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Influence of banking regulation and supervision on banks' performance

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Abstract
Purpose: The specific objectives of this study were to examine the effect of supervision on bank performance, ascertain the effect of regulation on bank performance, and assess the challenges faced by banks in the implementation of bank regulations.
Research Methodology: This study adopted a descriptive survey approach using data collected from all employees of a commercial bank in Accra Newtown. Data were analyzed using descriptive and inferential statistics from IBM SPSS Statistics 24.
Results: A positive relationship was found between banking regulation and bank performance and between supervision and bank performance. The study identified poor communication, lack of resources, resistance to change, and inefficient processes as the major challenges faced by banks in implementing strategies and achieving their objectives.
Limitations: This study was limited to a commercial bank in Ghana, thus making it inappropriate to generalize the results.
Contribution: To improve communication, there is a need for closer collaboration between banks and external regulatory bodies considering the positive effect of bank regulation on bank performance. From this study, there is a need for continuous monitoring and evaluation of processes to ensure that banks comply with regulations.
Practical Implications: There is a need to maintain and improve effective regulatory and supervisory frameworks, as they positively affect bank performance.
Novelty: This study examines banking regulation and supervision of bank performance with evidence from a commercial bank in Accra New Town, a suburb of Accra in Ghana.
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1. Introduction

Every state's economic sector generally depends on the regulatory and supervisory structures that support its growth and development. Following the 2007–2009 financial crisis, numerous countries, including Ghana, enacted laws to safeguard the financial system from negative activities and transactions (Abdullah, 2017). A supportive environment is necessary for the financial systems to flourish (Phina et al. 2021). The probability that a nation may experience a banking crisis depends on both the domestic and worldwide contagion variables. The international and national economic systems both depend on banking; therefore, to ensure the balance and effectiveness of the banking system, bank regulation and supervision are essential tools (Özker, 2020). Bank regulations and supervision define capital standards, set requirements for entry into the banking market, frame acceptable ownership, and provide business guidelines for the banking industry. In banks, the board of directors and other regulatory bodies for financial institutions are responsible for implementing these rules (Nwosu et al., 2022). Banking regulations safeguard consumers by ensuring that banks have adequate capital, disclose the risks inherent in their businesses, and practice sound risk management. Furthermore, banking regulations are made to prevent clients from using unfair or deceptive tactics and to guarantee that clients have access to information about their rights and options (Lekwauwa & Bans-Akutey, 2022). The legal system and guiding principles of a nation define the functions of the banking and financial sectors as well as those of regulatory agencies (such as the central bank), establish guidelines for the entry and exit of financial institutions, identify and limit their businesses and products, and define the requirements and standards for the safe and reliable operation of the sector (Masciandaro, 2018).

In all matters relating to banking and non-banking financial business, the Bank of Ghana (BOG) is the general supervisory and regulatory authority with the goal of achieving a sound efficient banking system in the interest of depositors and various clients of these institutions, as well as the economy as a whole. The rules governing banking operations include clauses addressing licensing, license cancellation, arrangements for inspecting and monitoring banks, powers, and obligations, as well as supervisor protection. The Bank of Ghana Act, 2002 (Act 612), the Banking Act, 2004, the Banking Amendment Act, the Bank of Ghana Notices/Directives/Circulars/Regulations (Abdallah, 2015), and the ARB Apex Bank Limited Regulations (2006) provide the regulatory and legal frameworks in Ghana under which banks operate. 1825). The Bank of Ghana's supervisory activities are created in accordance with the Basel Core Principles for Effective Banking Supervision to strengthen the legal and regulatory environment. Act 673, the 2004 Banking Act, obligates the Bank of Ghana to immediately revoke a bank's license to operate as a bank when its whole capital base is depleted and its liabilities exceed its assets, unless shareholders can raise more capital within six months of the moment of the increased capital injection, bringing the bank back to capital decline (Section 62). The Banking Act (Section 81) requires all banks to display a copy of the most recently audited financial statements at each of their branches or agencies throughout the year in a prominent location to ensure that the public is aware of a bank's operations and financial status.

The Banking Act also ensures the confidentiality of consumer data. It states that unless disclosure of information is compelled by law, directors, officers, and other bank employees are not permitted to discuss customers' financial affairs (Section 84). Abdallah (2015) claims that persistent financial sector restructuring and Ghana's transition has been successful in establishing one of the most thriving financial services sectors in the sub region. Consequently, Ghana has experienced a sharp rise in the number of banks, including Pan-African organizations, with a deposit base that is expanding quickly. Ghana is the location of 23 commercial banks. The minimum stated capital requirement for new commercial banks is GHS 400.000.000, to establish sufficient funds to buffer against unexpected losses.

Today, the financial system is gradually becoming a global village, and the current level of offshore banking in both developed and developing nations is proof of this. Banks play an important role in the financial health of any country (Weber, 2019). The essential expansion and advancement of the financial sector in many nations depends on a regulatory and supervisory framework, as stated by Begenau and Landvoigt (2022). Additionally, as stated by Phan et al. (2022), the power of this regulatory framework is anticipated to contribute to an improvement in the macroeconomic and financial situation. This promotes financial inclusion (Anarfo & Abor, 2020), supports the security and stability of the financial system, protects customers and depositors, and increases employment in many sub-Saharan African emerging nations (Plato-Shinar, 2021), thereby promoting accessibility, availability, sufficiency, and affordability of credit, which in turn helps the African economy's medium- and small-scale firms (SMEs) thrive and create jobs (Quartey, Turkson, Abor, & Iddrisu, 2017).

Many studies have examined the effects of banking regulations and supervision on bank performance. The studies of Alam (2017), Pacces and Heremans (2012) and Yang, Gan, and Li (2019), on the bank regulation and supervision resulted in a positive effect on banking efficiency. In Ghana, many people have conducted studies in the same area, such as Nyarku and Oduro (2018), on the legal and regulatory framework benefits of the financial industry, SMEs, and the economy of Ghana. Their study recommended that states create adaptable credit laws that encourage financial backing to expand entrepreneurial endeavors. They also contend that Ghana's financial regulations should simplify SME registration processes, reduce and revise taxation regulations, implement price stabilization strategies, and uphold transparent and accountable regulatory institutions. In addition, the study by Obuobi et al. (2019) on the regulatory and supervisory directions of the banking sector focuses on the consequences of recapitalization on the Ghanaian banking industry. The results of previous studies have been inconsistent. Some studies believe that banking regulations improve banking efficiency, whereas others disagree. Some policies help promote efficiency, while others hinder it. This study attempts to fill this gap by assessing the effect of banking regulations and supervision on the performance of banks using a commercial bank in Ghana as a case study. It attempts to answer the following three questions.

1. What is the effect of supervision on commercial banks' performance?
2. What is the effect of regulations on commercial bank performance?
3. What are the challenges faced by commercial banks in applying regulations?

2. Literature review

Balasubramnian and Palvia (2018) explained that "the main purpose of bank examinations is information acquisition" about a bank's risk exposure and financial condition. They find evidence that bank examination has an auditing effect on the reported value of loans on a bank's balance sheet and generates new information about the bank's underlying financial condition. The latter effect is particularly pronounced for weaker banks. These findings are consistent with the idea that bank balance sheets are difficult for outsiders to assess, as theories related to banks' roles in information-gathering and monitoring opaque borrowers suggest. Implicitly, the role of supervision via examinations is to generate more precise information about a bank's condition to enable supervisors to take appropriate actions to reduce failure risk.

Eisenbach, Lucca, and Townsend (2016) developed a model that expands on the idea of information acquisition as a primary role for supervision. Their model begins with the idea that the shared objective of supervision and regulation is to "align banks' risk-taking with the objectives of society as a whole, for the good of the financial system and the economy." Their model assumes two types of information about banks' condition and risk exposures: "hard" information that can easily be verified (e.g., whether capital ratios exceed minimum required levels) and "soft" information that requires effort to obtain and judgment to assess, such as the quality of risk management. In this model, verifiable hard information forms the basis of regulation, while acquiring and assessing soft information is the role of supervision. The distinction between hard and soft information and their role in supervision is closely related to the ideas raised in papers that discuss the role of hard and soft information in lending.

As summarized in Liberti and Petersen (2019), hard information which is quantitative, is easy to store and is independent of its collection; while soft information is complex to completely summarize in numeric score, requires a knowledge of its context to fully understand, and becomes less useful when separated from the environment in which it was collected." This study finds that smaller banks that are closer to their customers are better equipped to deal with soft information (e.g., from local small businesses), whereas larger banks with more hierarchy and greater geographic scope use hard information more successfully (e.g., credit card scoring).

Bank supervision has rarely been examined separately from regulation, and relatively little is known about the distinct impact of supervisory efforts. Some of the literature on bank regulation explicitly describes a role for bank supervision, namely, to ensure compliance with regulation (Fernandes, Farinha, Martins, & Mateus, 2017). However, a theoretical approach that views the economic rationale for supervision solely as compliance with regulations falls short of capturing many important aspects of supervision in practice (Hirtle et al., 2020).

To illustrate how supervision differs from regulation, it is useful to outline the actions of bank supervisors. Regulation is, broadly speaking, the body of regulations that banking organizations are required to abide by. These laws cover topics such as who is allowed to own and operate commercial banks as well as permissible organizational structures, how much capital and liquidity banks must operate without additional sanctions or restrictions, what forms commercial banks and parent banking companies must follow, what activities commercial banks and parent banking companies can and cannot engage in, and what financial transactions are allowed between subsidiaries within a banking organization (Hirtle et al., 2020). In contrast, supervision requires keeping an eye on and overseeing banks, which involves reviewing risk management systems, evaluating corporate governance, evaluating internal controls, recognizing threats to a bank's long-term financial stability, and, most importantly, acting (Eisenbach et al., 2016). Depending on the nation, supervision is carried out by a variety of organizations, some of which work in tandem with the central bank and others employ independent supervisors.

The oldest economics literature on supervision studies how the level of inspection standards used by examiners to evaluate a bank's loan portfolio or determine its safety and soundness influences the amount of money that banks lend (Kiser, Prager, & Scott, 2016). Although the estimated economic effects of the impact vary, they generally find that increased supervisory stringency is linked to slower loan growth or reduced loan origination. Some studies find statistically significant but economically insignificant effects, whereas others find more significant impacts. Although many of the incidents examined make use of the tightening of supervisory requirements after downturns, suggesting that supervision has been procyclical, the estimates do not investigate their macro-prudential implications.

Whether banking regulation and supervision should be carried out by the central bank or by a different body is a topic that has been studied extensively. According to Masciandaro and Quintyn (2016), the benefits of having a central bank conduct supervision include better knowledge of the economic and financial market conditions that affect the banking industry. Combining information from supervising banks with data on the economy produced as part of the monetary policy process can improve both supervision and monetary policy, and there are potential econometric benefits to supervising the central bank. Central banks may have a human capital advantage because their staff is exposed to a greater range of issues and viewpoints. Oversight was headquartered at the same institution. On the other hand, supervisory data may provide useful information regarding financial conditions and macro-prudential measures taken by monetary authorities (for instance, the BIS 2020 overview of the effects of macro-prudential measures includes cross-country supervisory data).

On the other hand, if monetary policy activities have potential negative impacts on banks, merging the responsibilities for monetary policy and supervision in a single body may result in conflicts between the safety and soundness aims of supervision and the objectives of monetary policy. Additionally, integrating these tasks can raise public concerns about the potential for authority to be centralized in one organization, which could threaten the independence of the central bank and its monetary policy authority.

2.1. Effect of Supervision on Banks' Performance

The effect of bank supervision can be measured by the bank ROE (return on equity (ROE), loans, and lending (Endri & Marlina, 2020). The principal purpose of bank supervision is to control lending and risk-taking performance.

***ROE*:** A study of US banks discovered that frequent inspections enhance return on equity (ROE) (Rezende & Wu, 2014). More frequent examinations by regulators encourage banks to maintain safer assets, which decreases their losses, including loan losses, and boosts their profitability (Arif, Nasir, Rodrigo, Bujang, & Supar, 2023; Rahmawati & Hadian, 2022). Because the net interest margin to total liabilities (NIM/TL), unlike ROE, does not take balance sheet risks into account, it is backed by the fact that the ratio of NIM/TL is not considerably changed by the frequency of examination. Hence, although the net interest income component of the ROE is unaffected by more frequent audits, losses on asset components are affected.

***Loan*:** By calculating the impact of examination frequency on banks' ratios of non-performing loans to total loans (NPL/TL), charge-off ratios to total loans (CO/TL), and provisions for loan and lease losses to total loans (PLLL/TL), it is possible to more accurately analyze the effects of supervision on loan losses (Rezende & Wu, 2014). The study shows that more frequent examinations lower all three loan loss measures: over the sample period of 1994 to 2012, reducing the gap between examinations by 100 days results in a reduction in NPL/TL of 0.64 percentage points, a reduction in CO/TL of 0.09 percentage points, and a reduction in PLLL/TL of 0.16 percentage points.

Lending**:** According to Choi, Holcomb, and Morgan (2020), a bank lends less when it is under regulatory scrutiny and when it has a low regulator rating. These findings indicate that, as regulators monitor a bank more closely, they might raise their regulatory capital ratios, which would be beneficial to performance. However, they are more likely to recommend that they reduce their loan supply, which could have a negative impact.

Agarwal, Lucca, Seru, and Trebbi (2014) looked at a sample of state banks that had undergone alternate inspections from federal and state authorities. They contend that federal regulators are stricter than state regulators, between the time an assessment by a federal regulator and before. Banks report higher regulatory capital ratios in response to a state regulator's assessment, which could have a beneficial impact on performance. However, they also record larger non-performing loans, more delinquent loans, and worse returns on assets, which could have a negative impact. Their findings show that more stringent regulatory reporting by banks following federal regulator inspections is mostly to blame for the changes in these variables, which do not necessarily indicate a change in bank performance.

2.2. Effect of Regulation on Banks Performance
Banks are subject to several conditions, limitations, and rules under banking regulations. Legal requirements differ from nation to nation (Abidin et al., 2021). Nevertheless, they have similar objectives, such as reducing systemic risk by creating unfavorable trading conditions for banks or preventing bank fraud. Bank regulation has made significant contributions to supporting the design and implementation of structures and processes within banks since the late 1980s, when many institutions were unaware of the extent of their risk exposures. Adopting procedures and structures that are open to public scrutiny can help management controls perform better (Rana, Wickramasinghe, & Bracci, 2019), but they can also be used to establish and uphold legitimacy (Wang, Zhao, & Li, 2022).

2.3. Prudential and Monetary Regulation
According to Almaw (2020), prudential regulation is a category of financial regulation that includes limitations on bank capital, concentration (shareowners' rights and nationality), and banking entry and exit. Despite the fact that monetary regulation entails restrictions on interest rates (lending and deposits), credit (credit balance (credit cap), and portfolio or flow of credit), these restrictions also include holding government securities, such as 27% of T-bill credit in Ethiopia, lending credit to preferred institutions, limiting the total amount of credit extended, and reserve requirements.

Eden (2015) finds that monetary regulation has a considerable detrimental impact on bank performance. She emphasized how strict monetary restrictions prevent banks from lending money above cap or ceiling levels but allows them to pay interest in investable capital, which is frequently received from depositors. thereby reducing interest income, which has a negative impact on the output. Additionally, she said that having a high reserve requirement hurts banks' performance because it reduces the net interest margin, which is one measure of success because the reserve deposited with the central bank receives no interest while the bank pays interest to the funds deposited. While capital requirements are applicable to all banks, according to Klomp and De Haan (2015), strict reserve requirements hurt only small and unlisted banks. A sizable bank's market share guarantees constant liquidity. Despite the assertion that a bank's performance is unaffected by liquidity restrictions, banks are subject to size-based reserve regulations. Gavalas and Syriopoulos (2014) study the potential impact of Basel III on lending rates and loan growth. Their investigation revealed that capital requirements affect various nations differently. Different nations have different loan- and lending-rate elasticities. According to their statistics, a 1.3 percent increase in capital requirements (equity to total assets) caused 4.97 percent and 18.67 percent declines in loan volume for banks in crisis-hit and non-crisis-hit countries, respectively. Prudential measures had a positive effect on banks' performance in the years following the global financial crisis, according to research by Haque and Brown (2017), Barth, Lin, Ma, Seade, and Song (2013), and G. E. Chortareas, Girardone, and Ventouri (2012). They found that bank capital regulation, consistent with the public interest viewpoint theory of bank regulation, had a positive impact on bank performance. Contrarily, Pasiouras, Tanna, and Zopounidis (2009) concluded that capital regulation had a negative. They emphasize that having high capital requirements reduces banks' risk, which leads to low performance and revenue. The high cost of capital may prevent banks from making efforts to make improvements. Furthermore, banks with strict capital requirements may not be overseen by shareholders, which could exacerbate bank collapses.

Deli and Hasan (2017) used bank-level data from 125 countries to analyze the impact of bank capital restrictions on loan growth. They found that while strong capital restrictions, particularly for banks with low capitalization levels, have a short-term negative impact on loan growth, they also have a long-term favorable benefit. They also showed that compliance with global regulatory norms, such as Basel's pillars, has no effect on loan growth in terms of poor performance and profit. Due to the high cost of capital, banks may not exert themselves to perform better. Additionally, shareholders may not oversee banks with strict capital requirements, which could worsen bank collapses.

Banerjee and Mio (2018) discovered that greater liquidity regulation had the reverse impact, causing banks to shift the composition of their balance sheets rather than reduce their loan and asset portfolios. This would be bad because it would have an adverse effect on interest margins and the cost-effectiveness of long-term bank investments. In reality, they find that banks' interest margins are unaffected by liquidity restrictions. However, liquidity limitations have a considerable and unfavorable influence on the interbank market and Fed investment.

Gual (2013) evaluated Basel III's capital standards and their implications for the banking industry. It was found that the efficiency of legislation is called into question by the theory and data currently in use. His analysis indicates that the capital requirement of the Basel III Agreement is unlikely to reduce the risk-taking threat posed by banks; rather, it will slow the banking sector's capitalization, which could have a detrimental effect on the economy and banking sector in the short term because of the tight credit market and sovereign debt crisis. Compared with risk reduction, this has a larger impact on risk aversion.

Compared with risk reduction, this has a larger impact on risk aversion. In addition, he showed that the Basel III accord's regulatory methods primarily prioritized the capital ratio and neglected to account for financial risk to the banks.

According to Eskinder (2016), private banks in Ethiopia face a significant struggle to compete in the market because of these policies and directives. He also illustrated the formal and overt discrimination against private banks by the Ethiopian government. The national bank bill covers only privately held banks and various public funding methods raised by state-controlled banks. Legislation has a negative effect on bank performance.

In relation to bank efficiency in Africa, Calice, Leonida, and Muzzupappa (2021) look at the effects of capital requirements, bank admission limits, banking activity restrictions, transparency requirements, bank existence restrictions, liquidity and price controls, and the presence of a financial safety net. They found that, in line with the observations reported by G. Chortareas, Magkonis, Moschos, and Panagiotidis (2015), the size and risk profile of banks have a significant impact on how various bank regulations are implemented. Klomp and De Haan (2009) found that stringent entry requirements help high-risk banks operate more effectively. However, exit restrictions do not apply to small low-risk organizations. Their studies showed how strong price and capital constraints increase the efficiency of sizable, low-risk banks. This implies that the size and risk profile of individual banks should be considered when regulating banks. Hence, bank regulation in Africa should follow a "one size fits all" approach, bank regulation in Africa should follow a "risk proportionality approach."

2.4. Effect of structural regulation

According to Haque and Brown (2017) and Barth et al. (2013), structural regulation may have a major impact on the performance of banks. They said that because bank structural limits confine banks' operations to what they can do, they prohibit banks from gaining advantage through economies of scale.

Banks become less efficient owing to increased operating costs. This is because bank structural limits restrict bank activities to what they should do rather than what they can do. Banks cannot acquire an advantage through economies of scale. Banks become less efficient owing to increased operating costs. Structural constraints hinder banks' ability to take advantage of economies of scale, preventing them from providing a wide range of standard services at competitive costs. Furthermore, this restriction makes it challenging for banks to diversify their revenue streams and cash flows, which reduces their incentive to put in long hours and deliver quality work each week. According to Djankov, Georgieva, and Ramalho (2018), structural limits may hinder bank performance and efficiency but only increase regulators' negotiating power.

However, according to Gaganis, Galariotis, Pasiouras, and Staikouras (2021), strict structural bank regulation has a positive effect on banks' performance. They found that stricter structural regulation reduces corporate structure complexity, streamlines bank management, removes the moral hazard problem, and increases risk-taking. People may be more loyal to banks because of the low cost of administration, abuse, and exploitation brought on by this simple management technique, which allows banks to generate money more efficiently and perform well.

2.5. Importance of Regulation

The Safety Net. Because bank failures appear to have significant externalities in terms of liquidity, bankruptcy costs, and asset destruction, an essential aspect of banking regulation is to prevent or at least mitigate the effects of bank failures. This is known as the ‘safety net’ that surrounds the banking system and safeguards bank customers (WDR, 2016).

Deposit insurance. The main goal of a deposit insurance program is to reduce, if not eliminate completely, the possibility of bank runs. Shield small depositors from losses is a secondary goal (Lee & Hwang, 2019). More than two-thirds of International Monetary Fund (IMF) members have recently experienced one or more financial crises. Approximately 50% of the countries in the world have established deposit insurance plans as a result of the inherent fragility of banks. Deposit insurance has the potential to contribute to a more stable banking system by boosting depositors’ confidence. These programs allow the government to guarantee that money can always be withdrawn at full value, giving depositors peace of mind that their money is safe. Depositors will not be motivated to participate in massive bank runs to withdraw their money if they think that the government will be able and willing to uphold its word. Therefore, deposit insurance can contribute to a more stable banking system by enhancing depositor confidence (Barth, 2019). Bank risk-taking behavior is altered, and deposit insurance results in excessive risk absorption if it is not fully apparent.

Capital requirements. The amount of liquid capital (i.e., securities that can be quickly sold) that banks and other depository institutions must hold in relation to a certain percentage of their assets is determined by capital requirements, which are standardized rules in place for these institutions. These requirements, also known as regulatory capital, are established by regulatory bodies such as the Federal Reserve Board, Bank for International Settlements, and Federal Deposit Insurance Corporation. The purpose of capital requirements is to prevent banks’ and depository institutions' assets from being heavily weighted with securities that raise the risk of default. Additionally, they guarantee that depository institutions and banks have enough capital to withstand operating losses (OL) and honor withdrawals. The purpose of capital requirements is to make banks solvent. Capital requirements are intended to keep banks solvent and indirectly maintain the stability of the broader financial system. No bank is an island in the era of national and international banking; as regulation proponents point out, a shock to one might affect several. Therefore, there is even greater justification for strict standards that can be consistently implemented and utilized to compare various institutions' levels of soundness.

Bailout policy and bank closure. Bailouts can decrease systemic risk, promote stability, prevent or lessen short-term financial system issues, and lessen the likelihood and severity of recessions, which are frequently the result of bank financial hardship and failure. By boosting employment and lowering business and consumer bankruptcies, bailouts are also typically shown to increase credit availability and improve economic conditions (Alain Gilles, Grace, Hans Patrick, Arlette, & Léopold, 2020).

However, bailouts are associated with societal costs. Because bailouts may increase expectations of future bailouts, which may impair market discipline, they may encourage banks to take excessive risks over the long term. Taxpayers may be forced to pay bailout expenditures that do not reflect the assumed risks fairly. Additionally, bailouts may skew the distribution of funds such that some of them are determined by the political and regulatory connections of the banks.

2.6. Challenges of Implementation of Bank Regulation

The Financial Stability Board (FSB) and Basel Committee created complex legislation for international financial regulation with developed and rising nations in mind. A growing reaction to complicated financial regulation regulations, particularly capital restrictions in banking regulation, has been observed since the global financial crisis (Jones & Matthijs, 2019).

According to Beck, Da-Rocha-Lopes, and Silva (2021), complex regulations are less effective and may also be harmful. There have been suggestions to simplify financial regulation norms by relying more on "rules of thumb" and discretion than on prescription.

The Basel Committee formed a Task Force on Complexity and Comparability to further investigate this topic. The main grievances concern two major issues: the efficacy of complex rules in preventing bank failures and financial crises, and the sheer volume of resources needed, including sophisticated risk assessment algorithms, enormous databases, and the number of regulators in each jurisdiction.

The new capital adequacy framework adds complexity to design, data quality, reporting, and operations, according to a McKinsey study on Basel III and the European banking system (Muhammad et al., 2018). Many banks have "vastly underestimated" the time and money required to comply with the regulatory requirements. These criticisms and findings are significant for wealthy nations and their financial institutions, but they are crucial for emerging nations, especially low-income nations, as they lack the means (financial, technical, and human) to implement these rules. The Basel Committee offers alternatives that are characterized by lower levels of capital since it is aware that developing nations may have different requirements and a lack of resources in the area of Basel II framework's capital norms for banks.

However, it seems that African LICs felt that adopting the most complex regulations initially created for developed countrieswas a way to signal that they were adopting international best practice standards, even if they were not the most suitable to meet their needs when Basel II was adopted as a new capital adequacy framework. According to Beck, Demirgüç-Kunt, and Pería (2011), if they did not execute the most complex standards, their financial institutions would suffer consequences, such as higher foreign borrowing rates. As a result, LICs face complexity as a challenge, especially in terms of capital needs, as discussed further below. The inability of African regulators to test and oversee the more complex models that banks may decide to use, as well as to maintain sufficiently sizable and trustworthy datasets to run them, is another significant challenge.

Investing in staff to boost their ability to fulfill their regulatory/supervision tasks effectively increases their risk of being poached by banks because the pool of skilled individuals at the country level is often small (Bans-Akutey, 2023). African nations seem to be progressively understanding that their prior ideas of what is realistic or achievable are excessively high as a result of these limitations.

In Ghana, it is widely believed that regulatory organizations lack independence and are susceptible to political pressure, which jeopardizes the integrity of their decision-making processes. The central bank does not have the authority to oversee the financial system. Before granting bank licenses, altering the minimum capital adequacy standards, initiating legal action against, or taking over troubled banks, the central bank must receive government approval.

The standards for granting licenses to banks have been defined but not those for granting licenses to other financial firms. The impression of partisanship is exacerbated by licensing decisions, which are frequently viewed as biased. Additionally, there are delays in obtaining regulatory approval for the institution nominated by the finance director, which leads to lengthy regulatory response times on issues affecting the industry, and a lack of industry experience among regulatory agency staff causes misconceptions regarding regulatory problems (Boateng & Oduro, 2018).

The term "security risk" with the potential for directorship, as used by the Ministry of the Interior for concerns of national security, has caused considerable confusion. Candidates were questioned inanely or improperly. Delays and onerous disclosure requirements have discouraged many qualified applicants from sitting on the boards of directors of financial institutions, and they have nothing to do with the "fit and adequate" directorship criterion.

2.7. Difference between Regulation and Supervision

By using different types of information about a bank, either "hard" or "soft," the two entities can be distinguished from one another. Regulators can only use hard data, such as a bank's business lines or the sufficiency of its capital or liquidity. Supervisors can also use softer data, such as the standards and importance of risk management at a bank, as well as if it seems to be neglected while making crucial choices.

3. Research methodology

To accomplish its goals, the study collected data using a quantitative approach and descriptive research design. The target population of the study was employees of a commercial bank in Accra New Town, a suburb of Accra. Considering the small number of employees, all 24 were selected to participate in the study. This finding implies that the total population participated in this research. A self-administered questionnaire was used for data collection. Responses were measured on a five-point Likert-type scale. The five-point scale is a numerically scaled Likert type of multiple-choice answer ranged from 1-5-point scale in the following pattern: Strongly Agree, Agree, Neutral, Disagree and Strongly Agree, from which the respondents made choices. Prior to data collection, the researcher applied for an introduction letter from the college in order to be able to access the bank ethically. The letter was sent to the firm to seek permission to use it as a case study. After permission was granted, the researcher received a gatekeeper to help administer the questionnaire on her behalf. The completed questionnaires were collected from the gatekeeper, three weeks after the date of submission. In this study, the rights and privacy of all respondents were maintained such that no information could be attributed or traced to any particular respondent. The data were then analyzed using descriptive and inferential statistics. Tables and percentages are used to present the results.

4. Results and discussions

From the findings, 58% of the respondents were female and 42% were male. Thus, most respondents were female. Of the total respondents, 50% were between the ages of 35 and 44, 29% were between the ages of 45-54 years, 17% were above 54, and 4% were between the ages of 25-35. 42% have been working for a period of 7–10 years while 29%, 4-6 years. 21% had been in the company for more than 10 years, while 8% had been with the company for a period of to 1-3 years. 38% were senior-level staff, 29% mid-level staff, 17% top executives, 13% managers, and 4% entry-level staff.

4.1. Effect of Supervision on GCB Bank's Performance

When asked whether they had received regular supervision from their immediate supervisor, all 24 respondents (100 %) said yes. Of the 24 respondents, 33% asserted that they had performance review meetings with their supervisor on a monthly basis, while 25% said it was quarterly. In addition, 21% reported biannually, while 13% reported annually. However, a minority of 8%, representing two respondents, said that the performance review meeting with the supervisor was conducted weekly. The majority of respondents stated that the performance review meeting with the supervisor was conducted monthly.

When asked how effective the supervision they received in improving their performance was, 54% of respondents, representing the majority, said it was very effective, while 29% said it was somewhat effective. However, a minority (17 %) said it was ineffective. Thus, most of the respondents indicated that the supervision they received was very effective and improved their performance.

The question sought to determine whether the quality of supervision received affects the GCB bank's overall performance. The majority (38%) responded positively, while 25% responded positively. In addition, 17% were neutral, whereas 13% and 8% were somewhat negative and very negative, respectively.

Table 1 presents a summary of the variables used in this study. It shows a strong relationship between bank supervision and performance, with a 53.9% variation in performance caused by bank supervision.

Table 1. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.541[a]	.539	.413	5.50219

a. Predictors: (Constant), supervision, performance

Table 2 presents the analysis of results. The sig. figure 0.000 indicates that bank supervision is significant to bank performance.

Table 2. ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	2192.035	3	1644.014	31.736	.000[b]
	Residual	4435.576	63	49.134		
	Total	6627.611	66			

a. Dependent Variable: Performance
b. Predictors: (Constant), Supervision

4.2. Effect of Regulation on GCB Bank's Performance

When asked how effective the current regulatory environment is in ensuring GCB bank compliance with banking laws and regulations, 54% responded very effectively, 29% indicated it was somewhat effective, and 17% stated it was ineffective. Thus, most respondents indicated that the current regulatory environment was very effective in ensuring the GCB Bank's compliance with banking laws and regulations.

Respondents were asked if compliance with regulations affects GCB banks' overall performance; 33% of the respondents stated it very positively, while 25% stated it somewhat negatively. 21% said somewhat positively, 13% said neutral, and 8% said very negatively.

Table 3. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.617[a]	.694	.413	5.50219

a. Predictors: (Constant), bank regulations, performance

Table 3 presents the analysis of results. From the table, the sig. figure 0.000 indicates that bank regulations have a significant effect on performance.

Table 4. ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	3395.037	4	1454.148	34.765	.000[b]
	Residual	7635.716	37	68.344		
	Total	6247.101	63			

a. Dependent Variable: Performance
b. Predictors: (Constant), Bank regulation

4.3. Challenges Faced by GCB in Implementation

All respondents (100 %) agreed to encountering challenges in the course of complying with regulations at the GCB Bank. From the survey, 42% asserted that poor communication was the major challenge, 29% stated a lack of resources, 17% expressed resistance to change, and 13% alluded to inefficient processes.

4.4. Discussion

The first objective was to examine the effects of supervision on GCB performance. This study identifies a positive relationship between bank supervision and performance. This aligns with Agarwal et al. (2014), who examined a sample of state banks that had undergone alternate inspections from federal and state authorities. They conclude that because federal regulators are stricter than state regulators, banks report higher regulatory capital ratios in response to a state regulator's assessment, which could have a beneficial impact on performance. Hence, bank supervision leads to better performance. This suggests that effective supervision has a favorable influence on the overall performance of banks. Robust and competent supervision allows for better risk management, compliance with regulations, and financial stability within banks. By closely monitoring banks' activities, regulators ensure adherence to prudent practices, leading to improved financial soundness and reduced losses. Moreover, supervision helps to protect customer interests, promotes governance and transparency, and contributes to customer satisfaction and investor confidence. These findings highlight the significance of maintaining a strong supervisory framework to enhance bank performance and ensure long-term success in the banking industry.

The second objective ascertained the effects of the regulations on GCB performance. There is a positive relationship between bank regulations and performance. Similarly, according to a study by Barth et al. (2013), G. E. Chortareas et al. (2012), as well as Haque and Brown (2017) prudential measures have a favorable impact on banks' performance in the years following the global financial crisis. Specifically, they discovered that bank capital regulation has a favorable impact on bank performance, which is in line with the public interest theory of bank regulation. This indicates that regulations have a beneficial effect on banks' overall performance outcomes. Regulations play a crucial role in establishing a structured and stable banking environment by setting standards and guidelines for the various aspects of banking operations. Compliance with regulations ensures that the bank operates within legal boundaries, adopts sound risk-management practices, and maintains appropriate governance and transparency. This compliance contributes to improved financial stability, reduced risk, and enhanced overall performance. Moreover, regulations often focus on customer protection, ensuring fair practice, transparency, and high service standards. By adhering to these regulations, Ghana Commercial Bank can build trust, foster customer loyalty, and positively impact its performance. These findings underscore the importance of robust regulatory frameworks in promoting a healthy and sustainable banking sector, ultimately benefiting the performance of the Ghana Commercial Bank and the overall stability of the financial system.

The third examined the challenges faced by GCB banks in the implementation of bank regulations. The study identified poor communication, lack of resources, resistance to change, and inefficient processes as the major challenges facing GCB in implementing its strategies and achieving its objectives. Similarly, Beck et al. (2021) and Muhammad et al. (2018) identified inefficient processes and poor communication as the two foremost challenges faced by banks in implementing bank regulations. Ineffective communication of bank regulations and their requirements within the organization can lead to misunderstandings, confusion, and inadequate compliance. It is crucial to address this challenge by improving communication channels and ensuring that clear and detailed guidelines are provided to all stakeholders.

Another challenge is a lack of resources. Implementing bank regulations requires adequate resources, including skilled personnel, technological infrastructure, and financial investment. Insufficient resources can hinder the banks' ability to meet regulatory requirements and impede the implementation process. To overcome this challenge, appropriate resources must be allocated and investments should be prioritized in areas crucial for regulatory compliance.

Resistance to changes is another significant challenge. Implementing bank regulations often involves changes in processes, systems, and organizational cultures. Resistance to such changes can hinder the successful implementation of regulatory strategies. The bank must focus on change management initiatives, including employee education, training, and fostering a culture of adaptability and openness to change.

Inefficient processes, which were the last challenge the study found, can impede the implementation of bank regulations, leading to delays, errors, and increased costs. Banks need to conduct regular process reviews, identify bottlenecks, and streamline workflows to enhance efficiency and ensure smooth compliance with regulatory requirements. Despite the identified challenges, both regulation and supervision significantly affected performance positively.

5. Conclusions

5.1 Conclusion

This study aimed to evaluate the effects of banking regulation and supervision on the performance of GCB banks. This study adopted a descriptive research design, specifically a case-study approach. The population of the study was employees of the GCB Bank and were all sampled for the study. Questionnaires were used as data collection instruments. The collected data were analyzed using SPSS, and facts were presented with the aid of descriptive statistical tools.

First, the study found that supervision has a significant positive effect on GCB bank performance. Effective supervision mechanisms, including regular monitoring, risk assessment, and enforcement of regulatory standards, help mitigate potential risks and enhance banks' overall performance. Supervision ensures compliance with regulations and promotes a sound banking environment that fosters stability and growth. Second, the study revealed that regulation also has a significant positive effect on GCB bank performance. Regulatory frameworks such as capital adequacy requirements, liquidity ratios, and prudential norms play a crucial role in ensuring the safety and soundness of the banking sector. GCB banks' adherence to these regulations promotes financial stability, customer confidence, and sustainable growth. Overall, the study concludes that banking regulations and supervision have a positive effect on bank performance.

5.2 Limitation

This study is limited to a commercial bank branch in Ghana. Although all members participated in the study, the results cannot be generalized. In addition, this study employed a quantitative methodology that provides no subjective meaning to what the figures have indicated.

5.3 Suggestion

Future research should employ both quantitative and qualitative methods to examine the effects of supervision and regulations on bank performance. It is also recommended that future studies focus on the effects of supervision and regulation on financial institutions other than commercial banks.

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