IRAQI
Academic Scientific Journals

University of Kirkuk Journal For Administrative and Economic Science (2024) 14 (3): 358-375

UKJAES

University of Kirkuk Journal For Administrative and Economic Science

ISSN 2222-2995
University of Kirkuk Journal For Administrative and Economic Science

Aziz Gulderan A. & Othman Wuria M. .The impact of bank governance on financial performance: a sample of commercial banks in Erbil city. *University of Kirkuk Journal For Administrative and Economic Science* (2024) 14 (3):358-375.

# The impact of bank governance on financial performance: a sample of commercial banks in Erbil city

Gulderan A. Aziz [1], Wuria M. Othman [2]

[1,2] *University of Salahaddin - College of Administration and Economics1Erbil, Iraq*

Gulderan.aziz@su.edu.krd [1]
Wuria.othman@su.edu.krd [2]

**Abstract:** Banks are one of the important players in the financial system in any economy. This research paper seeks to examine the effects of banking governance on specific financial performance indicators in a sample of commercial banks in Erbil. Data collection was conducted using a random sampling method and a five-point Likert scale questionnaire. Survey questionnaires were distributed to 82 bank officials, and the data collected were analyzed using statistical software such as SPSS and Easy Fit to test hypotheses through simple and multiple regressions. The study's results indicate that corporate governance significantly impacts financial performance. Additionally, the findings demonstrate a direct relationship between banking governance and profitability, liquidity, and loan portfolio management. The authors recommend implementing training programs for bank officials to improve their governance skills and strengthening the application of bank governance to protect against financial fraud, manipulation, corruption, crises, and bankruptcy.

**Keywords:** Corporate Governance and Bank Financial Performance.

---

# التوافق بين الفرد والبيئة المنظمية ودوره في تعزيز الاحتفاظ بالعاملين: دراسة حالة في عدد من المصارف الخاصة في مدينة الموصل

أ.م.د. كولدران عبد الرحيم عزيز [١]، م. وريا محمد عثمان [٢]

[١،٢] *جامعة صلاح الدين – كلية الإدارة والاقتصاد، أربيل، العراق*

**المستخلص:** تُعَدُّ البنوك من اللاعبين المهمين في النظام المالي في أي اقتصاد. تهدف هذه الورقة البحثية إلى دراسة تأثير حوكمة البنوك على مؤشرات محددة للأداء المالي في عينة من البنوك التجارية في أربيل. تم جمع البيانات باستخدام طريقة العينة العشوائية واستبيان يعتمد على مقياس ليكرت الخماسي. تم توزيع الاستبيانات على ٨٢ من مسؤولي البنوك، وتم تحليل البيانات التي تم جمعها باستخدام برامج إحصائية مثل SPSS وEasy Fit لاختبار الفرضيات من خلال الانحدار البسيط والمتعدد. تُشير نتائج الدراسة إلى أن حوكمة الشركات لها تأثير كبير على الأداء المالي. بالإضافة إلى ذلك، تُظهر النتائج وجود علاقة مباشرة بين حوكمة البنوك والربحية، والسيولة، وإدارة محفظة القروض. يُوصي المؤلفون بتنفيذ برامج تدريبية لمسؤولي البنوك لتحسين مهاراتهم في الحوكمة وتعزيز تطبيق حوكمة البنوك للحماية من الاحتيال المالي، والتلاعب، والفساد، والأزمات، والإفلاس. الكلمات المفتاحية: حوكمة الشركات وأداء البنوك المالي.

**الكلمات المفتاحية:** حوكمة الشركات والأداء المالي للبنوك.

**Corresponding Author: E-mail:** ahmad.hmood@hcu.edu.iq

## Introduction

The series of corporate scandals that swept through prominent companies in Europe and the USA, such as (Societe Generale and Lehman Brothers), have prompted inquiries into the optimal composition of boards for effectively monitoring and controlling management activities within organizations. These companies' managements were involved in dubious and fraudulent accounting practices, which their boards failed to detect in a timely manner. Fraud, mismanagement, and inadequate monitoring of agents' activities led to a lack of transparency and accountability, rendering these top companies vulnerable to failures. In response, regulatory corporate governance reports and codes were introduced to establish regulations aimed at ensuring effective governance and improving the financial performance of these firms.

Wilson (2006) highlighted that poor corporate governance can erode market confidence in a bank's ability to manage its assets and liabilities, including deposits, potentially triggering a liquidity crisis. The strength of a financial establishment's corporate governance mechanism determines its vulnerability to uncertainties and eventual risks, thereby influencing whether some institutions fail while others succeed. However, Drobetz et al. (2003) found that good corporate governance leads to increased valuation, higher profits, higher sales growth, and lower capital expenditure.

The fundamental components of corporate governance structures include directors, accountability and audit processes, directors' remuneration, shareholders, and annual general meetings (AGMs). Cadbury (1992), Greenbury (1995), and Hampel (1998) emphasized the need for greater transparency and accountability in areas such as board structure and operation, directors' contracts, and the establishment of board monitoring committees. They also stressed the importance of the monitoring role of non-executive directors.

### 1st: Problem of the Study

In the increasingly competitive and dynamic financial sector, effective bank governance has emerged as a critical factor influencing the financial performance of commercial banks. Despite the recognized importance of governance structures in safeguarding shareholder interests, promoting transparency, and ensuring sustainable financial outcomes, there remains a gap in understanding how these governance mechanisms specifically impact the performance of banks within localized contexts, such as Erbil city. The unique socio-economic and regulatory environment in Erbil presents distinct challenges and opportunities for commercial banks, making it imperative to examine whether existing governance practices adequately support financial performance in this region.

This study seeks to address the problem of understanding the relationship between bank governance and financial performance among commercial banks in Erbil city. Specifically, it aims to investigate whether governance mechanisms, such as board of management, risk management, and compliance, are effectively aligned with the banks' financial goals. The study also seeks to explore the potential barriers or facilitators within Erbil's banking sector that may influence this relationship, providing valuable insights for policymakers, bank managers, and investors.

### 2nd: Objective of the Study

The research paper seeks to:

1. Investigate banking governance, its principles, and the key stakeholders involved.
2. Assess the effect of banking governance implementation on the financial performance of a sample of commercial banks in Erbil.

### 3rd: Importance of the Study

1. Implementing governance in the banking sector will enhance bank management performance, thereby boosting overall economic activity.
2. Governance helps in mitigating financial risks and eradicating administrative corruption in banks.

### 4th: Hypotheses of the Study

1. H0: Banking governance has no impact on the financial performance of the sample of commercial banks in Erbil.
2. H1: Banking governance impacts the financial performance of the sample of commercial banks in Erbil.
3. H0: Banking governance has no impact on the financial performance indicators of the sample of commercial banks in Erbil.
4. H1: Banking governance impacts the financial performance indicators of the sample of commercial banks in Erbil.

### 5th: Research chart:

Based on the literature reviews and previous empirical studies, the research framework has been synthesized. The model conveys the impact of bank governance on financial performance.

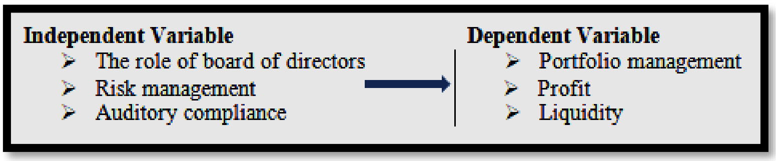


Figure illustrates the relationships, which have been constructed based on relevant theories and the aforementioned hypotheses.

### 6th: Study Limitations

As defined by Creswell (2005), a limitation is weakness in the research that could potentially be caused by any element that may block data collection within the study. However, the limitation of the study can be listed as following:
**Place scope**: The study is focused on commercial banks operating in Erbil city.
**Time scope**: It is the time period during which the data collection process from the study population and its transcription took place over the course of 2023-2024.

## 1- LITERATURE REVIEW

### A. Concept of Corporate Governance

Governance in banking dramatically changed in the 1990s because of significant changes of ownership which emanated from mergers and acquisitions (Arouri et al., 2011). The recent financial crisis that affected most of the developed countries originated from America before spreading to other countries. This was because of the financial interconnectivities of financial institutions. The chief cause of the subprime mortgages that lead to the financial crisis was because of excessive risk taking. Excessive risk-taking hinges on agency problem. Agency theory posits that a large board can be less efficient than a small board due to a rise in agency conflicts because of inefficient communication and cooperation costs (Jensen, 1993). However, Pfeffer (1972) noted that board size is positively linked to the performance of large firms. This is because large firms have a greater need of more board members who may bring different experience and expertise especially when the board is well diversified.

**B. Corporate Governance and Banking Sector**

**(1) The role of board of directors**

Following Jensen and Mecking (1976) postulates about the Agency Theory, the separation of ownership and control creates information asymmetries that may bring a transfer of wealth from owners to managers. As Jensen (1983) or Fama and Jensen (1983) explains, the board of directors is one of the major devices that limits agency costs and permits the survival of most corporations. As these authors state, corporate' boards monitor and ratify the decisions initiated at the top management level, thus creating an effective separation between "decision management" and "decision control". As Fama (1980) and Fama and Jensen (1983) explain, the board of directors is one of the most important internal control monitoring mechanisms of top internal managers in an open corporation, where external directors play a key role in working in favor of shareholders' interests, "carrying out tasks that involve serious agency problems" between internal-executive directors and shareholders. As Fama and Jensen (1983) assert, the board is an effective mechanism of the "decision control" role within a corporation when it is able to restrict the discretion of top managers over the "decision management" role within the corporation. Agrawal and Knoeber (1996) argue that together with external representation on corporate boards, concentrated shareholders by institutions or by block-holders can also play a significant controlling role, improving firm performance. However, as Kim et al. (2007) explain, although large owners might play a relevant monitoring role over managers, large shareholders' (institutional and blockholders) interests may not be aligned with those of minority shareholders and therefore the composition of the board of directors may be significantly affected by the ownership structure. As Kim et al. (2007) explain, concentrated ownership is considered a governance mechanism as large owners may use their power to appoint independent non-executive directors to control managerial decisions effectively in order to reduce agency costs between owners and managers. However, as previously stated, large shareholders' interests do not always match with those of minority shareholders. Under these circumstances the fundamental agency problem comes from the separation between minority and large shareholders, where the latter dominate the "decision control" role within the company (Shleifer and Vishny, 1997). The presence of large shareholders may lead to wealth expropriation from minority shareholders, if large shareholders tend to appoint managers or directors that are aligned with their own interests (Lim et al, 2007). Therefore, the composition of the board of directors becomes a key control mechanism for minority shareholders. Independence becomes a crucial requirement to control the costs of the different agency relationships within the firm. The presence of a significant proportion of independent non-executive directors tends to guarantee an objective control over pervasive managers and non-independent directors' decisions. Therefore, minority shareholders are expected to support the presence of a majority of independent directors in the board. Conversely, managers will prefer the presence of executive directors and large owners will tend to nominate non-executive directors, professionally or personally connected to them, the so-called gray directors (Kim et al., 2007). Under these circumstances, the legal environment plays an important role guarantying the protection of minority shareholders' interests, promoting and a minimum number of independent directors in the corporate boards. As Chen and Jaggi (2000) or more recently, Coles et al. (2008) explain, the board of directors of a corporation has two main roles: advising corporate boards on strategic decisions and monitoring executive directors and top management decisions (Fama, 1980). In fact, together with the regulatory requirements, the presence of independent non-executive directors depends on the costs and the needs of both advising and monitoring within each firm (Linck et al., 2008). However, most of the literature focuses on the monitoring role of independent directors where empirical results reveal how their presence significantly affects transparency and improves firm performance, revealing that independent directors work for the benefit of shareholders' interests. For example, Rosenstein and Wyatt (1990) find a positive stock price reaction to appointments of outside directors to corporate boards; Weisbach (1988) finds that a poorly performing CEO is more likely to be replaced if the firm has a majority of outside directors; Brickley et al. (1994) report a positive stock price reaction to the adoption of anti-takeover mechanisms (poison pills) when there is a majority of outsiders in the board; More recently, Black et al. (2006) find that the presence of independent directors affects company value in emerging economies; Beasley (1996) looked at the relationship between board composition and financial statement fraud, finding that those companies with higher presence of independent directors on their board are less likely to be involved in financial fraud than those with a lower proportion of independent directors. Hossain et al. (2001) find a positive relationship between the presence of independent directors and firm value on New Zealand companies, while other authors such as Dahya et al. (2002, 2005) find a similar effect on outside CEO appointments and company performance. Overall, the presence of independent outside directors monitoring company's decisions seem to be “good news” since corporate boards act in a more responsive manner, favoring investors’ interests (Chen and Jaggi, 2002) reducing the potential costs of agency relationship.

**(2) Risk Management**

Smith et al. 2020 defines risk management is identifying, analyzing and prioritizing risks and response planning by applying economic resources to minimize the risks. Smith et al define risk as an undesired outcome of investment. According to Leo et al 2013 risk management constitutes risk identification, monitoring, assessment, testing, reporting and oversight. They argue that higher the anticipated returns, the higher the risk. There are different types of risks in the banking sector; operational, market, liquidity, technology and insolvency risk. Based on Leo et al research the main risks in the banking sector are credit, operational and market risks. Effective risk management is key to business performance.

Although risk managers have established regulations to limit business exposure to risks, risk cannot be wholly avoided by the banks. Most risks require capital to manage, making them more draining to businesses. According to Samimi and Amir 2020, banks can achieve risk management through communication, evaluation, control and monitoring of the risks. They further argue that assessing the most vital risk in the banks can help make quick risk management its top priority. For instance, in the banking industry, credit risks have been the most significant risks facing them. Businesses should set capital aside for the management of anticipated risks and unforeseen risks. According to Leo et al 2014, risk management ensures the profitability of the business by reducing the losses which could be accrued from the risks. Smith et al 2020 postulate that risk management team should anticipate the risks associated with their industry and provide imminent solutions. Smith et al further argues that risk management in the banking industry is achieved through the use quantitative methods of risk management. Banking industry needs more proficiency in the management of risks as it deals with broad economic sectors. Similarly, they prove that the desire to increase returns is accompanied by an increase in risks. Risk management ensures that bank venture into profitable risks by advising on the probability of risk occurrence.

**(3) Auditory Compliance**

Compliance Auditing entails the process whereby organizations comprehensively review their transactions in line with regulatory guidelines. It is a means used to determine whether an audit process or transaction has or has not followed applicable rules (Kantiolm, 1998). According to Fargason (1993), compliance auditing refers to a comprehensives review of an organization’s adherence to regulatory guidelines. If rules are violated, the auditor determines the cause and recommends ways to prevent future deviations. The rules being tested can be those created by the organization for itself through the corporate bye-laws, policies, plans and procedures; or can be those imposed on the organization through external laws and regulations (Kanholm, 1998). According to Stephen (2002), compliance audit deals with the responsibility of the organization to audit whether the activities of the company are in accordance with the relevant laws, regulations and authorities that govern the company. This involves reporting on the degree to which the audited entity is accountable for its actions and exercises good public governance. More specifically, these elements may involve auditing to what extent the audited entity follows rules, laws and regulation, budgetary resolutions, policy, established codes, or agreed upon terms, such as the terms of a contract or terms of a funding agreement. Gary (1997), said that ‘‘compliance audit is an audit undertaken to confirm whether a firm is following the terms of an agreement (such as a bond indenture), or the rules and regulations applicable to an activity or practice prescribed by an external agency or authority’’. In addition, Gray (1997) opined that ‘‘the growth of compliance auditing is fundamentally a 21st century phenomenon''. Its emergence as a distinct type of auditing coincides with the rapid growth of business after the industrial revolution and the concurrent growth in efforts by firms and governments to direct and control business practices. Specifically, according to Feldesman et al (1999), compliance audit highlights the unique role auditing plays when identifying events or incidents that may affect an organization’s ability to achieve its objectives. Compliance audit is important in corporate business decision-making processes. It helps top executives prevent operating losses resulting from adverse regulatory initiatives, such as litigation, fines and other punitive.

**C. Financial Performance**

**(1) Profitability of commercial bank**

In the banking industry, profitability means the bank’s ability to generate earnings in comparison to its expenses and incurred costs during a specific period of time. It shows the capacity of the bank to handle associated risk while increasing their capital. It also indicates the effectiveness of management and competitiveness amongst banks. There are various measures to determine bank profitability such as return on capital employed, return on asset, return on equity, net profit margin, cost of income ratio, net interest margin, risk-adjusted return on capital, price-earnings ratio, total share return, return on invested equity, cash flow to assets etc. However, Brealey, Myers, Allen, and Mohanty (2012) recommends the important measures of bank profitability to be as return on asset (ROA), return on equity(ROE) and net profit margin. Profitability is a key factor for commercial banks as one of the major goals of commercial banks is to increase their profitability (Duffie & Singleton, 2012). All the activities within bank seems to affect their own profitability directly or indirectly. There are several categories to determine bank’s profitability in the literature. However, these can broadly be categorized into two groups which are internal determinants and external determinants (Staikouras & Wood, 2011). Internal determinants are influenced by decisions of bank management and policy objectives which is controlled by the management (Staikouras & Wood, 2011). It reflects the sources and uses of capital in the bank as well as liquidity management and expenses management (Guru, Staunton, & Balashanmugam, 2002). External determinants refer to factors outside the bank which is beyond the control of management (Staikouras & Wood, 2011). Some credit-related factor like the amount of non-performing loan is beyond the control of management. In addition, some management decisions are influenced by external regulations, hence, some external determinants are also included in the model specification.

**(2) Bank profitability indicators**

As bank profitability is an important aspect of the research, a thorough discussion of the appropriate measure of bank profitability is presented. As discussed earlier, there are various measures of bank profitability and the choice of the specific measure will depend on the objective of the research and practice of the sample banks. For this research, the return on asset (ROA) and return on equity (ROE) are the measures that will be used as indicators of bank profitability. ROA and ROE are not only traditional measures of performance but also the most important measures of bank profitability in the literature.

**(3) Return on Asset (ROA)**

Return on Asset (ROA) is the ratio of net income to total assets which measures net income earned per dollar of assets. It reflects how well the management is utilizing the bank’s real investment resources to generate profit (Vong & Chan, 2009). Thus, it shows how efficient and profitable a bank's management is, on the basis of its total asset. Mathematically, ROA is expressed as,

$$ROA = \frac{Net\ Income}{Total\ Assets} \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots (1)$$

For banks with similar risk profiles, ROA is a useful static for comparing bank profitability as it avoids distortions produced by differences in financial leverage (Bhattarai, 2014). From an accounting perspective, ROA is a comprehensive measure of overall bank performance (Jr Sinkey & Sinkey Jr, 1992). ROA has been widely used as a metric of bank profitability while examining the relationship between credit risk management and bank performance in earlier studies such as that of Alshatti (2015), Berríos (2013), Bhattarai (2014), Kaaya and Pastory (2013), Kurawa and Garba (2014), Nawaz et al. (2012), Ndoka and Islami (2016), Ogboi and Unuafe (2013), Adeusi et al. (2014), Poudel (2012), Zou and Li (2014), Zubairi and Ahson (2014) etc. thus, providing us an argument for using return on asset (ROA) as an indicator of bank profitability.
b Return on Equity (ROE) Return on Equity (ROE) is the ratio of net income to total equity capital which measures the return to shareholders on their equity. It measures how well the management is utilizing the shareholder's invested money to generate profit (Athanasoglou, Brissimis, & Delis, 2008). ROE is one of the most important measures for evaluating efficiency and profitability of bank's management based on the equity that shareholders have contributed to the bank. The equation for ROE is written as,

$$ROE = \frac{Net\ Income}{Total\ Equity} \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots (2)$$

Generally, a bank with higher ROE has a tendency to be able to generate more return to their shareholders. The higher the bank's ROE compared to its competitors, the better the bank is. Therefore, the stockholders of the banks always prefer higher ROE however this could sometimes be a threat to the bank (Saunders & Cornett, 2011) because an increase ROE implies that net income is increasing faster relative to total equity. Further, a huge drop in equity capital may result in a violation of minimum regulatory capital standards which tends to increase the risk of solvency for the banks (Saunders & Cornett, 2011). A number of previous empirical studies (Aduda and Gitonga (2011), Afriyie and Akotey (2012), Alshatti (2015), Berríos (2013), Ndoka and Islami (2016), Adeusi et al. (2014), Zou and Li (2014), Zubairi and Ahson (2014)) examining the relationship between credit risk management and bank performance have used ROE as a metric of profitability. Thus, the second measures of profitability used in the study is ROE. In this study, the dependent variables use to measure the effectiveness of management in utilizing assets and shareholder's equity of commercial banks are the ROA and ROE respectively.

**(4) Liquidity**

Liquidity in the absolute sense means money, while liquidity in the technical sense means the ability of an asset to convert into cash quickly and without losses. It can be said that liquidity represents the ability to meet obligations owed, whether these obligations are contracted or uncontracted (incidental). Therefore, liquidity is A relative concept of the relationship between cash and assets that quickly convert into cash and without loss on the one hand and maturing liabilities on the other hand (Abdul Hamid and Kazem, 2020). Liquidity expresses the facility's ability to meet its current obligations on their due dates, and the strength or weakness of the facility's liquidity is linked to the extent of its availability. The net cash flow from operating activities is positive. If the net cash flow can be used by the facility's management either in expanding cash from operating activities, it means a surplus. This means that the facility must search for investment activities or in repaying debts. However, if it is negative, Of its investments or by borrowing (Jabr and Abdel Hamid, Sources for Financing the Deficit, either by selling part of it (2017). By banking liquidity, we mean what the bank owns of the cash mass in the fund and current accounts, in addition to the securities in circulation (treasury bills, certificates of deposit, and commercial papers). To meet daily withdrawal movements by customers on deposits and current accounts (Qaidi and Ben Khaznaji, 2016). Liquidity in the banking system means the difference between the resources available to it and the funds used in various types of assets. Banks are in a state of abundant liquidity when the available funds are in excess of the bank's ability to lend, so that the bank is forced to invest the surpluses in liquid assets such as securities or in the form of bank balances or idle balances with the central bank (Ahmed, 2013). It becomes clear to the researcher From the above, liquidity is a relative issue, with two variables: the first variable is liquid assets, and the second variable is depositors' withdrawals and credit requests. Naturally, liquid assets differ in their degree of liquidity, that is, in the possibility of converting them into cash without losses. On the other hand, depositors' withdrawals Their deposits, along with the increase in credit requests, make liquidity in banks a sensitive and dangerous issue. At a time when any creditor in any industrial, agricultural, or real estate company could be asked to deposit money, we find that the matter becomes dangerous. Therefore, the bank's lack of liquidity may expose it to collapse (Kazim, 2014). Therefore, liquidity has three dimensions that must be taken into account, which include time (i.e. the speed of converting the asset into cash), risk (i.e. the possibility of a decline in the value of the assets to be liquidated), and cost (i.e. loss or The financial sacrifice that may exist in the process of converting assets into cash (Abdel-Sada et al., 2008).

**(5) Corporate Governance and Bank's Financial Performance**

(Levine. R, 2004) mentioned that when "banks apply good governance, banks will efficiently mobilize and allocate funds, this lowers the cost of capital to firms, boosts capital formation, and stimulates productivity growth". Corporate failures are a consequence of terrible corporate governance. The establishment of great corporate governance over the globe defends the effect of this failure. Most studies presumed that corporate governance systems are to be connected and related to firm performance (Avgouleas, E., 2009), discovered a positive connection between firm particular corporate governance and firm valuation, investors and firms utilizing corporate governance reports lessen risk and enhance business sector estimation of firms. Corporate governance is relied on to influence bank's cost of capital, risk taking, valuation, execution and conduct. (Levine. R., 2004) Agency Theory (Jensen and Mackling, 1976) recommends that solid corporate governance prompts better execution and accounting results. It has a significant part to play in the improvement of the banking sectors. It also brings about bank's comprehensive results in less cost of funds, higher company's market value, and higher productivity. Poor corporate governance may help banks to fail, which will posture critical public expenses, lead market loss of trust in the capacity of banks to legitimately deal with its assets and liabilities which will prompt liquidity risk, (Capel, J ., 2011). Earlier research studies which are centered on features of corporate governance demonstrated that is has a positive effect over bank's success. Discoveries demonstrate that a small board of directories of maximum 8 members can help enhance banks execution (Jensen, 1993). There are studies led after some time in different nations ( France, Germany, UK, Malaysia, Switzerland and Hong Kong) recommend leadership structure demonstrated a positive connection with the firm execution, (Franks and Mayer, 2001). Then again, earlier writing concentrated on evaluating size as mechanism of corporate governance demonstrate a negative connection between board size and firms value, (Yermack, 1996). An alternate study was directed demonstrated that with the increment of variety of banks transactions, this makes new difficulties in banks corporate governance. Additionally, studies demonstrate that board of directories; official administration and shareholders have high critical relations on the performance of firms, (Boot and Schmats, 2000).

The impact of corporate governance on firm execution has been a lot of incredible enthusiasm to economists and financiers as Maher and Anderson expressed that it has no extraordinary effect on firm execution so why financiers and economists concerns a great deal with this subject, (Maher and Andersoon, 1999). Allen and storm expressed that even with the vicinity of powerless corporate governance the solid product market rivalry may match director's objective with the goal of being efficiently productive (McGee, R. W., 2008).

In the US market studies finished up that it demonstrates that corporate governance instruments have positive effect on firm execution for instance it was observed that banks with solid shareholders rights have higher gainfulness rate than feeble shareholders. A few late studies showed that board autonomy is not emphatically identified with bank execution in banking sector, while board sized is certain identified with the execution of banks. A study in Pakistan shows the results propose that there was an effect of corporate governance changes on the banks performance and efficiency and had a positive effect.

## (6) Methodology

The study includes only commercial banks because their operating and financing functions are almost homogenous. The study includes several commercial banks. However, the convenient sampling method is used for the selection of 7 commercial banks for the period 2023–2024. Other banks such as specialized, foreign banks and few private sector banks are excluded, as the services /functions performed by these banks are heterogeneous or different, few private commercial banks lack the information related to the variables included in the analysis. To complete the practical side of the research and analysis of the impact of corporate governance on the Bank Financial performance of a sample of banks, a questionnaire form was designed, and to verify its validity, it was presented to a group of specialists from the university professors, as shown in Appendix (1), and the questionnaire was distributed to a random sample consisting of (90) individuals working in commercial banks in the Erbil city of the Kurdistan Region of Iraq, of which (85) questionnaires were retrieved and (82) of which were valid for analysis through the ready-made statistical program SPSS and the program EasyFit, and the analysis was as follows. The personal characteristics of the sample covered by the questionnaire were described by specifying the categories, frequencies, and percentages of some personal information of the respondents, which included position, gender, and age, which are summarized in Table (1):

**Table (1): Frequency distribution according to personal information**

| The information | Classes | Number | Percent |
|---|---|---|---|
| Position in the financial institution | Member | 7 | 8.5% |
| | Committee | 42 | 51.2% |
| | Board | 19 | 23.2% |
| | Staff | 14 | 17.1% |
| Sex | Male | 40 | 48.8% |
| | Female | 42 | 51.2% |
| Age | 20-25 | 1 | 1.2% |
| | 26-30 | 12 | 14.6% |
| | 31-35 | 20 | 24.4% |
| | 36-40 | 23 | 28% |
| | 41-45 | 15 | 18.3% |
| | 46+ | 11 | 13.4% |
| | Total | 82 | 100% |

Through Table (1), we note that the general information of the research sample was for positions in the financial institution, distributed between 8.5% for the position (Member), 51.2% for the position (Committee), 23.2% for the position (Board), and finally the position (Staff), with a ratio of 17.1%. Sex: The largest percentage of respondents were females, at 51.2%, compared to males, at 48.8%. Regarding age, it was distributed between 1.2% for the age group (20-25) years, 14.6% for the age group (26-30) years, 24.4% for the age group (31-35) years, 28% for the age group (36-40) years, 18.3 % for the age group (41-45 years) and finally by 13.4% for the age group (46 years and above).

**(7) Study variables**:

The study variables were measured by representing the independent variable "Corporate Governance Issues" with the general average into (20) items divided into four dimensions, where the first dimension represents "Board Role and Composition" which included six items, the second dimension "Transparency and Disclosure" which included five items, The third dimension, "Auditing and Compliance" included four items, and the fourth dimension, "Risk Management," which included five items. The dependent variable, "Financial Performance Indicators" represents the general average of (24) items, divided into three dimensions, where the first dimension represents "Profitability" which includes nine items, the second dimension, "Liquidity" which consists of nine items, and the third dimension, "Loan Portfolio." It included six items, using a five-point Likert scale (strongly disagree = 1, disagree = 2, neutral = 3, agree = 4, and strongly agree = 5).

**Testing the reliability of the internal consistency:**

Before analyzing the questionnaire variables, the extent of internal consistency and consistency of the respondents' answers regarding its variables and the questionnaire, in general, must first be measured (Omar et al. 2020) through the Cronbach's alpha coefficient shown in the following table:

**Table (2):** Cronbach's alpha test

| Variables | Cronbach's alpha | Number of items |
|---|---|---|
| Independent Variable (Corporate Governance Issues) | ٠,٨٤٣ | ٢٠ |
| Dependent Variable (Financial Performance Indicators) | ٠,٨٩٨ | ٢٤ |
| Questionnaire items | ٠,٩٣١ | ٤٤ |

The Cronbach's alpha reliability coefficient for all questionnaire items for the measurement tool has a high degree of reliability because it is greater than 60% (the lowest value was 84.3%). Thus, this means there is internal consistency for the questionnaire variables items, and the overall questionnaire items in general, as the Cronbach Alpha coefficient reached 93.1%.

**Testing the distribution of questionnaire data:**

It can be ensured that the data follows a normal distribution through the use of the Kolmogorov-Smirnov Test (abbreviated as K.S.) and the Chi-Square Test (Ali et al. 2023), based on which the appropriate test for the research hypotheses will be determined, i.e., testing the following hypothesis:
Null hypothesis: the questionnaire variables have a normal distribution.
Alternative hypothesis: the questionnaire variables do not have a normal distribution.
The statistical program (EasyFit) was used to test the above hypothesis at a level of significance (0.05), and the most important results of the two tests are summarised in Table (3):

**Table (3):** Test of normal distribution of questionnaire data

| Variable | Kolmogorov-Smirnov Test | | | Chi-Square Test | | |
|---|---|---|---|---|---|---|
| | Statistics | p-value | Tabulated Value | Statistics | p-value | Tabulated Value |
| Independent | ٠,١١٠٣ | ٠,٢٥٢ | ٠,١٤٧٨ | ٨,٨٦٨ | ٠,١١٤ | ١١,٠٧٠ |
| Dependent | ٠,١٣٨٨ | ٠,٠٧٧ | ٠,١٤٧٨ | ٨,٤٩٤ | ٠,١٣١ | ١١,٠٧٠ |

From Table 3, we notice that the K.S. test shows that the independent and dependent variables follow a normal distribution because the statistic values were equal to (0.1103 and 0.1388), respectively, which are less than their tabulated value, which is equal to (0.1478). This is confirmed by the p-values equal to (0.252 and 0.077), respectively, which are greater than the significance level (0.05). The chi-square test also shows that the two variables follow a normal distribution because the statistical values were equal to (8.868 and 8.494), which are equal to (0.252 and 0.077), respectively, which are greater than the significance level less than its tabular value, which is equal to (11.070). This is confirmed by the p-values, which are equal to (0.114 and 0.131) and greater than the significance level(٠,٠٥) .

**Measuring study variables**: The study included two variables, one independent and the other dependent, which were measured and descriptive statistics were given as follows:
**Independent variable:** Corporate Governance Issues: The research assumes that corporate governance includes (20) items summarized in Table (4):

**Table (4):** Descriptive statistics for the items of the independent variable

| S | Items | Mean | Degree of agreement | Standard Deviation |
|---|---|---|---|---|
| | **1. Board Role and Composition** | | | |
| ١ | The Board of Directors approves and supervises the strategic objectives of the Bank. | 3.9634 | 79.27 | 1.08235 |
| ٢ | The Board of Directors verifies the financial statements that represent the financial position of the Bank | 4.1585 | 83.17 | .80844 |
| ٣ | The Board of Directors ensures that the remuneration policies are commensurate with the Bank's long-term strategic objectives. | 3.9390 | 78.78 | .85125 |
| ٤ | The Board of Directors works to protect the rights and interests of shareholders and depositors by directing and controlling the executive directors in charge of managing the bank's internal operations. | 3.8293 | 76.59 | .91361 |
| ٥ | Members of the Board of Directors have free access to information on time to carry out their duties. | 3.7317 | 74.63 | .94345 |
| ٦ | The Board of Directors and Disclosure assures communication activities with shareholders, stakeholders and depositors | 3.6707 | 73.41 | .96934 |
| | **Mean of First Dimension** | ٣,٨٨٢١ | ٧٧,٦٤ | ٠,٩٢٨١ |
| | **2. Transparency and Disclosure** | | | |
| ٧ | Regular monthly and up-to-standard reports are made available to members. | 3.8415 | 76.83 | 1.12732 |
| ٨ | Information on decisions taken by managers is communicated to shareholders and stakeholders promptly. | 3.6585 | 73.17 | 1.22947 |
| ٩ | The bank has a web page and is constantly updated under the title of disclosure of periodic and annual reports | 3.6707 | 73.41 | 1.12277 |
| ١٠ | The structure and qualifications of the members of the Board of Directors, directors and committees, the structure of incentives and the remuneration policies of shareholders are disclosed | 3.6098 | 72.20 | 1.09720 |
| ١١ | There is an audit committee in the bank to maintain the integrity of the financial statements | 3.6951 | 73.90 | 1.00233 |
| | **Mean of Second Dimension** | ٣,٦٩٥١ | ٧٣,٩٠ | ١,١١٥٨٠ |
| | **3. Auditing and Compliance** | | | |
| ١٢ | There is an independent audit committee (internal and external) that sits monthly. | 3.5610 | 71.22 | .99502 |
| ١٣ | There is an internal policy that guides the activities and reporting channels of the internal controller | 3.6829 | 73.66 | 1.04087 |
| ١٤ | There is a reputable external supervisory body that provides monthly reports on the bank. | 3.9146 | 78.29 | .94544 |
| ١٥ | Monthly audit reports are submitted by internal and external auditors | 3.9268 | 78.54 | .95297 |
| | **Mean of Third Dimension** | ٣,٧٧١٣ | ٧٥,٤٣ | ٠,٩٨٣٦ |
| | **4. Risk Management** | | | |
| ١٦ | The financial institution has a modern risk management policy. | 3.6220 | 72.44 | 1.25354 |
| ١٧ | There is a loan recovery task force with a detailed loan recovery timeline and procedures | 3.5976 | 71.95 | 1.25570 |
| ١٨ | All employee files contain performance appraisal and monitoring forms that are regularly updated | 3.7317 | 74.63 | .99441 |
| ١٩ | All collateral (real property) is checked monthly at the level of the Land Office | 3.6463 | 72.93 | 1.08152 |
| ٢٠ | All loan files are accompanied by business plans in case of commercial loans or a detailed project | 3.8537 | 77.07 | 1.10131 |
| | **Mean of Fourth Dimension** | ٣,٦٩٠٣ | ٧٣,٨٠ | ١,١٣٧٣ |
| | **Overall Mean** | **3.7652** | **75.30** | **1.0384** |

Table (4) shows that the overall mean of the independent variable (Corporate Governance Issues) was (3.7652), which is higher than the hypothetical average (3) by (0.7652), which indicates the agreement of the sample studied with the paragraphs of the independent variable, with an agreement degree of 75.3% and a limited standard deviation of (1.0384) indicates the convergence of the opinions of the sample studied and their lack of dispersion regarding the items measuring the independent variable. The first dimension (Board Role and Composition) obtained an average of (3.8821), which is higher than the default average (3) by (0.8821), with an agreement score of 77.64% and a limited standard deviation of (0.9281). The second dimension (Transparency and Disclosure) received an average of (3.6951), which is higher than the default average (3) by (0.6951), with an agreement score of 73.9% and a limited standard deviation of (1.1158). The third dimension (Auditing and Compliance) obtained an average of (3.7713), which is higher than the default average of (3) by (0.7713), with an agreement score of 75.43% and a limited standard deviation of (0.9836). The fourth dimension (Risk Management) received an average of (3.6903), which is higher than the default average of (3) by (0.6903), with an agreement score of 73.8% and a limited standard deviation of (1.1373).

**Dependent variable:** Financial performance indicators: The research assumes that financial performance indicators include (24) items summarised in Table (5):

**Table (5):** Descriptive statistics for the dependent variable items

| S | Items | Mean | Degree of agreement | Standard Deviation |
|---|---|---|---|---|
| **1. Profitability** | | | | |
| ١ | The bank has achieved acceptable profits in recent years | 4.2073 | 84.15 | 3.63365 |
| ٢ | The cost of the service (loan interest, transfer and deposit fees) is reduced thanks to high profits | 3.6098 | 72.20 | 1.16276 |
| ٣ | The bank has efficiency in making its investment decisions through the profits previously achieved | 3.7073 | 74.15 | .99985 |
| ٤ | The bank achieves a high return on equity periodically that puts it in a better financial position | 3.7927 | 75.85 | 1.07425 |
| ٥ | The financial institution fulfils all its social obligations through realized profits | 3.5488 | 70.98 | 1.04412 |
| ٦ | Financial institution's profits are steadily increasing reflected in lower transaction costs | 3.8293 | 76.59 | 1.14185 |
| 7 | Loan interest is paid on time and the actual is always equal to or greater than the expected amounts | 3.4512 | 69.02 | 1.09039 |
| 8 | Profits are increasing thanks to income-generating assets such as buildings | 3.6098 | 72.20 | 1.08589 |
| 9 | All invoices, creditors, bonuses, etc. are paid on time. | 3.5976 | 71.95 | 1.02872 |
| **Mean of First Dimension** | | ٣,٧٠٦٠ | ٧٤,١٢ | ١,٣٦٢٤٠ |
| **2. Liquidity** | | | | |
| 10 | All member deposits are available upon request and on time | 3.4512 | 69.02 | 1.26835 |
| 11 | A Bank reserve account exists to meet instant credit requests and savings withdrawals | 3.5366 | 70.73 | 1.25899 |
| 12 | The organization targets and meets peak cash demands without stress | 3.5000 | 70.00 | 1.38109 |
| 13 | The institution lends only up to 70% of its savings while the rest and shares are held as reserves in the bank's reserve accounts. | 3.5976 | 71.95 | 1.22585 |
| 14 | There is a cash limit (maximum safe amount) at all bank branches | 3.7927 | 75.85 | 1.18361 |
| 15 | There is daily monitoring of liquidity to ensure the balance of liquidity and profitability | 3.5732 | 71.46 | 1.25738 |
| 16 | There is a different investment account from the current bank accounts in which the excess liquidity is deposited | 3.6585 | 73.17 | 1.06828 |
| 17 | When the demand for loans increases, investments in real estate properties are stopped even when there is excess liquidity in the bank | 3.5244 | 70.49 | 1.23953 |

| | | | | |
|---|---|---|---|---|
| 18 | There is an investment committee that puts all the excess liquidity into profitable projects. | 3.6341 | 72.68 | 1.25228 |
| **Mean of Second Dimension** | | ٣,٥٨٥٤ | ٧١,٧١ | ١,٢٣٧٣٠ |
| **3. Loan Portfolio** | | | | |
| 19 | The number of overdue loans and the amounts you pay at the enterprise is declining over time | 3.7561 | 75.12 | 1.20248 |
| 20 | There is a modern loan policy that has significantly reduced bad debt. | 3.7805 | 75.61 | 1.21741 |
| 21 | The cost of recovering the loan is much lower than the interest on the loan | 3.7561 | 75.12 | .95013 |
| 22 | The loan redemption team has achieved great success in late loan collection | 3.8049 | 76.10 | 1.03565 |
| 23 | All loan application files contain duly registered mortgages | 3.9390 | 78.78 | 1.11497 |
| 24 | No false collateral documents in the bank's loan files | 4.2561 | 85.12 | .75049 |
| **Mean of Third Dimension** | | ٣,٨٨٢١ | ٧٧,٦٤ | ١,٠٤٥٢ |
| **Overall Mean** | | ٣,٧٠٤٨ | ٧٤,١٠ | ١,٢٣٦٢ |

Table (5) shows that the overall mean of the dependent variable (financial performance indicators) reached (3.7048), which is higher than the hypothetical average (3) by (0.7048), which indicates the agreement of the sample studied with the paragraphs of the dependent variable, with an agreement degree of 74.1% and a limited standard deviation. It reached (1.2362) indicating the convergence of the opinions of the sample studied and their lack of dispersion on the items measuring the dependent variable. The first dimension (profitability) received an average of (3.7060), which is higher than the default average (3) by (0.7060), with an agreement score of 74.12% and a limited standard deviation of (1.3624). The second dimension (liquidity) obtained an average of (3.5854), which is higher than the default average (3) by (0.5854), with an agreement score of 71.71% and a limited standard deviation of (1.2373). The third dimension (loan portfolio) received an average of (3.8821), which is higher than the default average (3) by (0.8821), with an agreement score of 77.64% and a limited standard deviation of (1.0452).

### Classification of financial performance indicators according to importance in the bank

The ratios of the three financial performance indicators are summarized in order of importance in the following table:

**Table 6:** Classification of financial performance indicators according to importance in the bank

| N. | indicators | First | Second | Third |
|---|---|---|---|---|
| **1** | **Profitability** | 72% | 20.7% | 7.3% |
| **2** | **Liquidity** | 37.8% | 50% | 12.2% |
| **3** | **Loan portfolio** | 29.3% | 20.7% | 50% |

Table 6 shows the percentages of classification of financial performance indicators according to importance, where the first indicator (profitability) received 72% of the first classification, 20.7% of the second classification, and 7.3% of the third classification, while the second indicator (liquidity) obtained 37.8% of the first classification, 50% of the second classification and 12.2% of the third classification. The third indicator (loan portfolio) received 29.3% of the first classification, 20.7% of the second classification and 50% of the third classification.

- **Testing the study hypotheses**

The questionnaire tested the following hypotheses:

**First hypothesis:**

**Null hypothesis:** Corporate Governance Issues do not affect the financial performance of a sample of commercial banks in the city of Erbil.

**Alternative hypothesis:** Corporate Governance Issues affect the financial performance of a sample of commercial banks in the city of Erbil.

Corporate Governance Issues represent the independent variable, while financial performance represents the dependent variable. On this basis, the hypothesis will be tested by estimating a simple linear regression model (Ali, 2022). The results are summarized in Table (7):

**Table (7):** Analysis of the model of the impact of Corporate Governance Issues on financial performance

| Financial Performance | Regression Coefficients | | p-value | t | F | p-value | $R^2$ |
|---|---|---|---|---|---|---|---|
| Corporate Governance Issues | Constant | -0.606 | 0.079 | -1.779 | 163.057 | 0.000 | 0.671 |
| | Slope | 1.145 | 0.000 | 12.769 | | | |

Through Table (7), we notice that Corporate Governance Issues explain 67.1% of the changes occurring in financial performance, and the p-value of the regression slope test is close to (0.000), which indicates its significance and the importance of the presence of the Corporate Governance Issues variable in the estimated model. We also note that the F-value The calculated value is (163.057), which is greater than its tabulated value, which is below the level of significance (0.05), and the degrees of freedom (1 and 80), which amounted to (3.971). This means that the estimated model is suitable for the data, and this is confirmed by the p-value, which is close to (0.000), which is less than the level of significance. (0.05) Therefore, the null hypothesis will be rejected and the alternative hypothesis will be accepted, which states that there is a statistically significant effect of Corporate Governance Issues on the financial performance of a sample of commercial banks in the city of Erbil, which has been tested and its results circulated to the research community as a whole, and a simple linear regression model.

$$\hat{y}_i = -0.606 + 1.145 x_i$$

**Second hypothesis:**

Null hypothesis: Corporate Governance Issues do not affect the three financial performance indicators.
Alternative hypothesis: Corporate Governance Issues affect the three financial performance indicators.
Corporate Governance Issues represent the independent variable, while the three financial performance indicators (profitability, liquidity, and loan portfolio) represent the dependent variable. On this basis, the hypothesis will be tested by estimating a simple linear regression model for each indicator. The results are summarized in Table (8):

**Table (8):** Analysis of the model of the impact of Corporate Governance Issues on the three financial performance indicators

| Financial Performance Indexes | Regression Coefficients | | p-value | t | F | p-value | $R^2$ |
|---|---|---|---|---|---|---|---|
| profitability | Constant | -٠,٥٨٦ | ٠,٢٢٦ | -1.221 | ٨١,٦٠٢ | ٠,٠٠٠ | ٠,٥٠٥ |
| | Slope | ١,١٤٠ | ٠,٠٠٠ | ٩,٠٣٣ | | | |
| liquidity | Constant | -١,٦٢٤ | ٠,٠٠٠ | -٣,٥١٦ | ١٢٩,٥٨ | ٠,٠٠٠ | ٠,٦١٨ |
| | Slope | ١,٣٨٤ | ٠,٠٠٠ | ١١,٣٨٣ | | | |
| loan portfolio | Constant | ٠,٨٩٠ | ٠,٠٥٣ | ١,٩٦٨ | ٤٤,٦٤٩ | ٠,٠٠٠ | ٠,٣٥٨ |
| | Slope | ٠,٧٩٥ | ٠,٠٠٠ | ٦,٦٨٢ | | | |

Through Table (8), we notice that Corporate Governance Issues explain 50.5% of the changes occurring in the profitability index, and the p-value of the regression slope test is close to (0.000), which indicates its significance and the importance of the presence of the Corporate Governance Issues variable in the estimated model. We also note that the F-value The calculated value is (81.602), which is greater than its tabulated value, which is below the level of significance (0.05), and the degrees of freedom (1 and 80), which amounted to (3.971). This means that the estimated model is suitable for the data, and this is confirmed by the p-value, which is close to (0.000), which is less than the level of significance. (0.05) Therefore, the null hypothesis will be rejected and the alternative hypothesis will be accepted, which states that there is a statistically significant effect of Corporate Governance Issues on the profitability index for a sample of commercial banks in the city of Erbil, which was tested and its results were generalized to the research community as a whole, and a simple linear regression model:

$\hat{y}_{1i} = -0.586 + 1.140x_i$

Corporate Governance Issues explain 61.8% of the changes occurring in the liquidity index, and the p-value of the regression slope test is close to (0.000), which indicates its significance and the importance of the presence of the Corporate Governance Issues variable in the estimated model. We also note that the calculated F-value is equal to (129.581), which is greater than its tabular value is below the level of significance (0.05) and the degrees of freedom (1 and 80) amounted to (3.971). This means that the estimated model fits the data, and this is confirmed by the p-value, which is close to (0.000), which is less than the level of significance (0.05). Therefore, the null hypothesis will be rejected and the alternative hypothesis will be accepted, which states that there is a statistically significant effect of Corporate Governance Issues on the liquidity index for a sample of commercial banks in the city of Erbil, was tested and its results were generalized to the research community as a whole, and the simple linear regression model: $\hat{y}_{2i} = -1.624 + 1.384x_i$

Corporate Governance Issues explain only 35.8% of the changes occurring in the loan portfolio index, and the p-value of the regression slope test is equal to (0.000), which indicates its significance and the importance of the presence of the Corporate Governance Issues variable in the estimated model. We also note that the calculated F-value is equal to (44.649), which is Greater than its tabular value, below the level of significance (0.05), and the degrees of freedom (1 and 80), which amounted to (3.971). This means that the estimated model fits the data, and this is confirmed by the p-value, which is close to (0.000), which is less than the level of significance (0.05). Therefore, it will be rejected. The null hypothesis and acceptance of the alternative hypothesis, which states that there is a statistically significant effect of Corporate Governance Issues on the loan portfolio index for a sample of commercial banks in the city of Erbil, was tested and its results were generalized to the research community as a whole, and a simple linear regression model: $\hat{y}_{3i} = 0.890 + 795x_i$

**Results:**

1. **Dimension One**: The study revealed that the second item, which states "The Board of Directors verifies the bank's financial statements," ranked first with a mean score of 4.1585. This indicates that most of the sample agrees on this item, highlighting the importance of the Board of Directors' role and their commitment to managing the bank and ensuring efficient performance.

2. **Disclosure and Transparency Dimension**: The first item, stating "Monthly reports will be prepared regularly," ranked first with a mean score of 3.8415. The last item, "There is an audit committee in the bank to maintain the integrity of the financial statements," ranked second. This indicates that the banks in the study sample emphasize the application of banking governance principles by regularly preparing financial reports and having an internal audit committee to ensure the integrity of financial operations.

3. **Audit and Compliance Dimension**: The last item, which states "Monthly audit reports are submitted by internal and external auditors," ranked first with a mean score of 3.9268. This shows that financial statements are audited by both internal and external auditors to ensure integrity in banking operations.

4. **Risk Management Dimension**: The last item, stating "All loan files are accompanied by business plans in the case of commercial loans," ranked first with a mean score of 3.8537. This indicates that the management of the banks in the study sample has a specific work plan and program for managing loans.

5. **Profitability Dimension**: The first item, stating "The bank has made profits in recent years," ranked first. This demonstrates that banks have achieved profits as a result of applying banking governance.

6. **Liquidity Dimension**: The fifth item, stating "There is a cash ceiling, i.e., the maximum safe amount," ranked first with a mean score of 3.7927. This indicates that the surveyed banks emphasize having a liquidity ceiling to ensure the bank is in a safe liquidity position and to balance profitability and liquidity.
7. **Loan Portfolio Dimension**: The last item, stating "There are no false guarantee documents in the bank's loan files," had a mean score of 4.2561. This indicates the absence of unsound files and that the bank follows prudent management in granting loans.
8. **Impact of Banking Governance on Financial Performance**: There is a statistically significant impact of banking governance on financial performance, with a positive relationship indicating that applying governance principles will increase financial performance by 1.145.
9. **Impact on Profitability Index**: There is a statistically significant impact of banking governance on the profitability index, with a positive relationship indicating that applying governance principles will increase profitability by 1.140.
10. **Impact on Liquidity Index**: Results show a statistically significant impact of banking governance on the liquidity index, with a positive relationship indicating that applying governance principles increases liquidity by 1.384.
11. **Impact on Loan Portfolio Index**: Results indicate a statistically significant impact of banking governance on the loan portfolio index, with a positive relationship indicating that applying governance principles will increase the loan portfolio by 795.

**Recommendations:**

1. **Encouragement by the Central Bank**: The central bank should encourage commercial banks to optimally and effectively apply banking governance principles in line with the economic environment.
2. **Establishment of a Supervisory Body**: Establish a supervisory body under the central bank to monitor and oversee the implementation of banking governance in commercial banks.
3. **Enhancing Internal Control and Audit Procedures**: Strengthen internal control and audit procedures as early warning tools for financial risks, which will help diagnose and address issues.
4. **Training Programs**: Conduct training programs for commercial bank employees in the field of governance to effectively qualify staff.
5. **Mandatory Governance**: Enforce mandatory governance in commercial banks among all parties to ensure the consistency of information, accountability, disclosure, and transparency.
6. **Strengthening Governance Application**: Emphasize the importance of strengthening the application of banking governance to protect banks from financial fraud, administrative corruption, crises, and bankruptcy.
7. The future researches are encouraged to undertake other banks like Islamic banks or other industries like manufacturing, tourism, rather than just focus on domestic-based banks. It can broaden the scope and quality of the research.

## References

1- Agrawal, A., & Knoeber, C. R. (1996). Firm performance and mechanisms to control agency problems between managers and shareholders. *Journal of Financial and Quantitative Analysis, 31*(3), 377-397.
2- Ali, T. H. (2022). Modification of the adaptive Nadaraya-Watson kernel method for nonparametric regression (simulation study). *Communications in Statistics-Simulation and Computation, 51*(2), 391-403.
3- Ali, T. H., Al-Saffar, A., & Ismael, S. S. (2023). Using Bayes weights to estimate parameters of a Gamma Regression model. *Iraqi Journal of Statistical Sciences, 20*(20), 43-54.
4- Arouri, M. E. H. (2011). Does crude oil move stock markets in Europe? A sector investigation. *Economic Modelling, 28*, 1716-1725.
5- Avogouleas, S. (2009). Corporate Governance and the global performance of Islamic banks. Journal of corporate law studies. Pp 1-58.
6- Beasley, M. (1996). An empirical analysis between the board of directors composition and financial statements fraud. *The Accounting Review, 71*, 443-466.
7- Berle, A., & Means, C. (1932). *The modern corporation and private property*. Macmillan Publishing Co. https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwiurtmPxc_4AhXRwAIHHT9pB9QQFnoECAUQAQ&url=https%3A%2F%2Fedisciplinas.usp.br%2Fpluginfile.php%2F106085%2Fmod_resource%2Fcontent%2F1%2FDCO0318_Aula_0_-_Berle__Means.pdf&usg=AOvVaw2599OsXZNmPDMJpgTztpjh
8- Black, B., Jang, H., & Kim, W. (2006). Does corporate governance predict firm's market value? Evidence for Korea. *Journal of Law Economics and Organization, 22*, 366-413.
9- Boot, J., Cornett, M., &Tehranian, H. (2000). Boards of directors, ownership, and regulation. Journal of Banking & Finance.
10- Brickley, J., Coles, J., & Terry, R. (1994). Outside directors and the adoption of poison pills. *Journal of Financial Economics, 35*, 371-390.
11- Cadbury, A. (1992). *Report of the Committee on the Financial Aspects of Corporate Governance*. London: Gee.
12- Capel. J. (2011). Corporate governance and financial performance. Journal of Payments strategy & systems, pp 17-29.
13- Cheng, C. M., & Jaggi, B. L. (2000). The association between independent non-executive directors, family control and financial disclosures. *Journal of Accounting and Public Policy, 19*(4/5), 285-310.
14- Chrisman, J. J. (2019). Stewardship theory: Realism, relevance, and family firm governance. *Entrepreneurship Theory and Practice*. https://journals.sagepub.com/doi/abs/10.1177/1042258719838472
15- Coles, J. L., Daniel, N. D., & Naveen, L. (2008). Boards: Does one size fit all? *Journal of Financial Economics, 87*(2), 329-356. https://doi.org/10.1016/j.jfineco.2006.08.008
16- Dahya, J., & McConnell, J. J. (2005). Outside directors and corporate board decisions. *Journal of Corporate Finance, 11*(1-2), 37-60.
17- Dahya, J., McConnell, J. J., & Travlos, N. G. (2002). The Cadbury committee, corporate performance, and top management turnover. *Journal of Finance, 57*, 461-483.
18- Davis, J. H., Schoorman, F. D., & Donaldson, L. (1997). Toward a stewardship theory of management. *Academy of Management Review, 22*(3), 611-613. https://doi.org/10.5465/amr.1997.9707180258
19- Drobetz, W., Schillhofer, A., & Zimmermann, H. (2003). Corporate Governance and Expected Stock Returns: Evidence from Germany. (ECGI - Finance Working Paper No. 11/2003). Available at SSRN: https://ssrn.com/abstract=379102 or http://dx.doi.org/10.2139/ssrn.379102
20- Fama, E. F. (1980). Agency problems and the Theory of the Firm. *Journal of Political Economy, 88*(2), 288-307.
21- Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *Journal of Law and Economics, 26*(2), 301-325.
22- Francis, B., Hasan, I., & Wu, Q. (2015). Professors in the boardroom and their impact on corporate governance and firm performance. *Journal of Financial Management, 44*(3), 547-581. https://doi.org/10.1111/fima.12069 Franks and Mayer. (2001). Corporate ownership and corporate control: a study of France, Germany and the UK. P191-231.
23- Ghazali, N. A. M. (2010). Ownership structure, corporate governance and corporate performance in Malaysia. *International Journal of Commerce & Management, 20*(2), 109-119. https://doi.org/10.1108/10569211011057245
24- Hillman, A. J., & Dalziel, T. (2003). Boards of directors and firm performance: Integrating agency and resource dependence perspectives. *Academy of Management Review, 28*(3), 383-396. https://doi.org/10.2307/30040728
25- Hossain, M., Perera, M., & Rahman, A. (1995). Voluntary disclosure in the Annual Reports of New Zealand companies. *Journal of International Financial Management and Accounting, 6*(1), 69-87.
26- Jensen, M. C. (1983). Organization Theory and Methodology. *The Accounting Review, 58*(2), 319-339.
27- Jensen, M. C. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *Journal of Finance, 48*, 831-880.
28- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm, managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics, 3*(4), 305-360. https://doi.org/10.1016/0304-405X(76)90026-X
29- Jensen, M.C., (1993).The modern industrial revolution, exit, and the failure of Internal control systems. The Journal of Finance, 44(3), pp.831-837.

30- Kim, A. K., Kitsabunnarat-Chatjuthamard, P., & Noftsinger, J. R. (2007). Large shareholders, board independence and minority shareholders rights: Evidence from Europe. *Journal of Corporate Finance, 13*, 859-880.
31- Kluvers, R., & Tippett, J. (2011). An exploration of stewardship theory in a not-for-profit organization.
32- Leo, M., Sharma, S., & Maddulety, K. (2019). Machine learning in banking risk management: A literature review. *Risks, 7*(1), 29.
33- Levine, R. (2004). The corporate governance of banks: A concise discussion of Concepts and evidence. World Bank Policy research.
34- Lim, S., Matolcsy, Z., & Chow, D. (2007). The association between board composition and different types of voluntary disclosure. *European Accounting Review, 16*(3), 555-583.
35- Linck, J. S., Netter, J. M., & Yang, T. (2008). The determinants of board structure. *Journal of Financial Economics, 87*(2), 308-328.
36- Macey, J. R., & O'Hara, M. (2001). The Corporate Governance of Banks. *Federal Reserve Bank of New York Economic Policy Review*.
37- Maher and Andersoon (1999). Corporate governance: effects on firm performance and Economic growth contemporary accounting research Vol 25, 99 351-405.
38- Malik, M. S., & Makhdoom, D. D. (2016). Does corporate governance beget firm performance in fortune global 500 companies? *Corporate Governance, 16*(4), 747-764. https://doi.org/10.1108/CG-12-2015-0156
39- McGe, R. (2008). Corporate governance in Asia: a comparative study of indonsia, Malaysia, Thiland and Vietnam.
40- Mori, N. (2014). Directors' diversity and board performance: Evidence from East African microfinance institutions. *Journal of African Business, 15*(2), 100-113. https://doi.org/10.1080/15228916.2014.920654
41- Omar, C., Ali, T. H., & Hassan, K. (2020). Using Bayes weights to remedy the heterogeneity problem of random error variance in linear models. *Iraqi Journal of Statistical Sciences, 17*(2), 58-67.
42- Pfeffer, J. (1972). Administrative Science Quarterly. *Vol. 17, No. 2 (Jun., 1972), 218-228.*
43- Samimi, A. (2020). Risk management in information technology. *Progress in Chemical and Biochemical Research, 3*(2), 130-134.
44- Schillemans, T., & Bjurstrøm, K. H. (2020). Trust and verification: Balancing agency and stewardship theory in the governance of agencies. *International Public Management Journal, 23*(5), 650
45- Yermack, D. (1996). Higher corporate governance with a small board of Directors. Journal of financial economics Vl 40. Pp185-211.