understanding of the various elements contributing to corporate failures. This would teach us a lot about, perhaps, how to draw inspiration from medical studies or from businesses like the airline sector that have strong root cause analysis procedures.

At the Lagos Business School Leadership Summit that took place on March 20, 2024, curbing corporate failures through maximizing

CEO-CFO Synergy was the extensively discussed. The theme of the conference was The CFO as a Strategic Architect - Maximizing the CEO-CFO Synergy. The main take-away at the conference were that the CFO role has moved from the traditional transactional to a strategic partner, an influencer and a tireless change agent. That strong collaboration and co-operation between the CEO and CFO can stem corporate failures through maximised stakeholder value, transparency and accountability and efficient capital allocation. Such collaboration will ensure effective risk management through frank discussions in order to navigate through turbulent waters.

5. CONCLUSION AND RECOMMENDA-TION

This study examined the challenges of corporate failures from a global perspective. From the findings of the study, it is concluded that the major endogenous factor that leads to corporate failure revolves around bad/poor corporate governance as well as poor risk management practices. Frequent changes in government policies (i.e. exogenous) is a major cause of corporate failures in Nigeria.

It is recommended that organizations should eschew multi-disciplinary approach to corporate governance, including economics, psychology, sociology, and law. Comparative studies of various corporate governance models and practices across the globe should be undertaken. Organisations can benefit from this by improving their understanding of good governance and by identifying methods that are both culturally particular and broadly applicable. There should be strong collaboration and co-operation between the CEO and CFO in order to strengthen corporate governance through maximised stakeholder value, transparency and accountability and efficient capital allocation.

DISCLAIMER (ARTIFICIAL INTELLIGENCE)

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc) and text-to-image generators have been used during writing or editing of manuscripts.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

- 1. Mbat DO, Eyo EI. Corporate failure: Causes and remedies. Business and Management Research. 2013;2(4):19-24.
- Rankin M, Stanton P, McGowan S, Ferlauto K, Tilling M. Contemporary issues in accounting. (3rd Edition, John Willey & Sons Australia, Ltd; 2022.
- Nwaobia AN. Advanced Auditing and Assurance - Lecture Notes (Unpublished); 2022.
- Cole R, Johan S, Schweizer D. Corporate failures: Declines, collapses, and scandals. Journal of Corporate Finance. 2021;67:101872.
- Pricewaterhouse Coopers; 2023. Available:https://www.pwc.com/gh/en/asse ts/pdf/why-businesses-fail.pdf
- Dupont Q, Karpoff JM. The trust triangle: Laws, reputation, and culture in empirical finance research. Journal of Business Ethics. 2020;163(2):217-238.
- 7. Indeed strategy; 2022. Available:https://www.indeed.com/careeradvice/career-development/what-iscorporate-
- Mohammed AB; 2022. Available:https://www.linkedin.com/pulse/w hy-corporate-failures-role- accountantsabdul-aziz-bampouri-mohammed
- Altman EI, Haldeman RG, Narayanan P. ZETATM analysis A new model to identify bankruptcy risk of corporations. Journal of Banking & Finance. 1977;1(1):29-54.
- Altman EI. Financial ratios, discriminant analysis and the prediction of corporate bankruptcy. The Journal of Finance. 1968;23(4):589-609.
- Bello A. Corporate failure: accounting and auditing resolution; 2015. Available at SSRN 1947369.
- 12. Calomiris CW, Gorton G. The origins of banking panics: models, facts, and bank regulation. In Financial markets and financial crises (University of Chicago Press. 1991;109-174.
- Monica S, Ali MB. An overview of corporate failure and auditing change in nigerian economy. Journal of Business Development and Management Research; 2023.
- Argenti J. Corporate planning and corporate collapse. Long range planning. 1976;9(6):12-17.
- 15. Bhimani A. The role of a crisis in reshaping the role of accounting. Journal of

Accounting and Public Policy. 2008;27 (6):444-454.

- Gruber CW, Clark MG, Klempe SH, Valsiner J. (Eds.). Constraints of agency: Explorations of theory in everyday life. Springer. 2014;12.
- 17. Owolabi SA. Quality accounting service a panacea to effective corporate governance; 2019. Available at SSRN 3382381.
- Zhang Y, Wiersema MF. Stock market reaction to CEO certification: The signaling role of CEO background. Strategic Management Journal. 2009;30: 693-710.
- 19. Miller T, Triana MDC. Demographic diversity in the boardroom: Mediators of the board diversity— firm performance relationship. Journal of Management Studies. 2009;46: 755-786.
- 20. Certo ST. Influencing initial public offering investors with prestige: Signaling with board structures. Academy of Management Review. 2003;28:432-446.
- 21. Busenitz LW, Fiet JO, Moesel DD. Signaling in venture capitalist–new venture team funding decisions: Does it indicate long-term venture outcomes? Entrepreneurship Theory and Practice. 2005;29:1-12.
- 22. Elitzur R, Gavious A. Contracting, signaling, and moral hazard: A model of entrepreneurs, "angels," and venture capitalists. Journal of Business Venturing. 2003;18:709-725.
- 23. Suazo MM, Martinez PG, Sandoval R. Creating psychological and legal contracts through human resource practices: A signalling theory perspective. Human Resource Management Review. 2009;19:154-16
- 24. Ross SA. The determination of financial structure: The incentive signaling structure. Bell Journal of Economics. 1977;8:23-40.
- Highhouse S, Thornbury EE, Little IS. Social-identity functions of attraction to organizations. Organizational Behavior and Human Decision Processes. 2007; 103:134-146.
- 26. Ehrhart KH, Ziegert JC. Why are individuals attracted to organizations? Journal of Management, 2005;31:901-919
- 27. Reny DR, Denies P. Pengaruh good corporate governance dan pengungkapan corporate social responsibility terhadap nilai perusahaan', Jurnal Nominal. 2017;1(1):84-103.

- Yuliastari M, Najmudin N, Dewi MK. The Influence of Financial Ratios and Macroeconomic Indicators in Predicting Financial Distress (Empirical study in the consumer goods sector companies). Sustainable Competitive Advantage (SCA). 2022;11(1).
- 29. Ebirien NGI, Namapele A, Chukwu GJ. Market valuation of corporate governance disclosures: Evidence From the Nigerian Banking Industry; 2020.
- Quintana AG, Urguía-Grande E, Jalón 30. MLD. Strategic conceptual theories and sustainable cooperation among stakeholders in e-government, eparticipation, and social media. Central European Journal of Public Policy. 2022;16(2):46-63.
- 31. Freeman RE. Stakeholder theory. Wiley encyclopedia of management. 2015;1-6.
- Donaldson T, Preston LE. The stakeholder theory of the corporation: Concepts, evidence, and implications. Academy of management Review. 1995;20(1), 65-91.
- Teppo A. The making of a good white: A historical ethnography of the rehabilitation of poor whites in a suburb of Cape Town (Doctoral dissertation, Helsinginyliopisto); 2004.
- 34. WCED SWS. World commission on environment and development. Our common future. 1987;17(1):1-91.
- 35. Hetler A; 2024. Available:https://www.techtarget.com/whati s/feature/Silicon-Valley-Bankcollapseexplained What-you-need-to-know
- 36. Barr MS; 2023. Available: https://www.federalreserve.gov/publication s/files/svb-review-20230428.pdf
- Buchwald E; 2023. Available:https://edition.cnn.com/2023/04/2 8/business/signature-bank-fdicreport/index.html
- NDTV Newsdesk; 2023. Available:https://www.ndtv.com/worldnews/signature-bank-shut-days-after-svbfailure-what-led-to-its-failure-3856743
- 39. Associated Press; 2023. Available:https://apnews.com/article/firstrepublic-seized-deposits-bankcd830cfa7390e315889a259981f2e79b
- 40. Narea N; 2023. Available:https://www.vox.com/businessan dfinance/2023/5/1/23706910/firstrepublicb ankfailure crisisfdic
- 41. Nelson C; 2023.

Available:https://guardian.ng/businessservi ces/howintrigueslapseslossescauseddiamo ndbanks fall/

- 42. Nwachukwu P; 2024. Available:https://www.channelstv.com/202 4/01/10/cbn sacks boards ofunionkeystoneand polaris banks/
- 43. CFI; 2020. Available:https://corporatefinanceinstitute.c om/resources/commerciallending/financial-distress/
- 44. Bedbies Traynor; 2024. Available:https://www.redflagalert.com/artic les/insolvency/red-flag-alert-begbiestraynor-q1 report
- Otubelu EN, Onodugo IC, Ezeamama M, 45. F. Akubuilo Corporate failures in dynamic Nigeria's environment: insights. Evidence and International Journal of Multidisciplinary Research and Development. 2024;8(7):04-09
- 46. CFO; 2023. Available:https://the-cfo.io/2023/01/19/themost-common-reasons-for-corporategovernance-failure-a-deep-dive/
- 47. Altman EI. Why businesses fail. Journal of Business Strategy. 1983;3(4):15-21.
- 48. Bawuah I. Audit committee effectiveness, audit quality and earnings management: evidence from Ghana. Cogent Business & Management. 2024;11(1):2315318.
- 49. Davidson III WN, Worrel DL. The impact of announcements of corporate illegalities on shareholder returns. Academy of Management Journal. 1988;31(1):195-200.
- 50. Essien EN, Edem EN, Ibanichuka EA, Ironkwe U, Egbe S. Creative accounting methods and corporate failure in Nigeria. Global Journal of Social Sciences. 2021;20(1):99-108.
- 51. Dietz G, Gillespie N. Recovery of trust: Case studies of organisational failures and trust repair London: Institute of Business Ethics. 2012;5.
- Hammond P, Opoku MO, Kwakwa PA, Amissah E. Predictive models of going concerns and business failure. Cogent Business & Management. 2023;10(2):2226481.
- 53. Tokoni MA, Paul OA. Creative accounting and corporate failure In Nigeria: listed Managers perception in manufacturing companies. Scholarly Journal of Management Sciences Research. 2023;2(11):36-49.

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- 54. ICAEW; 2023. Available:https://www.icaew.com/insights/v iewpoints-on-the-news/2023/sep-2023/why- do- companies-fail
- 55. Jones F. Current techniques in bankruptcy prediction; 1987.
- Nairametrics; 2024. Available:https://nairametrics.com/2024/03/ 06/767manufacturingcompanies shut downin nigeria n350 billion goods unsold in 2023/
- 57. Lagos Business School Summit. The CFO as a Strategic Architect -Maximising the CEO-CFO Synargy; 2024. https://www.youtube.com/watch?v=_nhwo BI5Y8A
- Martono S, Yulianto A, Wijaya AP. The agency cost of concentrated institutional Ownership: Evidence from Indonesia. Montenegrin Journal of Economics. 2023;19(3):201-212.
- Kofarbai HZ, Yauri NM. Corporate governance, risk management and bank failures in Nigeria: A case study of some selected banks. Journal of Finance, Accounting & Management. 2021; 12(1).
- Zahra SA, Priem RL, Rasheed AA. The antecedents and consequences of top management fraud. Journal of Management. 2005;31(6): 803-828.

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