RESEARCH ARTICLE

The Impact of Anti-Money laundering Policies of Iraq Central Bank on the Quality of Financial Reports of Private Iraqi Banks

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ARTICLE INFO	ABSTRACT
  *Corresponding Author: Dr. Amir Mansour Tehranchian m.tehranchian@umz.ac.ir	This study investigates the impact of the Central Bank of Iraq's anti-money laundering (AML) policies and other effective variables on the quality of financial reporting in selected private Iraqi banks. Financial reporting quality is crucial for stakeholders, including potential and existing investors, creditors, and other users, for making informed investment decisions and assessing the financial health and performance of banks. Despite extensive research on financial reporting quality in various contexts, there has been limited focus on the banking sector in Iraq, particularly regarding the effectiveness of AML policies. The research utilizes a panel data model, employing the Generalized Method of Moments (GMM) estimator due to the nature of the data and the requisite pre-estimation tests. The analysis covers data from the financial statements of selected private Iraqi banks over the period of 2014-2023. Data sources include annual financial reports from selected banks, the Central Bank of Iraq, and World Bank indicators (WDI). Key variables examined include the capital adequacy ratio, bank age, number of branches, and number of employees, with a specific focus on the AML index as the primary variable of interest. Statistical analyses, including significance testing and t-statistics, are employed to determine the relationships between these variables and the quality of financial reporting. Results indicate a positive and significant relationship between the AML index and the quality of financial reporting, suggesting that effective AML policies enhance transparency and reliability in financial disclosures. Other variables, such as the capital adequacy ratio, also show a significant positive impact, indicating that higher capital adequacy contributes to better financial reporting quality. However, factors like bank age, number of branches, and number of employees do not exhibit a significant correlation with financial reporting quality in the selected Iraqi banks. The research findings emphasize the critical role of regulatory frameworks in fostering high-quality financial reporting. The positive impact of AML policies highlights the importance of regulatory measures in enhancing financial transparency and accountability in the banking sector, ultimately contributing to better governance and increased stakeholder confidence. The findings also underscore the importance of capital adequacy in ensuring the robustness of financial reporting. This research contributes to the existing literature by providing empirical evidence from the Iraqi banking sector and highlights the necessity for ongoing improvements in regulatory practices to sustain and enhance financial reporting quality. Policy implications suggest that

strengthening AML policies and ensuring adequate capital adequacy are essential for improving the overall quality of financial reporting.

1. INTRODUCTION

Money laundering is a pervasive issue that poses significant risks to the integrity of financial systems worldwide. In Iraq, the prevalence of this illegal activity has necessitated stringent measures by regulatory bodies, particularly the Central Bank of Iraq (CBI). This thesis examines the impact of the CBI's policies on combating money laundering and how these measures influence the quality of financial reports produced by private Iraqi banks.

The Central Bank of Iraq plays a pivotal role in regulating and supervising the banking sector, ensuring adherence to international standards and promoting financial stability. In response to growing concerns over money laundering, the CBI has implemented a series of policies and procedures aimed at detecting, preventing, and prosecuting such activities. These efforts are not only crucial for maintaining the credibility and stability of the Iraqi financial system but also for fostering an environment of transparency and trust among local and international stakeholders.

The effectiveness of anti-money laundering (AML) policies can significantly influence the quality of financial reporting in banks. High-quality financial reports are essential for accurate decision-making by investors, regulators, and other stakeholders. They reflect the true financial health of institutions, providing insights into their operations, risk management practices, and overall stability. In the context of Iraqi banks, the implementation of robust AML policies by the CBI is expected to enhance the transparency, accuracy, and reliability of financial reporting.

This thesis aims to explore the relationship between the CBI's AML policies and the quality of financial reports in private Iraqi banks. By analyzing the regulatory framework, the compliance measures adopted by banks, and the subsequent impact on financial reporting, this study seeks to provide a comprehensive understanding of the current landscape. The findings will offer valuable insights into the effectiveness of regulatory interventions and their implications for the financial sector in Iraq.

The research aims to contribute to the existing body of knowledge on AML efforts in Iraq and their impact on financial reporting. It will also provide practical recommendations for policymakers, regulators, and banking institutions to further strengthen the fight against money laundering and improve the overall quality of financial information in the Iraqi banking sector.

The paper is organized into five sections, beginning with a review of existing literature, followed by an explanation of the research methodology. The subsequent section presents a model estimation, summary of results and their interpretation, with the final section offering conclusions and recommendations.

2. LITERATURE REVIEW

The financial system is the main channel through which proceeds from criminal activities are laundered. Money laundering has the potential to destabilize financial institutions and the entire financial system. According to Vanderzan et al. (2007), money laundering leads to financial market corruption and reduces customer trust in the financial system. It poses significant credit risks to financial institutions by compromising their integrity. Uncontrolled money laundering implies financial institutions' complicity in generating illegal funds, affecting market trust and confidence.

Financial institutions that benefit from money laundering may struggle to withstand market competition due to challenges in managing assets, liabilities, and operations effectively. Institutions

heavily reliant on illicit capital may fail market competition tests, leading to many of them collapsing. Large capital inflows and outflows from money laundering adversely affect foreign exchange markets, causing local currency fluctuations. Efforts to curb money laundering significantly impact the development and stability of the financial sector .

AML policies are considered effective government policies that contribute to financial stability when implemented properly. However, some studies have identified conflicting results. Geiger and Wuensch (2007) suggested that AML regulations imposed on financial institutions could negatively affect these institutions by increasing transaction costs. Masciandaro (1999) attempted to quantify the costs of AML regulations and concluded that such regulations do not improve banking efficiency. Combatting money laundering threatens public confidence in the financial system, especially when laundering is conducted through the same financial institutions. However, Afuouda et al. (2020) found that implementing AML regulations in financial institutions is expected to restore and improve confidence in these institutions and the overall financial system .

The theoretical debate on supervisory strategies in the financial sector revolves around the most effective ways to enforce compliance. Ayres and Braithwaite (1992) propose a multi-layered enforcement strategy, ranging from soft sanctions and moral suasion to harsher penalties. The bottom layer, persuasion, aligns with a risk-based approach where the stringency of AML regulations is adjusted based on the assessed risk of money laundering and terrorism financing (Al-Rashdan, 2012). This approach encourages a proactive compliance culture within financial institutions, potentially improving the quality of financial reporting through enhanced diligence and thorough internal controls. On the other hand, the top of the pyramid entails rigorous enforcement with severe penalties. While this can ensure compliance, it risks promoting a checkbox mentality where institutions comply superficially to avoid fines, rather than engaging in meaningful AML practices. This can lead to an increase in the number of Suspicious Transaction Reports (STRs) without necessarily improving their qualitative content (Takáts, 2011).

Financial institutions often view AML compliance as a costly regulatory burden rather than a risk management tool. Programs focused on awareness-raising and demonstrating the effectiveness of reporting systems can significantly improve compliance efforts (Pok, Omar, and Sathye, 2014). For instance, in Malaysia, such programs have proven effective in enhancing compliance without resorting to heavy penalties.

KPMG's 2014 survey revealed that financial institutions prefer stronger relationships with regulators, including additional guidance on AML practices. This cooperative approach can foster a culture of compliance, where financial institutions implement robust AML measures that contribute to the accuracy and reliability of financial reporting. However, achieving this requires a change in attitude among banks and intermediaries, viewing AML assignments as integral to their risk management strategies (Stellin, 2016).

Money laundering directly impacts the quality of financial reporting by manipulating financial data to hide illegal activities. The integrity of financial reports is compromised, leading to inaccurate and misleading information. This undermines the reliability of financial statements, which are crucial for decision-making by stakeholders, including investors, regulators, and policymakers.

Anti-Money Laundering (AML) regulations aim to improve the transparency, accuracy, and reliability of financial reporting. By enforcing strict compliance measures, financial institutions are required to implement robust internal controls and auditing processes. These measures help in detecting and preventing suspicious activities, thereby enhancing the overall quality of financial reports. Consequently, AML policies contribute to greater financial accountability and trust in financial institutions. The impact of Anti-Money Laundering regulations on the quality of financial reporting

is profound and multifaceted. By enforcing transparency, strengthening internal controls, reducing financial statement manipulation, and building stakeholder trust, AML policies significantly enhance the accuracy and reliability of financial reports. As financial institutions continue to evolve and adapt to these regulatory frameworks, the overall integrity and accountability of financial reporting are expected to improve, fostering a more transparent and trustworthy financial system. (Ofoeda et al., 2020).

The commitment of the Central Bank of Iraq to implementing effective policies in combating money laundering and enhancing the quality of financial reports contributes significantly to the stability of the financial system. This stability is crucial for fostering confidence in the Iraqi financial market, thereby encouraging investment and supporting national economic growth. By enforcing robust accounting standards, conducting regular inspections, and offering continuous training and development, the central bank ensures that financial institutions operate transparently and efficiently. This comprehensive approach not only mitigates financial risks but also promotes a trustworthy financial environment, which is essential for the sustainable development of the Iraqi economy.

Singh et al. (2022) in a study titled "Auditor Busyness, Audit Report Timeliness, and Financial Reporting Quality," focusing on Australian companies during the period 2004-2015, concluded that audit partners with multiple clients spend more time completing the annual audit process. More importantly, companies with busier auditors, who spend more time completing their audits, tend to have poorer financial reporting quality.

Hassan, Kassim, and Hamid (2020) in their research "Audit Quality, Audit Committee, and Financial Reporting Quality" found that corporate governance mechanisms have a significant effect on real earnings management, while the independence and size of the audit committee have minimal impact on real earnings management. The results indicate that higher audit quality leads to less real earnings management.

Irwandi and Pamungkas (2020), by examining the determinants of financial reporting quality and focusing on 287 companies over the years 2015-2018, found that the risk (likelihood) of investor distrust impacts financial reporting quality. Meanwhile, the legal expertise of audit committee members is a moderating variable that strengthens (improves) the relationship between this risk and financial reporting quality.

One of the latest studies related to our research conducted by Afouda et al. (2020). They identified that effective anti-money laundering (AML) regulations can instill customer trust in the financial system, which in turn promotes the development of the financial market. The study also revealed that AML regulations enhance the growth of financial institutions and markets, promote good governance, and boost the reputation of financial institutions, contributing to long-term financial sector development.

Yanida and Widagdo (2019) in their study "Corporate Governance and Financial Reporting Quality" concluded that the use of corporate governance is one of the forms to minimize agency conflicts that occur between investors and management, such that the information produced by companies reflects high-quality information. This issue creates agency problems in the form of information asymmetry between managers and owners, providing opportunities for managers to engage in earnings management to maximize their own utility. A strategy to limit earnings management activities is the implementation of corporate governance.

Rubin and Segal (2018), examined the skills of managers and financial reporting quality. The results indicate that the skills of board members lead to improved financial reporting quality. Habib and Bhuiyan (2016), investigated the role of audit committee members and compensation on financial

reporting quality. The results indicate that the oversight of audit committee members and executive compensation lead to improved financial reporting quality.

Ham, Lang, Seybert, and Wang (2017), in their study on managerial narcissism and financial reporting quality, concluded that CFO narcissism is associated with higher earnings management, less timely loss recognition, weaker internal control quality, and a greater likelihood of restating financial statement. Hamino et al., (2016), conducted a study on terrorism financing in Malaysia and concluded that terrorism-related money laundering crimes must be taken seriously within official institutions. Collaboration among all entities within a country or among a group of countries is essential in combating money laundering effectively. Dogan et al. (2016), examined the relationship between profitability, company size, and financial risk with timely reporting for internationally listed companies. The results indicated that profitable companies were more likely to report financial information quickly compared to unprofitable ones. Additionally, company size, financial risk, and a history of timely reporting were significant factors affecting timely reporting. Aubert (2016), investigated the reasons behind different managerial interests in the timing of annual financial reporting delays in French companies. He found that annual reporting delays were directly related to financial leverage and negatively related to previous period delays. The study's average delay for 250 companies was 116.05 days. Shaw (2015), investigated the relationship between disclosure quality, earnings smoothing, and timeliness of earnings. Using data from 1,112 company years, he concluded that companies with higher reporting quality used more discretionary accruals and focused more on earnings management and smoothing. Additionally, the timeliness of earnings was inversely related to disclosure quality when bad news (unprofitability) was present.

Ansa and Lountis (2015), Analyzing 95 companies listed on the Athens Stock Exchange, they found that larger companies, service companies, and those audited by the Big Five audit firms had faster reporting times. Their results also showed an average reporting delay of 161 days, with construction companies and companies with unqualified audit reports making more effort for timely reporting. Tapman(2015), reviewed measures taken in various countries and established that political instability increases the incidence of crimes. Kamal(2014), identified the impact of employee training on anti-money laundering within the banking system. Banking secrecy remains a significant barrier against AML efforts as it hinders access to bank deposits and protects suspicious funds. This is a conventional rule among active banks where customer secrecy and operations are preserved unless stipulated otherwise by law or agreement. Al-Nemat (2014), pointed out that the risks posed by money laundering have driven many governments to declare the need for close international cooperation to combat money laundering, achieving international consensus. Many countries are currently enacting laws and regulations in response. The growing threat of money laundering and global terrorism justifies banking confidentiality, as effective prevention of these threats is impossible without information flow from banks.

Barua (2014), examined measures of financial reporting quality using qualitative characteristics of financial information from the FASB's conceptual framework. He found that companies with high relevance and reliability of earnings had higher earnings response coefficients and greater explanatory power in price-earnings regressions compared to those with lower relevance and reliability. Ghosh et al. (2013), explored financial reporting quality and earnings response coefficients during consistent earnings and sales growth. Their findings indicated that companies with earnings growth accompanied by sales growth had higher financial reporting quality and earnings response coefficients than those with cost-reduction-driven growth.

Rahman (2013), indicated that compliance with AML regulations, especially those related to customer record-keeping, employee training, and reporting suspicious transactions, is the best measure against money laundering and other frauds. However, a drawback is that the Financial Action Task Force (FATF) regulations lack legal enforcement and are ineffective until incorporated

into national laws, leading to weak compliance globally. Therefore, implementing FATF regulations with adjustments to national laws and strict adherence to punitive measures is essential. Hanlon (2012), examined the relationship between taxes and financial reporting quality, concluding that companies with significant differences between financial statements and tax returns had fewer stable accruals and cash flows. Park et al. (2012), investigated the effect of earnings predictability on bank loan contracts. Analyzing 8,022 bank loan contracts of American companies, they found that companies with higher earnings predictability enjoyed more favorable loan terms, such as lower interest rates, longer maturities, and fewer restrictive covenants. The relationship between earnings predictability and loan costs depended on access to private information about the borrower, competition among banks, bonds, and company size.

Firth et al. (2012), examined the impact of various auditor rotation types (mandatory, voluntary, partner-level, and firm-level) on the quality of professional judgments by auditors in China's capital market. Their findings indicated a significant inverse relationship between mandatory partner rotation and voluntary firm rotation with the quality of auditors' professional judgments, while this relationship was not significant for voluntary partner rotation and mandatory firm rotation.

Jiaolansan (2012), investigated the impact of financing through equity issuance and bank debt on the relationship between investment and financial reporting quality. The study specifically examined the differences between residual accounting information related to shareholders and the impact of bank debt on the relationship between financial reporting quality and corporate investment decisions. The research concluded that financial reports can gradually decrease over time, influencing growth opportunities and ultimately the optimal level of investment.

Kim and Kio (2012), studied the relationship between earnings quality and stock returns in the context of macroeconomic variables. Using accrual quality as a measure of earnings quality, they found that accrual quality changes with macroeconomic variables. Companies with lower accrual quality were more vulnerable to macroeconomic shocks and changes.

Minnis (2011), studied how the auditability of financial statements affects debt interest rates. He examined private American companies not required to have audited financial statements and found that those with audited statements had significantly lower debt costs, as creditors valued audited financial statements more when determining interest rates.

Costello and Wittenberg (2011), in Their study, titled "The Impact of Financial Reporting Quality on Debt Contracts: Evidence from Internal Control Weakness Reports," examined how financial reporting quality affects the choice of restrictive covenants in debt contracts by creditors. They found that when a company has significant internal control weaknesses, creditors reduce the use of financial ratio-based covenants and prefer options like collateral, interest, and performance evaluations based on customer credit ratings. Agyey and Abdulkarim (2010), noted that the survival and integrity of financial institutions are at risk due to the prevalence of money laundering. They also recommended measures to prevent money laundering, including hiring employees to oversee compliance with the institution's AML regulations. Tang and Ai (2010), examined various aspects of AML regulation implementation in China, finding that developing countries adopt these regulations in two ways: non-enforcement and selective enforcement. They discovered a negative relationship between the effectiveness of AML regulations and money laundering. The increase in money laundering crimes in China was attributed to the unusual implementation of FATF recommendations due to political disruptions.

Velury and Jenkins (2009), explored the monitoring role of institutional investors on earnings quality. Using multivariate regression, they analyzed the impact of institutional ownership percentage, ownership concentration, cumulative ownership of the five largest institutional investors, managerial ownership percentage, company size, and debt ratio on earnings quality. The

results indicated a positive significant relationship between institutional ownership and earnings quality, while ownership concentration had a negative impact on earnings quality. Alok (2009), investigated the quality of earnings and the earnings response coefficient under conditions of consistent earnings growth with stable revenue growth. The study found that companies with earnings growth accompanied by revenue growth had higher earnings quality and future operating profits than those with cost-reduction-driven growth. Companies with revenue-driven growth also exhibited higher earnings response coefficients. Sabbutina (2008), studied the compatibility of local AML regulations with international standards in Russia, focusing on four elements: reporting, training, supervision, and customer identification for comparison purposes. The study found that except for specific terminology, other aspects were consistent. The study recommended promoting cooperation among various financial institutions, especially banks, and countries to combat money laundering. Cohen and Zarowin (2008), examined the relationship between financial reporting quality and investment in capital assets. They found that companies with lower financial reporting quality had lower stock returns and return on assets, and their investment in capital assets was less sensitive to internal cash flows. Kevin Logie (2004), tested the quality of financial reporting based on the conceptual framework of the Financial Accounting Standards Board (FASB). He found that the quality of financial reporting improves with increased institutional ownership. Consequently, the components of company earnings become more relevant and reliable.

While previous studies have explored the effects of different factors on financial reporting quality within the economic literature, they have not specifically focused on Iraq or the banks included in this study. This makes our research novel in this regard. Additionally, no prior research has examined the impact of the Central Bank of Iraq's Anti-Money Laundering (AML) policies on financial reporting quality. Furthermore, previous research has predominantly employed simple methodologies such as correlation coefficients or basic regression analysis. In contrast, our study utilizes more sophisticated econometric techniques, specifically panel data analysis, to estimate the model. The accounting data used in this research is also sourced from the financial statements of the banks under study, ensuring that we are using the most recent data available in this context.

3. MODEL AND METHODOLOGY OF RESERCH

Based on the theoretical framework and previous studies such as Afouda et al. (2020), Irwandi and Pamungkas (2020), and Andra Gajevszky (2015), the following regression equation is used to examine the impact of the Central Bank of Iraq's anti-money laundering policies and other relevant accounting and financial variables on the financial reporting quality of selected banks in Iraq.

$$FRQ_{it}=\alpha+\beta_1 FRQ_{i,\,t-1} + \beta_2 \text{Market Power}_{i,\,t}+\beta_3 LLP_{i,\,t}+\beta_4 Size_{i,\,t}+\beta_5 CAR_{i,t}+\beta_6 Age_{i,t}+\beta_7 NBB_{i,t}+\beta_8 HR_{i,t}+\beta_9 AML_{i,t}+\epsilon_{i,t}$$

(3-1)

Where:

FRQit indicates financial reporting quality of selected banks in Iraq and it is dependent variable in this research. financial reporting quality (FRQ) of banks needs to be calculated first. The FRQ is estimated using discretionary accruals based on the modified Jones model. To calculate discretionary accruals, the total accruals of the bank are adjusted by subtracting non-discretionary accruals. The total accruals of the bank are calculated as follows (Taghavi and Kurdistani, 2004):

$$TCA_i.t = (\Delta CA_i.t - \Delta Cash_i.t) - (\Delta Cl_i.t - \Delta STDebt_i.t)$$

(3-2)

 In this equation:

$\Delta CA_i.t$ is the change in current assets of the bank from the previous year. $\Delta Cash_i.t$ is the change in cash and short-term investments of the bank from the previous year. $\Delta Cl_i.t$ is the change in current liabilities of the bank from the previous year. $\Delta STDebt_i.t$ is the change in short-term debt of the bank

from the previous year. To measure non-discretionary accruals, the following regression model is used to estimate the coefficients (Mashayekhi et al., 2005):

$$\frac{TCAi.t}{TAi.t-1} = \alpha1\left(\frac{1}{TAi.t-1}\right) + \alpha2\left(\frac{\Delta REVi.t}{TAi.t-1}\right) + \varepsilon i.t \tag{3-3}$$

In this equation:

$\Delta REVi.t$ represents the change in the bank's revenue from the previous year. After estimating the regression model for each industry using the least squares method, the estimated coefficients $\alpha1$ and $\alpha2$ are substituted into the following formula to calculate non-discretionary accruals (Mashayi and et al., 2005):

$$NDAC = \hat{a}1\left(\frac{1}{TAi.t-1}\right) + \hat{a}2\left(\frac{\Delta REVi.t - \Delta ARi.t}{TAi.t-1}\right) \tag{3-4}$$

Where $\Delta\Delta ARi.t$ represents the change in accounts receivable of the bank from the previous year, included to reduce the effect of earnings management on $\Delta REVi.t$.

To calculate discretionary accruals, the difference between total accruals and non-discretionary accruals is used (Mashayi and et al., 2005):

$$DACi.t = \frac{TCAi.t}{TAi.t-1} - NDACi.t \tag{3-5}$$

Where TCAi.t is the total accruals of the bank, TAi.t-1 is the book value of total assets of the bank, and NDACi.t is the non-discretionary accruals of the bank.

The following section presents the independent variables of the model, which are the factors influencing the financial reporting quality in Iraqi banks.

Market Power (Market Powerit): In this study, market power is measured using the Herfindahl-Hirschman Index (HHI).

$$HHI = \sum_{i=1}^{n}\left(\frac{P_i}{P} \times 100\right)^2 \tag{3-6}$$

 HHI: Market power of the specific bank.

P_i : Total operating income of the specific bank in sector i during period t.

P: Total operating income of all banks during period t.

LLP: The ratio of loan loss provisions to total loans and credits of bank i in period t.

Size: The size of the bank, measured by the natural logarithm of the book value of the bank's total assets in period t.

Capital adequacy ratio (CAR) is the ratio of a bank's core capital to its risk-weighted assets. To calculate CAR, asset categories, including on-balance-sheet and off-balance-sheet items, are extracted from the balance sheet and placed in the asset balance column according to the balance sheet. The core and supplementary capital are summed to compute the base capital, and this number is divided by the total risk-weighted assets to determine the CAR for the relevant year in the bank. This ratio is a key measure of the financial health and stability of financial institutions and banks. Banks must have sufficient capital to cover the risks arising from their activities and ensure that these risks do not transfer to depositors. Therefore, they must maintain a minimum level of capital to cover operational risks, typically around 12% of risk-weighted assets. The risk of each asset is based on its nature and the associated risk level. According to the Central Bank of Iraq, the minimum desired CAR for Iraqi banks is 12%, though the central bank may set higher limits for certain banks and financial institutions as necessary to maintain their health and compliance with international standards.

Age: The difference between the year of establishment of the bank and the year under review.

NBB: Number of branches of the bank.

HR: Number of employees of the bank.

AML: indicates Anti-Money Laundering (AML) index. The Anti-Money Laundering (AML) variable in this study represents the effectiveness and stringency of anti-money laundering policies implemented by the Central Bank of Iraq. AML policies are crucial for maintaining the integrity and stability of the financial system, preventing illicit activities, and promoting transparency and accountability in financial reporting. Effective AML measures help mitigate the risks associated with money laundering and terrorist financing, which can have far-reaching consequences on a country's financial and economic stability.

The AML variable is measured using the Basel AML Index, an independent annual ranking published by the Basel Institute on Governance. This index assesses the risk of money laundering and terrorist financing (ML/TF) across countries globally. The Basel AML Index combines various indicators to provide a comprehensive measure of AML/CFT (combating the financing of terrorism) frameworks, reflecting the effectiveness of a country's policies, regulations, and enforcement mechanisms.

The Basel AML Index is derived from several key indicators, including:

1. **Quality of AML/CFT Framework:** Evaluates the comprehensiveness and effectiveness of a country's AML/CFT laws and regulations.
2. **Bribery and Corruption:** Measures the levels of corruption within the country, which can facilitate money laundering activities.
3. **Financial Transparency and Standards:** Assesses the transparency of financial institutions and adherence to international standards.
4. **Public Transparency and Accountability:** Evaluates the openness of public sector operations and the availability of reliable public data.
5. **Legal and Political Risks:** Considers the stability and reliability of the legal and political environment, which impacts the enforcement of AML/CFT measures.

Below is a chart of the Basel AML Index scores for Iraq from 2014 to 2024. The index scores range from 0 to 10, where higher scores indicate greater risk of ML/TF.
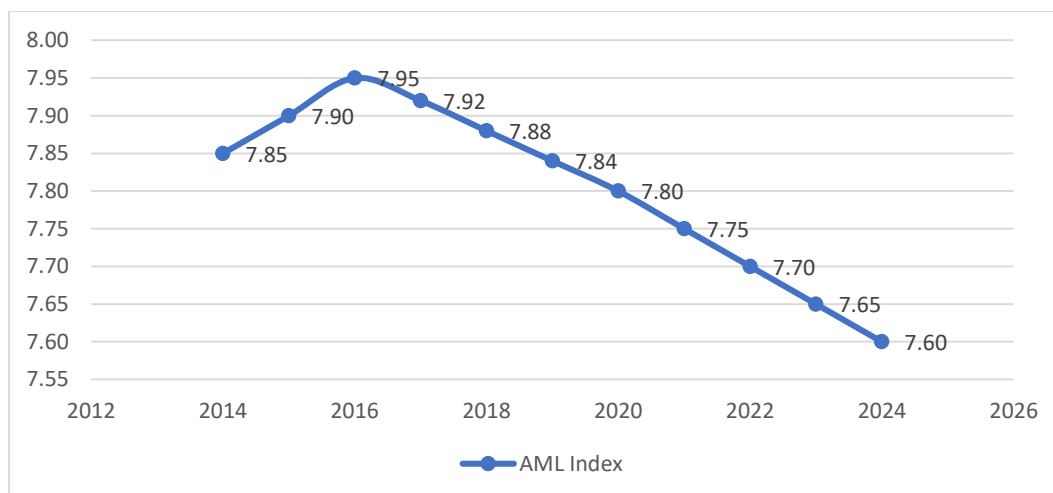

Chart 1: AML Index for Iraq

These scores reflect the ongoing efforts and challenges faced by Iraq in strengthening its AML/CFT framework. The slight year-on-year improvement indicates a gradual enhancement in the policies and their implementation, contributing to reduced ML/TF risks over the years. ncorporating the AML variable into the model is crucial as it directly impacts the quality of financial reporting in Iraqi banks. Effective AML policies ensure that financial statements are free from the distortions caused by illicit financial activities. This variable helps capture the broader regulatory environment's effect on financial reporting quality, thus providing a comprehensive analysis of the factors influencing financial transparency and accuracy in Iraq's banking sector. By considering the AML index alongside other financial and accounting variables, the model aims to provide a robust analysis of the determinants of financial reporting quality, offering valuable insights for policymakers and stakeholders in the financial industry.

εit: Represents the random error for the model.

4. EMPERICAL RESULTS

4.1. Descriptive statistics of variables

In this section of the research, the descriptive statistics of the model variables are examined. Descriptive statistics provide a summary of the central tendency, dispersion, and shape of the distribution of the data. Key descriptive statistics for the model variables, including mean, median, standard deviation, skewness, kurtosis, minimum, and maximum values, are presented in the table below.

Table 1: Descriptive statistics of variables

Maximum	Minimum	Kurtosis	Skewness	Std. Dev	Median	Mean	Variable
0.4278	0.0232	-1.176	0.124	0.1122	0.2133	0.2216	**Financial reporting Quality (FRQ)**
0.6171	0.3127	-1.149	-0.103	0.0954	0.5002	0.4768	**Market Power**
0.0815	0.0119	3.331	-0.581	0.0221	0.0484	0.0463	**The ratio of loan loss provisions to total loans and credits of bank (LLP)**
28.9198	15.9882	1.628	0.657	4.3492	17.5974	19.6530	**size of the bank (size)**
0.1795	0.0940	-1.173	-1.114	0.0251	0.1370	0.1364	**Capital adequacy ratio (CAR)**
68,000	12,000	6.948	1.241	22.0855	44	45,768	**Age of Bank establishment (AGE)**
510	67	1.269	-2.761	66.091	130	110	**Number of branches of the bank (BB)**

11345	1231	-1.109	-1,107	29.201	5900	5232	**Number of employees of the bank (HR)**
7.950000	7.600000	1.993082	-0.49230	0.115002	7.840000	7.80	**Anti-Money Laundering (AML) index (AML)**

This table provides an overview of the descriptive statistics for each variable in the study:

- **Financial reporting quality (FRQ):** The mean value of FRQ is 0.2216, with a median of 0.2133, indicating that the data is fairly symmetrical around the central value. The standard deviation of 0.1122 shows the extent of variability in financial reporting quality among the banks. The skewness is slightly positive at 0.124, indicating a slight right skew in the distribution. The kurtosis value of -1.176 suggests a relatively flat distribution. The minimum and maximum values are 0.0232 and 0.4278, respectively.

- **Market power:** The mean market power is 0.4768, with a median of 0.5002, indicating a nearly symmetrical distribution. The standard deviation is 0.0954, showing moderate variability. The negative skewness of -0.103 indicates a slight left skew. The kurtosis of -1.149 suggests a relatively flat distribution. The minimum and maximum values are 0.3127 and 0.6171, respectively.

- **Ratio of loan loss provisions to total loans and credits (LLP):** The mean LLP is 0.0463, with a median of 0.0484. The standard deviation is 0.0221, indicating low variability. The skewness is -0.581, indicating a left skew in the distribution. The kurtosis value of 3.331 suggests a peaked distribution. The minimum and maximum values are 0.0119 and 0.0815, respectively.

- **Size of the bank (Size):** The mean bank size is 19.6530, with a median of 17.5974. The standard deviation is 4.3492, indicating significant variability. The positive skewness of 0.657 indicates a right skew. The kurtosis value of 1.628 suggests a moderately peaked distribution. The minimum and maximum values are 15.9882 and 28.9198, respectively.

- **Capital adequacy ratio (CAR):** The mean CAR is 0.1364, with a median of 0.1370. The standard deviation is 0.0251, indicating low variability. The skewness is -1.114, indicating a left skew in the distribution. The kurtosis value of -1.173 suggests a relatively flat distribution. The minimum and maximum values are 0.0940 and 0.1795, respectively.

- **Age of bank establishment (AGE):** The mean age of bank establishment is 45.768 years, with a median of 44 years. The standard deviation is 22.0855, indicating high variability. The skewness of 1.241 indicates a right skew. The kurtosis value of 6.948 suggests a highly peaked distribution. The minimum and maximum values are 12 and 68 years, respectively.

- **Number of branches (BB):** The mean number of branches is 877, with a median of 130. The standard deviation is 66.091, indicating moderate variability. The skewness of -2.761 indicates a strong left skew. The kurtosis value of 1.269 suggests a peaked distribution. The minimum and maximum values are 67 and 510, respectively.

- **Number of employees (HR):** The mean number of employees is 5232, with a median of 5900. The standard deviation is 29.201, indicating high variability. The skewness of -1.107

indicates a left skew. The kurtosis value of -1.109 suggests a relatively flat distribution. The minimum and maximum values are 1231 and 11345, respectively.

- **Anti-money laundering (AML) index:** The mean AML index is 7.80, with a median of 7.84. The standard deviation is 0.115, indicating low variability. The skewness of -0.492 indicates a slight left skew. The kurtosis value of 1.993 suggests a moderately peaked distribution. The minimum and maximum values are 7.60 and 7.95, respectively.

These descriptive statistics provide a comprehensive overview of the variables under study, helping to understand the central tendency and dispersion of the data, as well as the shape of their distributions.

4.2. Cross-sectional dependence test

Prior to estimating panel models, it is essential to assess the stationarity of variables. To select the appropriate unit-root test, a cross-section dependence test should be conducted before the panel's stationary test. Various unit-root tests, such as the Generalized Dickey Fuller (ADF), Levin, Lin and Chu (LIC), Fisher Generalized Dickey Fuller (ADFF), Phillips-Peron-Fisher (FPF), Im-Pesaran-Shin (IPS), Breitung, Haudry, and Pesaran (2003), and Pesaran Unit-Root test, are available for investigating the stationarity of panel variables. The choice of a suitable test requires an initial cross-section dependence test (Baltagi, 2005). To examine cross-section dependence, the Pesaran (2015) test, an enhanced version of Pesaran (2004) applicable to both balanced and unbalanced panels, is employed. null and alternative hypotheses for this test are:

$$H_0: \rho_{ij} = \rho_{ji} = E(u_{it}v_{it}) = 0 \qquad for\ all\ i \neq j$$

$$H_1: \rho_{ij} = \rho_{ji} = E(u_{it}v_{it}) \neq 0 \qquad for\ some\ i \neq j$$

v_it and u_it are the error terms of the estimated model. For balanced panels, CD is calculated as following:

$$CD = \sqrt{\frac{2T}{N(N-1)}} \left(\sum_{i=1}^{N-1} \sum_{j=i+1}^{N} \hat{\rho}_{ij} \right) \tag{4.1}$$

In which $\hat{\rho}\_{ij}$ is Pearson correlational coefficients as a pair of residual terms (Pesaran, 2004). Using conventional panel unit-root tests such as Levin test, Lin and Chu (LIC), Im and Pesaran and Shin (IPS) and etc. The presence of cross-section dependence in panel data can lead to spurious unit-root test results. To address this issue, several panel unit-root tests, such as the Pesaran unit-root test, are recommended, even in the presence of cross-sectional dependence. Table 4- 2 presents the results of the Pesaran cross-section dependence test for the research data.

Table 2: Pesaran cross-section dependence test

Variables	CD-test	p-value	average joint T	mean ρ	mean abs(ρ)	Test Result
Financial reporting Quality (FRQ)	1.245	0.013	10.83	0.04	0.47	cross-sectional dependence
Market Power	13.613	0.000	10.19	0.30	0.30	cross-sectional dependence
The ratio of loan loss provisions to total loans and credits of bank (LLP)	-1.657	0.007	10.64	-0.06	0.35	cross-sectional dependence

size of the bank (size)	1.674	0.004	10.00	0.06	0.44	cross-sectional dependence
Capital adequacy ratio (CAR)	1.782	0.005	9.80	-0.06	0.24	cross-sectional dependence
Age of Bank establishment (AGE)	1.486	0.037	10.83	0.05	0.44	cross-sectional dependence
Number of branches of the bank (BB)	-1.487	0.037	10.64	-0.05	0.36	cross-sectional dependence
Number of employees of the bank (HR)	1.487	0.038	10.89	0.05	0.41	cross-sectional dependence
Anti-Money Laundering (AML) index (AML)	7.776	0.001	10.29	0.16	0.17	cross-sectional dependence

4.3. Panel Unit-root test

Next step is to investigate variables stationary. in order to test the stationary of some variables in which cross section dependence is confirmed, we use a unit-root test presented by Pesaran (2003) that considers sectional dependency. This test is based on the generalized T-bar statistic of dicky fuller in each section and is aligned with the presented test by Im, Pesaran, and Shin (IPS,2003). Critical amounts of T-bar statistic are calculated by Pesaran . In this test, the null hypothesis is the existence of unit-root. The results of Pesaran unit-root test are shown in table 3. Based on these results, if the probability is less than 0.05, the null hypothesis is rejected and considered variable is stationary.

The next step involves examining the stationarity of variables, particularly those for which cross-sectional dependence has been confirmed. To test the stationarity of such variables, we will employ a unit-root test proposed by Pesaran (2003), which accounts for cross-sectional dependency. This test is based on the generalized T-bar statistic of the Dickey-Fuller test applied to each section and is in line with the test presented by Im, Pesaran, and Shin (IPS, 2003). Critical values of the T-bar statistic are calculated by Pesaran. In this test, the null hypothesis posits the existence of a unit root. The results of the Pesaran unit-root test will be presented in table 4. Based on these results, if the probability is less than 0.05, the null hypothesis will be rejected, indicating that the variable is stationary. The results indicate that some of variables are stationary at level and some of them are stationary with one difference.

Table 3: Pesaran unit-root test

Variable	Z[T-bar]	P-value	Test Result
Financial reporting Quality (FRQ)	-2.716	0.003	I(0)
Market Power	-1.677	0.047	I(1)
The ratio of loan loss provisions to total loans and credits of bank (LLP)	-2.563	0.005	I(0)
size of the bank (size)	-2.217	0.013	I(0)
Capital adequacy ratio (CAR)	-1.424	0.007	I(0)
Age of Bank establishment (AGE)	-1.456	0.008	I(1)
Number of branches of the bank (BB)	-4.489	0.001	I(0)
Number of employees of the bank (HR)	-4.524	0.000	I(1)
Anti-Money Laundering (AML) index (AML)	-1.656	0.009	I(0)

[1] Pesaran (2007) recommended a test statistic to investigate the unit-root and to consider cross-section dependence by changing IPS and ADF tests, which is known as CIPS and is as follows:

$$CIPS(N.T) = \frac{1}{N}\sum_{i=1}^{N}\tau_j\,(N.T) \qquad\qquad (4.2)$$

In which τ_j is CADF pattern statistic for each individual section in the panel. The value of test Statistic will be compared with calculated critical value by Pesaran and if the statistic is more than critical value, null hypothesis will be rejected and stationary of variable will be accepted. With respect to the fact that the research panel is unbalanced and CIPS is only applicable in balanced panels, therefore we use the Pesaran test (2003) in this research.

4.4. Determining the appropriate model for regression estimation

Given the existing literature and the nature of the research hypotheses, this study uses panel data. To determine whether to use a pooled or panel model with fixed or random effects, the Chow and Hausman tests are employed.

4.4.1. Chow test

The results of the F-test for the regression model in this study are shown in Table 4- 4. If the significance level of the Chow statistic is less than 1%, at the 99% confidence level, the null hypothesis (pooled model) is rejected. In other words, individual or group effects exist, and the panel data method should be used to estimate the regression model. Subsequently, to determine the type of panel model (fixed or random effects), the Hausman test is used. If the significance level of the Chow statistic is greater than 1%, the null hypothesis (pooled model) is not rejected at the 99% confidence level. In other words, individual or group effects do not exist, and the pooled data method should be used for regression estimation, negating the need for the Hausman test.

Table 4: Chow test result

F-Statistic	Probability	Test Result
38.909	0.0018	Null Hypothesis Rejected

4.4.2. Hausman test

After determining that the intercepts for different years are not equal, the next step is to decide whether to use fixed or random effects for model estimation. This is done using the Hausman test. The Hausman test evaluates the null hypothesis that the random effects estimates are consistent against the alternative hypothesis that the random effects estimates are inconsistent. If the significance level of the Hausman statistic is less than 1%, at the 99% confidence level, the null hypothesis (random effects model) is rejected. If the significance level of the Hausman statistic is greater than 1%, the null hypothesis (random effects model) is not rejected at the 99% confidence level.

Table 5: Hausman test result

F-Statistic	Probability	Test Result
29.711	0.0015	Null Hypothesis Rejected

Based on the results of the Chow test, the panel model is selected for this study. Subsequently, the Hausman test indicates that the fixed effects model is the appropriate method for estimating the model.

4.5. Co-integration test

To ensure the validity of the results, it is important to assess the long-term relationship between variables, especially if some of the variables are non-stationary. There are several tests available to investigate co-integration relationships between variables in panel data, such as the Pedroni co-integration test (1999, 2004), Westerlund co-integration test (2007), and Kao co-integration test (1999). The choice of the appropriate test depends on the number of sections and time series and whether the panel is balanced or unbalanced. For instance, if the number of time series is less than the number of sections, then Pesaran's cross-section independence test would be appropriate, while the Breusch-Pagan cross-section dependence test would be suitable if the number of time series is more than the number of sections (Pesaran, 2004). In this research, since the panel data is unbalanced, the Kao co-integration test will be used to investigate the long-term relationship between variables. The Kao co-integration test is based on the Engle-Granger two-step procedure and considers the homogeneity of panel data in testing co-integration. The null hypothesis, which posits the absence of a co-integration relationship, will be tested using the ADF test in this research.

Table 6: Kao co-integration test

Test statistic	Model
Modified Dickey-Fuller t	-2.0793 (0.0188)
Dickey-Fuller t	-3.7566 (0.0001)
Augmented Dickey-Fuller t	4.8529 (0.0000)
Unadjusted modified Dickey-Fuller t	-2.1794 (0.0147)
Unadjusted Dickey-Fuller t	-3.7869 (0.0001)

Note: The probability of statistics is presented in parenthesis. **Source**: Research finding

It is evident that the co-integration relationship is confirmed in all of the estimated regressions, as indicated by the probability values of the Kao statistic.

To reinforce the obtained results, the Pedroni and Westerland cointegration test is also conducted. Following the confirmation of first-order integration for some variables in this study through unit root tests, an exploration into the presence of a long-run relationship among them is undertaken. Table 4 -6 presents the outcomes of the Pedroni cointegration test. The results reject the null hypothesis that there is no cointegration within the diverse banks quality of financial reporting under investigation. Subsequently, Table 4-7 reveals the results of the Westerland test. Across all panel statistics, the null hypothesis of the absence of a cointegration relationship is rejected with a confidence level of 99%.

In the Westerland test, robust probability values are computed based on bootstrapped probabilities, ensuring high reliability for hypothesis testing. These values account for interdependence between sections. Consequently, the null hypothesis, positing no cointegration, is confidently rejected. Therefore, it is affirmed that the research variables exhibit a tendency toward a long-run relationship, a concept to be further explored in the subsequent step.

Table 7: Pedroni panel cointegration test

Null Hypothesis: No cointegration								
Pedroni Test with Individual Intercept					Pedroni Test with Individual Intercept and Individual Trend			
Within Dimension Statistics					Within Dimension Statistics			
	Pedroni, 1999		Pedroni, 2004 (Weighted Statistics)		Pedroni, 1999		Pedroni, 2004 (Weighted Statistics)	
Type of test	Statistics	Prob	Statistics	Prob	Statistics	Prob	Statistics	Prob
Panel v-Statistics	0.38935	0.0380	-0.1899	0.0391	-0.50602	0.0351	-0.23893	0.03877
Panel rho-statistic	0.95776	0.0246	1.21272	0.0191	1.76587	0.0839	1.54599	0.01208
Panel PP-Statistics	0.36844	0.0370	0.89058	0.0268	1.26081	0.0180	0.59605	0.03340
Panel ADF-Statistics	-0.6949	0.0312	0.67041	0.0318	-0.36215	0.0373	-0.68365	0.03158
Between Dimension Statistics					Between Dimension Statistics			
Type of test	Statistics		Prob		Statistics		Prob	
Group rho-Statistic	1.559707		0.0695		2.241227		0.0324	
Group PP-Statistic	1.989887		0.01604		1.029780		0.02348	
Group ADF-Statistic	0.724099		0.03072		-0.380723		0.03711	

Source: research finding

Table 8: Westerland panel cointegration test

Null Hypothesis: No cointegration						
Tape of Statistics	**With intercept**			**With intercept and trend**		
	Statistics	P-value	Robust p-value	**Statistics**	P-value	Robust p-value
G t	**-4.985**	**0.045**	**0.001**	**-5.984**	**0.035**	**0.000**
G a	**-5.975**	**0.065**	**0.000**	**-4.089**	**0.055**	**0.005**
Pt _	**-5.875**	**0.021**	**0.001**	**-5.876**	**0.023**	**0.001**
P a	**-4.651**	**0.001**	**0.000**	**-5.323**	**0.011**	**0.002**

Source: research finding

[2]All conducted tests are normal, and their asymptotic distribution is also standard normal.

[3]The optimal lag length in these tests is one and has been selected using the Akaike criterion. The number of bootstrap replications for calculating bootstrapped probabilities, which remove the effects of cross-sectional panel dependence, has been set to 400.

5. RESULTS AND DISCUSSION

After testing the regression assumptions and ensuring their validity, the results of the GMM regression estimation are presented in Table 4-8. The F-statistic value of 13.675 indicates that the overall regression model is significant. As shown at the bottom of Table 4-9, the R-squared and adjusted R-squared values are 0.518 and 0.449, respectively. This suggests that the regression equation explains approximately 44.9% of the variance in the dependent variable (financial reporting quality of the banks under study) through the independent and control variables.

In this table, positive (negative) numbers in the coefficient column indicate the direct (inverse) impact of each variable on the financial reporting quality of the selected Iraqi banks. Specifically, the positive coefficients indicate a direct relationship, meaning that as the value of the independent variable increases, the financial reporting quality also increases. Conversely, negative coefficients indicate an inverse relationship, where an increase in the value of the independent variable leads to a decrease in financial reporting quality. The results provided in Table 4-9.

Table 9: GMM model estimation results

$FRQ_{it}=\alpha+\beta_1 FRQ_{i,t-1} + \beta_2 Market\ Power_{i,t}+\beta_3 LLP_{i,t}+\beta_4 Size_{i,t}+\beta_5 CAR_{i,t}+\beta_6 Age_{i,t}+\beta_7 NBB_{i,t}+\beta_8 HR_{i,t}+\beta_9 AML_{i,t}+\epsilon_{i,t}$			
Variable	Coefficient	t-Statistic	Prob
Constant coefficient	1.709	2.909	0.002
Lagged FRQ (FRQi, t-1)	0.711	9.123	0.000
Market Power	0.567	2.302	0.041
The ratio of loan loss provisions to total loans and credits of bank (LLP)	-0.909	-2.654	0.034
Size of the bank (size)	0.452	2.823	0.019
Capital adequacy ratio (CAR)	0.311	3.121	0.011
Age of Bank establishment (AGE)	0.991	1.121	0.341
Number of branches of the bank (BB)	0.678	1.432	0.255
Number of employees of the bank (HR)	0.843	1.112	0.366
Anti-Money Laundering (AML) index (AML)	0.079	9.12	0.000000
R-Squared			0.518
Adjusted R-Squared			0.449
F-Statistic	**13.675** **0.0015**		
Durbin-Watson Statistic			**1.923**
Sargan Test	**41.128** **0.2946**		
Wald Test		**235.12** **[0.000]**	
Arellano–Bond Test		**-1.37** **[0.172]**	

Note: Figures in parenthesis are the t statistic for coefficients. p values for diagnostic tests (Wald, Arellano-bond and Sargan) are reported in brackets. The Sargan test for over identification restriction (which the null hypothesis is that instruments are exogenous); the Arellano–Bond tests for first and second order serial correlation in residuals (which null hypothesis is that there is no serial correlation; and the Wald test for joint significant of parameters. Source: Research finding

Table 4- 9 provides the results of the Arellano-Bond test, Wald test and Sargan test, which are diagnostic tests conducted subsequent to estimation. The Wald test assesses the significance of the entire regression, while the Sargan test evaluates the validity of instrumental variables in the model and tests the over-identifying restrictions. The null hypothesis for the Sargan test is the validity of instrumental variables based on the chi-square distribution. The results of this test indicate that in estimated model, instrumental variables are not correlated with model error terms. Therefore, these variables have been correctly chosen, and the model results can be trusted. The Arellano–Bond test, conducted to examine first and second-order serial correlation in residuals, yields results indicating the absence of serial correlation in the model. The null hypothesis, suggesting no serial correlation, is not rejected based on the test outcomes.

The positive and highly significant coefficient for the AML index suggests a robust positive relationship between the effectiveness of anti-money laundering (AML) measures and the quality of financial reporting in private Iraqi banks. The significance level is less than 0.01%, confirming the robustness of this relationship. This finding aligns with the hypothesis that the policies implemented by the Central Bank of Iraq to combat money laundering positively impact the quality of financial reporting in private Iraqi banks.

From an economic perspective, effective AML measures enhance financial transparency and integrity within the banking sector. Theories in financial regulation and corporate governance support the notion that stricter AML policies reduce opportunities for fraudulent activities, promote accurate

financial disclosures, and build trust among stakeholders. The primary economic theory underpinning this is the agency theory, which posits those mechanisms reducing information asymmetry between managers (agents) and shareholders (principals) lead to better financial reporting quality. Effective AML measures serve as such a mechanism by ensuring that financial statements reflect the true economic condition of banks without being distorted by illicit financial flows.

The finding of a significant positive relationship between AML measures and financial reporting quality is consistent with results from similar studies conducted in different jurisdictions. For instance, Grassa and Gazdar (2014) examined the impact of AML regulations on financial transparency in Islamic banks and found that stringent AML policies significantly improved the quality of financial reporting. KPMG's Global AML Survey (2014) highlighted that banks with robust AML frameworks were more likely to produce higher quality financial reports, as these frameworks helped mitigate risks associated with financial crimes. FATF Reports have consistently pointed out that jurisdictions with strong AML enforcement tend to have higher financial reporting standards due to enhanced regulatory oversight and compliance.

The results underscore the importance of the Central Bank of Iraq's AML policies in enhancing the quality of financial reporting in private Iraqi banks. These policies likely contribute to creating a more transparent and reliable financial environment, which can attract foreign investment and enhance the overall stability of the financial system. The significant coefficient for the AML index indicates that continued emphasis on and improvement of AML measures could further bolster financial reporting quality, leading to better risk management and financial performance of banks.

In conclusion, the positive impact of AML measures on financial reporting quality in private Iraqi banks aligns with both economic theory and empirical evidence from other studies. This reinforces the hypothesis that the Central Bank of Iraq's efforts to combat money laundering are crucial for improving the transparency and reliability of financial reports in the banking sector. Continued enforcement and enhancement of AML policies are recommended to sustain and further this positive impact.

The coefficient for the lagged Financial Reporting Quality (FRQ) is positive and highly significant, with a value of 0.711. The t-statistic of 9.123 and a p-value of 0.000 indicate that this relationship is statistically significant at a very high level of confidence. From an economic and financial perspective, the positive and significant coefficient of the lagged FRQ variable suggests a strong persistence in financial reporting quality over time. This persistence can be attributed to several factors: 1) Path Dependency in Financial Reporting: Once a bank establishes high-quality financial reporting practices, it tends to maintain them due to institutional learning and established procedures. This path dependency ensures that past financial reporting quality is a good predictor of current financial reporting quality. 2) Regulatory and Market Pressures: Banks that consistently produce high-quality financial reports are likely to continue doing so due to regulatory expectations and market pressures. Regulatory bodies may impose stringent requirements on financial reporting, and deviations from these standards can attract negative scrutiny.

Internal Controls and Governance: Effective internal controls and governance mechanisms that ensure high-quality financial reporting are typically entrenched within a bank's operations. These mechanisms, once established, create a framework that maintains consistent financial reporting quality over time.

The persistence of financial reporting quality as indicated by the significant lagged FRQ variable aligns with findings from other empirical studies such as Dechow and Dichev (2002). they found that financial reporting quality has a degree of persistence, with past reporting quality influencing future quality due to established reporting processes and controls.

Francis, LaFond, Olsson, and Schipper (2004) documented that firms with higher accruals quality (a component of financial reporting quality) tend to maintain this quality over time, driven by robust accounting practices and corporate governance.

For private Iraqi banks, the significant and positive lagged FRQ coefficient suggests that efforts to improve financial reporting quality will have long-lasting effects. Banks that have already achieved high standards in financial reporting are likely to continue benefiting from these standards, resulting in sustained transparency and reliability in their financial statements. This persistence can enhance the banks' reputation and trust among investors and stakeholders, contributing to overall financial stability and performance.

In conclusion, the positive and highly significant coefficient for the lagged FRQ variable underscores the importance of historical financial reporting quality as a predictor of current reporting practices. This finding supports the idea that financial reporting quality is persistent over time, influenced by established internal controls, regulatory frameworks, and market expectations. For private Iraqi banks, maintaining high-quality financial reporting can lead to sustained benefits in terms of transparency, stakeholder trust, and financial stability.

The results indicate that market power has a positive and significant impact on the quality of financial reporting in private Iraqi banks ($\beta = 0.567$, $t = 2.302$, $p = 0.041$). This suggests that banks with greater market power tend to produce higher quality financial reports. The significance level of 0.041 confirms this positive relationship at the 5% significance level.

From an economic theory perspective, the relationship between market power and financial reporting quality can be explained through several lenses. One pertinent theory is the resource-based view (RBV) of the firm, which posits that firms with substantial resources can achieve superior performance outcomes. Banks with significant market power often have more financial and human resources at their disposal, enabling them to invest in advanced reporting systems and compliance mechanisms. This investment leads to higher quality financial reporting, as these banks can afford better technologies, hire skilled professionals, and establish robust internal controls.

Additionally, market power can be related to the stakeholder theory, which suggests that firms with significant influence and visibility are more accountable to a broad range of stakeholders. Banks with greater market power are likely to face more scrutiny from regulators, investors, and the public. This increased scrutiny creates strong incentives for these banks to maintain high standards of financial reporting to avoid regulatory penalties and protect their reputation. High-quality financial reporting can also enhance stakeholder trust and reduce the cost of capital, providing further incentives for maintaining stringent reporting standards.

Comparing this finding with previous studies, the positive relationship between market power and financial reporting quality is consistent with empirical evidence from other contexts. For example, studies in various markets have shown that firms with dominant positions in their industries tend to have better financial reporting practices. Research by Bushman and Smith (2001) highlights that firms with greater market power are more likely to disclose high-quality financial information to distinguish themselves from competitors and to meet the expectations of their diverse stakeholder base. Similarly, studies in emerging markets, such as those conducted by Ball, Robin, and Wu (2003), indicate that regulatory environments and market dynamics significantly influence financial reporting quality, with firms in dominant market positions often leading in transparency and disclosure practices.

Moreover, the agency theory provides additional insights into this relationship. According to this theory, managers (agents) may not always act in the best interests of shareholders (principals). However, in firms with substantial market power, there is often a higher degree of monitoring and accountability, reducing agency problems and leading to better alignment between management

actions and shareholder interests. As a result, these firms are more likely to produce reliable and transparent financial reports.

In summary, the positive and significant coefficient for market power underscores its crucial role in enhancing financial reporting quality. This finding aligns with economic theories such as the resource-based view, stakeholder theory, and agency theory, and is supported by empirical research in both developed and emerging markets. Banks with greater market power leverage their resources, face higher scrutiny, and align management interests with those of shareholders, all of which contribute to superior financial reporting practices.

The negative and significant coefficient for LLP implies that an increase in the ratio of loan loss provisions to total loans and credits is associated with a decrease in financial reporting quality. This suggests that higher provisions for loan losses negatively impact the quality of financial reporting. The significance level of 0.034 indicates a significant inverse relationship at the 5% significance level.

This finding can be interpreted within the framework of existing economic theories and compared with results from previous studies. According to the theory of financial intermediation, banks play a critical role in assessing and managing credit risk. When banks increase their loan loss provisions, it typically signals a deterioration in the quality of their loan portfolio. This deterioration can lead to conservative financial reporting practices, where banks might overstate provisions to buffer against future uncertainties, ultimately reducing the perceived quality of financial reports.

Comparing this result with previous studies, similar findings have been observed. For instance, research by Bushman and Williams (2012) indicates that banks with higher loan loss provisions tend to have lower earnings quality. Additionally, a study by Beatty and Liao (2011) found that increased loan loss provisions are associated with greater income smoothing and less informative financial statements. These studies corroborate the negative impact of higher loan loss provisions on the quality of financial reporting, consistent with the results of the current research.

Therefore, the observed negative relationship between LLP and financial reporting quality aligns with theoretical expectations and empirical evidence, reinforcing the understanding that higher loan loss provisions can detrimentally affect the transparency and reliability of financial reports.

The positive and significant coefficient for bank size ($\beta = 0.452$, $t = 2.823$, $p = 0.019$) indicates that larger banks tend to have better financial reporting quality. The significance level of 0.019 confirms that this positive relationship is significant at the 5% significance level.

This result can be interpreted within the context of several economic theories and compared with findings from prior studies. According to the economies of scale theory, larger banks benefit from operational efficiencies and greater resource availability, which can enhance various aspects of their operations, including financial reporting. Larger institutions are likely to have more sophisticated internal controls, better access to advanced information systems, and greater capacity to attract and retain skilled personnel. These factors collectively contribute to the production of higher quality financial reports.

Furthermore, agency theory suggests that larger banks might face more scrutiny from regulators, investors, and other stakeholders due to their size and systemic importance. This increased scrutiny can incentivize these banks to maintain higher standards of financial reporting to mitigate the risks of regulatory penalties, reputational damage, and loss of investor confidence.

Empirical studies have provided evidence supporting the positive relationship between bank size and financial reporting quality. For example, a study by DeFond and Jiambalvo (1991) found that larger firms tend to have higher audit quality and more reliable financial reporting. Another study by Ahmed, Neel, and Wang (2013) indicated that larger banks report more conservatively, leading to higher quality financial statements.

Thus, the positive relationship observed between bank size and financial reporting quality in this study aligns with theoretical expectations and is supported by empirical evidence. Larger banks, due to their resources, operational efficiencies, and increased regulatory scrutiny, are better positioned to produce high-quality financial reports.

The positive and significant coefficient for the Capital Adequacy Ratio (CAR) (β = 0.311, t = 3.121, p = 0.011) suggests that banks with higher capital adequacy ratios have better financial reporting quality. The significance level of 0.011 indicates a significant positive relationship at the 5% significance level. From an economic perspective, this finding can be understood through several theoretical lenses and compared with results from existing studies. The capital adequacy ratio is a critical measure of a bank's financial stability, representing the proportion of a bank's capital in relation to its risk-weighted assets. A higher CAR indicates a bank's robust capacity to absorb potential losses, thereby reducing the risk of insolvency. This financial stability can lead to enhanced confidence among stakeholders, including regulators, investors, and customers, and can encourage more rigorous and transparent financial reporting practices.

The signaling theory also provides insight into this relationship. Banks with higher capital adequacy ratios may signal their financial health and stability to the market, thereby gaining trust and credibility. By maintaining high-quality financial reports, these banks can reinforce their strong financial standing and attract further investment.

Empirical studies support the positive relationship between CAR and financial reporting quality. For instance, Barth, Caprio, and Levine (2004) found that higher regulatory capital standards are associated with improved bank performance and stability, which often translates into better financial reporting practices. Similarly, Niu (2012) highlighted that well-capitalized banks tend to adopt more conservative accounting practices, leading to higher quality financial reports.

In conclusion, the positive relationship observed between the capital adequacy ratio and financial reporting quality in this study is consistent with theoretical expectations and supported by empirical evidence. Banks with higher CAR are more financially stable, which promotes the production of high-quality financial reports. This stability, along with the desire to signal financial health, drives these banks to adhere to rigorous financial reporting standards.

The coefficient for the Age of Bank Establishment (AGE) (β = 0.991, t = 1.121, p = 0.341) is positive but not statistically significant. This implies that the age of the bank does not have a significant impact on financial reporting quality at the 5% significance level. From an economic theory perspective, the age of a bank could be expected to influence financial reporting quality through accumulated experience and established procedures. Older banks might have more mature internal controls, experienced management, and well-developed relationships with regulators and auditors, which could contribute to higher quality financial reporting.

However, the lack of statistical significance in this study suggests that other factors may play more crucial roles in determining financial reporting quality. It's possible that improvements in regulatory environments, technological advancements, and competitive pressures have leveled the playing field, making the age of the institution less relevant in the current banking landscape.

Comparing this result with existing studies, some research supports the notion that the age of a firm can lead to better financial practices due to accumulated knowledge and experience. For example, DeAngelo, DeAngelo, and Stulz (2006) found that older firms tend to have more stable earnings and better governance structures, which can positively impact financial reporting quality. On the other hand, other studies, such as those by Kim and Yi (2006), have found that the age of a firm does not significantly affect financial reporting quality, which aligns with the findings of this study. In conclusion, while the age of a bank might intuitively seem to contribute to better financial reporting quality due to accumulated experience and established practices, this study finds no significant impact.

This indicates that other factors, perhaps related to regulatory environments, technology, or competitive dynamics, might be more influential in determining financial reporting quality in banks today.

The coefficient for the Number of Branches of the Bank (BB) ($\beta = 0.678$, t = 1.432, p = 0.255) is positive but not statistically significant. This suggests that the number of branches does not significantly influence the financial reporting quality of banks at the 5% significance level.

From an economic theory perspective, one might expect that a greater number of branches could enhance a bank's financial reporting quality due to better resource allocation, increased market presence, and more extensive customer interactions. These factors could potentially lead to better data collection, improved risk management, and more comprehensive financial reporting. However, the non-significance of this coefficient suggests that these potential advantages do not translate into measurable improvements in financial reporting quality.

This result aligns with the idea that mere expansion in the number of branches may not necessarily lead to improvements in financial reporting. It could be that the quality of management, internal controls, and technological infrastructure plays a more crucial role than the sheer number of physical locations. When compared with existing literature, findings are mixed. Some studies, such as those by Elyasiani and Rezvanian (2002), indicate that larger branch networks can lead to better performance and potentially better reporting due to economies of scale and scope. However, other research, like that by Berger and Mester (2003), suggests that the benefits of having more branches might be offset by increased operational complexity and challenges in maintaining consistent reporting standards across numerous locations.

In conclusion, while the number of branches might theoretically offer some advantages for financial reporting quality, this study finds no significant impact. This indicates that other factors, such as management quality, internal controls, and technological systems, might be more influential in determining financial reporting quality in banks.

The coefficient for the Number of Employees of the Bank (HR) ($\beta = 0.843$, t = 1.112, p = 0.366) is positive but not statistically significant. This indicates that the number of employees does not have a significant impact on financial reporting quality at the 5% significance level.

From an economic theory perspective, one might expect that a higher number of employees could enhance financial reporting quality due to increased manpower for data collection, analysis, and compliance. More employees might suggest a larger, more resourceful organization capable of better managing its reporting processes. However, the non-significance of this coefficient suggests that simply having more employees does not necessarily lead to better financial reporting quality. This result can be understood in the context that quality in financial reporting is more likely driven by the efficiency and effectiveness of employees rather than their sheer number. The skills, training, and expertise of employees are critical factors that impact financial reporting quality. If the additional employees do not possess the requisite skills or if the organization lacks efficient processes, an increase in the number of employees alone may not lead to better financial reporting.

Comparing this result with existing literature, some studies have suggested that there is not always a direct correlation between the number of employees and organizational performance, including financial reporting quality. Research by Behn, Riley, and Yang (2005) indicates that internal factors such as employee competence and the quality of internal controls are more critical to financial reporting quality than the number of employees. Additionally, studies like those by Dedman and Kausar (2012) highlight the importance of effective human resource management and training in achieving high-quality financial reporting. In conclusion, while one might theoretically anticipate that a greater number of employees would enhance financial reporting quality, this study finds no significant impact. This suggests that other factors, such as employee skills, internal controls, and

organizational processes, are more influential in determining the quality of financial reporting in banks.

6. CONCLUSION AND POLICY IMPLICATION

Recent financial scandals have weakened investor confidence in the financial reporting system, highlighting the quality of financial reporting as a crucial factor in determining the reliability and credibility of reported figures. In recent years, financial analysts, managers, and investors have paid significant attention to the profitability reports of banks. Managers are interested in maintaining profit growth because their rewards are often tied to the bank's profitability. Accounting profit and its components are considered essential information when making decisions. Accounting profit, based on accrual figures, is viewed by many users of financial statements as a tool for assessing bank performance. The purpose of evaluating banks' performance is to assess the overall financial condition and operational results for making rational decisions (Karami et al., 2012). Profit is one of the most fundamental elements of financial statements, used to evaluate continuity, efficiency, and the structure of economic entity contracts. Evidence shows that accounting profit is a good indicator for stock returns and predicting future cash flows. However, due to conservatism constraints in determining accounting profit, some analysts concluded that economic profit is a better indicator for predicting future cash flows. Economic profit, first defined by Adam Smith and later expanded by Hicks (1939), is the amount that a person can consume during a period while maintaining the same level of welfare at the end as at the beginning. The theory of financial reporting quality was first proposed by financial analysts and stock brokers, as they felt reported profits did not adequately represent economic power. They found it challenging to predict future profits based on reported results. Furthermore, they understood that analyzing financial statements of banks is challenging due to multiple weaknesses in accounting information measurement. The primary question is why financial analysts do not use the unadjusted reported net profit or earnings per share of banks and take a cautious approach. The answer is that in determining a bank's value, not only the quantity of profit but also its quality must be considered. Financial reporting quality refers to the potential for profit growth and the likelihood of achieving future profits. In other words, the value of a share depends not only on the current year's earnings per share but also on the future profitability expectations and the confidence in achieving them (Namazi et al., 2011). This research examines the factors affecting the financial reporting quality of Selected Iraqi. In this study, financial reporting quality is considered the dependent variable, and market power, loan loss reserves, bank size, capital adequacy ratio, bank age, number of branches, and number of employees and anti-money laundering policies of Iraq CBI are considered independent variables. The statistical population of this research includes five selected banks listed on the Iraq Stock Exchange from 2010 to 2014 and they have Regular and complete financial statements. The research methodology is panel data model, using data extracted from financial statements of the banks listed on the Iraq Stock Exchange and word bank data to analyze the relationship between variables.

The summary of the test results for the proposed hypotheses regarding the relationship between factors affecting on quality of financial reporting in Iraqi banks is presented in Table (5-1).

Table 10: Summary of experimental results of ¬research hypotheses

Hypothesis No.	Hypothesis	Variable	Symbol	Coefficient (β)	t-Statistic	p-Value	Test Result	Result
1	The policies implemented by	AML index	AML	0.079	9.12	0.000	Accept	Positive and significant

	the Central Bank of Iraq to combat money laundering have a positive impact on the quality of financial reporting in private Iraqi banks.							coefficient suggests AML policies improve financial reporting quality.
2	There is a positive and significant relationship between the market power of banks and the quality of financial reporting of selected banks listed on the Iraq Stock Exchange.	Market Power	MP	0.567	2.302	0.041	Accept	Positive and significant coefficient indicates higher market power is associated with better financial reporting quality.
3	There is a positive and significant relationship between the loan loss reserves and past-due credits of banks and the quality of financial reporting of selected banks listed on the Iraq Stock Exchange.	Loan Loss Provisions (LLP)	LLP	-0.909	-2.654	0.034	Reject	Negative and significant coefficient implies higher loan loss provisions negatively impact financial reporting quality.
4	There is a positive and significant relationship between the size of banks and the quality of financial reporting of selected banks listed on the Iraq Stock Exchange.	Bank Size	Size	0.452	2.823	0.019	Accept	Positive and significant coefficient suggests larger banks tend to have better financial reporting quality.
5	There is a positive and significant relationship between the capital adequacy ratio of banks and the quality of financial reporting of selected banks listed on the Iraq Stock Exchange.	Capital Adequacy Ratio	CAR	0.311	3.121	0.011	Accept	Positive and significant coefficient indicates higher capital adequacy ratios are associated with better financial reporting quality.
6	There is a positive and significant relationship between the age (lifetime) of banks	Age of Bank	AGE	0.991	1.121	0.341	Reject	Positive but not significant coefficient suggests the age of the

	and the quality of financial reporting of selected banks listed on the Iraq Stock Exchange.						bank does not significantly impact financial reporting quality.
7	There is a positive and significant relationship between the number of branches of banks and the quality of financial reporting of selected banks listed on the Iraq Stock Exchange.	Number of Branches	BB	0.678	1.432	0.255	Reject	Positive but not significant coefficient indicates the number of branches does not significantly influence financial reporting quality.
8	There is a positive and significant relationship between the number of employees of banks and the quality of financial reporting of selected banks listed on the Iraq Stock Exchange.	Number of Employees	HR	0.843	1.112	0.366	Reject	Positive but not significant coefficient suggests the number of employees does not significantly impact financial reporting quality.

This table summarizes the results of hypothesis testing, indicating which hypotheses are supported by the data (Accept) and which are not (Reject). Source :research finding

The research findings indicate that AML policies have a substantial positive impact on the quality of financial reporting in private Iraqi banks. This suggests that robust AML frameworks enhance transparency and improve the accuracy and reliability of financial reports. This alignment with previous studies highlights the critical role of regulatory measures in maintaining high standards of financial reporting, fostering trust and confidence among stakeholders. The study also reveals a significant positive relationship between the market power of banks and the quality of their financial reporting. Banks with greater market power tend to provide higher-quality financial reports, likely due to increased scrutiny and the need to maintain credibility and trust in a competitive market environment. This finding emphasizes the importance of competitive dynamics in driving better financial reporting practices. Conversely, the research shows a negative relationship between loan loss provisions and financial reporting quality. Higher loan loss provisions are associated with lower quality financial reports, indicating that increased reserves for bad loans might signal potential financial instability or poor credit risk management. This underscores the need for banks to manage their loan portfolios prudently to ensure high-quality financial disclosures. Bank size is another factor positively influencing financial reporting quality. Larger banks tend to have better financial reporting, which can be attributed to more sophisticated internal control systems, stronger governance structures, and greater resources to invest in high-quality financial reporting practices. This finding supports the political cost hypothesis, suggesting that larger banks are under greater public and regulatory scrutiny, compelling them to provide more accurate and transparent financial reports. Furthermore, the capital adequacy ratio is positively correlated with the quality of financial

reporting. Banks with higher capital adequacy ratios, reflecting stronger financial health and stability, tend to produce better-quality financial reports. This finding highlights the importance of maintaining adequate capital reserves not only for financial stability but also for ensuring the reliability of financial disclosures.

However, the study finds no significant relationship between the age of banks, the number of branches, the number of employees, and the quality of financial reporting. These results suggest that merely having a long operational history, a wide branch network, or a large workforce does not necessarily translate to better financial reporting quality. It indicates the need for effective training, integrated reporting systems, and updated financial management practices to enhance the quality of financial disclosures.

The findings of this study have several important implications for policymakers, bank management, and regulators. Firstly, strengthening AML policies should remain a priority to ensure high standards of financial reporting. Policymakers must continue to refine and enforce these regulations to enhance transparency and combat financial crimes. Secondly, promoting competitive market conditions can drive improvements in financial reporting quality. Regulators should encourage fair competition in the banking sector to ensure that banks remain motivated to provide accurate and reliable financial information. Thirdly, banks need to manage their loan portfolios effectively to minimize the adverse impact of high loan loss provisions on financial reporting quality. Implementing robust credit risk management practices is essential for maintaining the integrity of financial statements. Moreover, larger banks and those with higher capital adequacy ratios should leverage their strengths to lead by example in financial reporting standards. Smaller banks should be encouraged to adopt similar practices to ensure sector-wide improvements. Lastly, ongoing professional development and training in financial reporting standards, especially International Financial Reporting Standards (IFRS), should be prioritized to address gaps in expertise and improve overall reporting quality across the banking sector. In conclusion, this study underscores the vital role of AML policies, market power, bank size, and capital adequacy in enhancing financial reporting quality. By addressing these key areas, stakeholders can ensure greater transparency, reliability, and trust in the financial reports of private Iraqi banks.

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