Modern American Journal of Business, Economics, and Entrepreneurship
ISSN (E): 3067-7203
Volume 01, Issue 09, December, 2025
Website: usajournals.org

CORPORATE GOVERNANCE AND ITS IMPACT ON ENHANCING THE RELIABILITY OF FINANCIAL REPORTING USING BIG DATA ANALYTICS: AN APPLIED STUDY IN IRAQ

(1) Hashim Haydar Al-Sarraf,
(2) Ridha Mohanad Al-Salman
(1) University of Kufa, Najaf, Iraq
(2) Al-Furat Al-Awsat Technical University
hashimh.alsarraf@uokufa.edu.iq.
rida.ghazi.cku@atu.edu.iq.

Abstract
This study investigates the impact of corporate governance practices on the reliability of financial reporting in Iraqi private commercial banks listed on the Iraq Stock Exchange (ISX) during the period 2015–2024, with a specific focus on the mediating role of Big Data Analytics (BDA). The research addresses the persistent problem of low reporting reliability in Iraq, which stems from weak governance mechanisms, ownership concentration, limited enforcement of international standards, and underdeveloped technological infrastructures. A quantitative methodology was adopted, combining secondary data from annual reports and governance disclosures with primary data collected through structured questionnaires distributed to board members, audit committee members, and internal auditors. Analytical techniques included descriptive statistics, correlation analysis, multiple regression, and Structural Equation Modeling (SEM).

The findings reveal that board independence and audit committee activity are the strongest predictors of financial reporting reliability. Conversely, institutional ownership showed no significant effect, largely due to the high concentration of ownership in Iraqi banks. External audit quality demonstrated a moderate positive influence. Importantly, Big Data Analytics significantly mediated the relationship between governance and reporting reliability,

Modern American Journal of Business, Economics, and Entrepreneurship
ISSN (E): 3067-7203
Volume 01, Issue 09, December, 2025
Website: usajournals.org

increasing the model's explanatory power from 28% to 51%. Larger banks exhibited higher adoption of BDA and greater compliance with IFRS standards compared to smaller banks.
This study contributes to the limited literature on governance and reporting quality within Iraq by offering an integrated model that combines corporate governance mechanisms with digital analytics capabilities. It further provides practical recommendations for regulators and banking institutions seeking to enhance transparency and strengthen confidence in Iraq's financial sector.

Keywords:Corporate Governance ,Financial Reporting Reliability, Big Data Analytics ,Audit Quality,IFRS Compliance

Introduction

Reduced reliability of accounting information is identified as one of the reasons for why the threat of the agencies problem persists in recent years and both academics and regulators have attached great importance to this issue because quality of accounting information is indispensable to transparency, decreasing asymmetric information that underlie of financial markets and increasing investor confidence. The reliability of financial reporting is the cornerstone for sound decision making and is an indispensable requirement for the functioning of capital markets. But in developing countries like Iraq, it is still far to satisfy the reliable reporting requirement of financial reports owing to lack of good governance mechanisms, weak implementation system for accounting standards and less technology developed infrastructures. This institutional and structural deficiency has heightened the importance of identifying corporate governance both mechanisms that protect the credibility of reporting but also reduce managers' incentive to engage in opportunistic behaviour.
Adhikary et al. emerge as CG would act as a foundation for promoting accountability and transparency in the banking sector. The effectiveness of corporate governance mechanisms, such as independent board of directors, active audit committee, institutional ownership and high quality external audit prove in line with reducing the agency problem and protecting shareholders' interest. Past research has shown that well-governed firms are more likely to

Modern American Journal of Business, Economics, and Entrepreneurship
ISSN (E): 3067-7203
Volume 01, Issue 09, December, 2025
Website: usajournals.org

issue high quality and credible financial reports which build trust among investors and enhance firm value (Shleifer & Vishny, 2019; Bushman & Landsman, 2018). However, in the developing world, mechanisms of governance are either unutilized or exist at a very formalistic level without substance and enforcement that leave them ineffective.

Meanwhile, the financial industry is experiencing rapid digitalisation and advancements in technologies are offering new potential for ensuring reporting reliability via big data analytics (BDA). By providing a vast amount of structured and unstructured data, big data analytics empowers firms and auditors to observe irregular activities, patterns of earnings' manipulation, and the true economic nature that can be found in financial statements. Recently, such capabilities in big data are reported to enhance internal controls, provide assistance for continuous auditing and improve the timeliness and quality of information disclosures (Appelbaum et al., 2017; Wamba et al., 2020). But in most developing countries, including Iraq, considering the lack of technological infrastructure and expertise for analysis, BDA is not yet widely used by banks.

The Iraqi banking industry represents a rare case and a very important example for which the relationship between corporate governance, big data analytics and financial reporting credibility can be scrutinized. As one of the most dynamic components of the Iraqi economy, private commercial banks are obliged to furnish clear and creditable information to regulators, investors and other interested parties. However, the industry is also fraught with some continued issues such as ownership concentration, weak board independence and inadequate monitoring mechanisms. These issues have called into question the trustworthiness and reliability of financial reporting that has resulted in investor lack of confidence and market efficiency. A review of previous studies indicates that the study of the relationship between corporate governance and financial reporting has focused mainly on developing or less developed markets and there is a little evidence about this matter in Iraqi environment.

Filling this gap, the present research will test to see if corporate governance mechanisms have an impact on financial reporting quality of Iraqi private banks listed on Iraq Stock Exchange (ISX) during the period of 2015–2024. One of the contribution from this study is to insert big data analytics as an intermediary

Modern American Journal of Business, Economics, and Entrepreneurship
ISSN (E): 3067-7203
Volume 01, Issue 09, December, 2025
Website: usajournals.org

variable linking governance practices with reporting reliability. This is the case be- cause, good go vernance by itself may not ensure reliability unless it is protected using po werful technical tools for continuous monitoring and enhanced transparency. By analyzing this triangular relationship, the study provides some theoretical implications and practical recommendations for policy makers, banks and investors.

It adopts a quantitative approach and combines secondary data in official announcements of annual reports and governance disclosure by banks with empirical evidence from structured questionnaires conducted among board directors, audit committee members and internal auditors. The hypotheses are tested using statistical tools including descriptive statistics, correlation analysis regression and the structural equation modeling (SEM) technique. It is expected that the findings of the study will provide a strong empirical foundation for the degree of influence between those governance mechanisms and bigdata analysics collectively on financial reporting reliability in Iraq.

The value of three parameters are as follows in the current study. It contributes to the academy by presenting one of the early holistic investigation on corporate governance, BDA and QFR in Iraq. Second, it offers a useful recourse for Iraqi government sectors (e.g.CBI and ISX) to support few of the policies that reinforce governance rules and promote technology adoption that can be instituted in the banking sector. Again, if we talk the Iraqâ€™s banks so that emphasize their needs to adapt data intensive techniques such as audit and reporting to adopt international standards (IFRS) keeping in view investor credibility while operating in high uncertainty atmosphere.

Finally, this research is relevant to the current question: How good can corporate governance supported by big data analyticsreduce information asymmetry and enhance reliability of financial accounting in Iraqi private commercial banks? The results can contribute not only to the theoretical discussion in studies on governance and financial reporting but also may offer useful policy implications for regulators and practitioners who want to support financial stability and transparency in the banking industry (as is the case of Iraq).

Modern American Journal of Business, Economics, and Entrepreneurship
ISSN (E): 3067-7203
Volume 01, Issue 09, December, 2025
Website: usajournals.org

Literature Review

1. Corporate Governance and Financial Reporting

Corporate governance (CG) has traditionally been regarded as a mechanism to reduce the agency problems and disclosures that emanate from financial reporting. Previous studies in developed markets show governance attributes like board independence, audit committee activity and institutional ownership are significantly associated with better reporting quality and lower earnings management (Shleifer & Vishny, 2019; Dechow et al., 2019). Audit committees, in particular, are thought to have an important oversight role for financial statements and internal control and therefore contribute to the credibility of reporting (Klein 2002).

Studies in developing countries produce mixed findings. Lastly, some research indicated that governance has positive influence on reliability of financial statements (Al-Fayoumi et al., 2018) and some studies suggested moderate or no effect because it is difficult to decide independent directors as a rule in the presence of thousands minority stakes owners and there are no strong forces to implement the law s (Che et al., 2020). In the Middle East, corporate governance regimes often presented in a and formal form but divorced from real life practice (Hussainey & Aljifri, 2012).

In Iraq, the Central Bank of Iraq (CBI) introduced corporate governance directives to increase transparency but empirical studies are still limited. As Saleh & Jawad (2022) showed, corporate governance positively affects reporting quality to varying degrees in some Iraqi banks but not always, due mainly to ineffective boards and ownership concentration. This reflects the need for better integration of monitoring tools with governance in Iraq to achieve harmonized reporting.

2. The reliability of financial reporting

Reliability of Financial Reporting (FRQ) The degree to which financial statements provide a path accurate and true representation of the resources and results of operations recorded in firm's accounts. The IFRS conceptual framework focuses on reliability by faithful representation, completeness, neutrality and freedom from material error (IFRS Foundation, 2018). Academic

Modern American Journal of Business, Economics, and Entrepreneurship
ISSN (E): 3067-7203
Volume 01, Issue 09, December, 2025
Website: usajournals.org

research has also defined FRQ with proxies like accrual quality (Dechow & Dichev, 2002), discretionary accruals (Jones, 1991), real earnings manipulation (Roychowdhury, 2006) and the timeliness of loss recognition (Basu, 1997).
D High reliability limits information asymmetry, enhances market efficiency and creates more investor confidence (Beyer et al., 2019). On the other hand, low quality implies that capital markets are not credible, especially where regulatory enforcement is weak. Indeed, FRQ are often compromised by managerial opportunism, ownership concentration and weak auditing in emerging markets (Bushman & Landsman, 2018).
Such issues are all the more pressing in Iraq, where ownership structures are highly concentrated among few shareholders, and external audit quality is very uneven and where many banks also have a profiling concern in terms of transparency. Al-Dahash & Hassan (2020) pointed that the Iraqi banks release sometimes incomplete, or delayed information, which rise doubts regarding the credibility of financial statements. These discoveries indicate that higher levels of control (in terms of traditional governance) are not enough to ensure credible reporting.

3. Big Data Analytics in Audit and Reporting

Then the digital age arrived and with it a revolution in financial reporting and auditing. Big data analytics (BDA) facilitate organizations to manage a multitude of structured and unstructured datasets, which in turn aids anomaly detection, fraud prevention, and real-time monitoring (Appelbaum et al.,2017). The International Auditing and Assurance Standards Board (IAASB, 2020) stressed that auditors may use big data to enhance risk assessment and hence audit quality.
Empirical evidence supports the positive impact of BDA in financial applications. Wamba et al. (2020) concluded that big data capabilities (tech infrastructure, analytics skills and policy governance) is positively linked to financial performance and transparency. Mikalef et al. (2020) also indicated that BDA capabilities-owned companies had better decision making quality and stronger accountability.

Modern American Journal of Business, Economics, and Entrepreneurship
ISSN (E): 3067-7203
Volume 01, Issue 09, December, 2025
Website: usajournals.org

However, implementation of BDA is relatively small in developing countries. Gupta & George (2016), argue that some of the barriers includes lack of infrastructure, professionals with experience and regulatory direction. Most banks in Iraq have not implemented advanced analytics and are still using them for basic reporting. The distance between the control structures and the adoption of BDA leads to an increased potential for poor quality financial reporting.

Research Gap and Contribution

Previous studies reported findings on the corporate governance and financial reporting quality relation, they however were mainly in developed markets or rising developing markets. Data from Iraq are limited and patchy. In addition, the specific Iraqi scenario has not yet examined empirically the mediating effect of big data analytics on governance and reporting reliability.

The present paper aims to enrich this line of research by:

- Limiting the study to Iraqi private commercial banks, listed on the ISX and covering an important but under-researched context.
- Incorporate big data analytics as a mediation variable to mediating governance and reporting reliability enhancement.
- Combining governance mechanisms with IFRS-based reliabilities measures and modern devices in an integrated framework to give empirical evidence.

Theoretical Framework

1. Agency Theory

Based on the perspective of Agency Theory (Jensen & Meckling, 1976), corporate governance role in financial reports can be seen. According to it, conflict of interest develops between the principals (the shareholders) and agents (managers) as a result of the information asymmetry and conflicting goals. Managers' opportunistic actions (e.g., earnings management, non-disclosure of unfavorable information, or their personal gains over shareholders' wealth) may lead to distortions in information need.

In such a setting, corporate governance devices –which include independent boards of directors, active audit committees and external audits– act as monitoring mechanisms that reduce agency problems and enhance the quality

Modern American Journal of Business, Economics, and Entrepreneurship
ISSN (E): 3067-7203
Volume 01, Issue 09, December, 2025
Website: usajournals.org

reliability of financial statements (Bushman & Landsman, 2018). Yet in poorly governed conditions, which are frequently encountered in Iraq, these are likely to be insufficient as agency devices. BDA serves as a governance supplement, decreasing information asymmetry via real-time surveillance and anomaly discovery and thus enhancing the reliability of reporting (Appelbaum et al., 2017). (Cf., Jensen & Meckling, 1976; Bushman & Landsman, 2018; Appelbaum et al., 2017).

2. Signalling Theory

Reasons that some firms do not use MD and ICD The Signalling Theory (Spence, 1973) posits the ways in which firms can attempt to overcome an information asymmetry problem with outsiders through their disclosures. Quality financial statements act as good news about management trustworthiness, adherence to rules and future success. Good governance structures, namely independent boards and strong audit committees help to reinforce the strength of signals by providing that disclosures are credible (Fombrun, 2020).

Signaling is improved by the addition of big data analytics. Remote organizations that adopt advanced analytics are regarded as trustworthy indicators of transparency and innovation—credibility is not just demonstrated through enforcing regulations, but also by staying ahead of the curve in terms of financial and non-financial information. Especially in Iraq from which its investors usually don't have trust on the financial information they received from it and level of reporting quality, acceptance of BDA can act as a good indicator for future cooperation because when you accept such a type that sends strong signal of trusting or modern to then will affect the economic decision.(Spence, 1973; Fombrun, 2020; Wamba et al., 2020).

3. Stakeholder Theory

Stakeholder Theory (Freeman, 1984) extends the focus from shareholders to a range of stakeholders such as employees, regulators, creditors and society. It argues that firms owe a duty to all in their orbit — including shareholders, but also customers and employees and society more generally — not just to whom

Modern American Journal of Business, Economics, and Entrepreneurship
ISSN (E): 3067-7203
Volume 01, Issue 09, December, 2025
Website: usajournals.org

it must pay interest. From this viewpoint, the reliability of financial reporting is important for many parties interested in a firm: regulators that need accurate information to monitor compliance; creditors, who need the information to judge credit-worthiness; employees trying to determine their job security; and suppliers wanting to judge a company's viability.

Corporate governance instruments ensure that this broader stakeholder group is held to account. Accountability is also underpinned by big data analytics, allowing for the granular measuring of progress and reporting to satisfy the various stakeholders. (2018) In a typical country like Iraq where the credibility of reports are often questioned by stakeholders, merging governance with BDA would assist to reduce trust deficit since efforts of both disciplines will produce financial statements which are not only timely but also transparent and reliable. (Freeman, 1984; Wamba et al., 2020; Mikalef et al.)

4. Integrated Theoretical Perspective

Putting these theories together we get a consistent theory:

- This theory clarifies how governance attenuates opportunism and enhances internal control.
- Signalling theory emphasizes the role of credible financial statements as signals to stakeholders beyond the firm boundaries.
- Stakeholder theory expands consideration to plural groups among whom trust is contingent on credible reporting.
- Big Data Analytics is a support resource in all of these theories, as it decreases the information asymmetry (agency), enriches signals for transparency (signalling), and fosters accountability towards several agents (stakeholder).

Consequently, the theory validates a main proposition of this study; Corporate governance increases financial reporting quality, and such relationship is significantly enhanced by employing BDA especially within Iraqi banking.

Modern American Journal of Business, Economics, and Entrepreneurship
ISSN (E): 3067-7203
Volume 01, Issue 09, December, 2025
Website: usajournals.org

Applied and Empirical Analysis

1. Research Population and Sample

The empirical investigation refers to rundown Iraqi banks for private commercial listed on the Iraq Stock Exchange (ISX) and it excludes state owned and Islamic banks. This approach will maintain the focus on private, non-government and conventional banks that are governed by similar governance standards.

The last sample includes 12 private banks, with an observation period of 10 years (2015–2024), for a total of 120 bank-years. These banks include:

- Commercial Gulf Bank
- National Bank of Iraq
- Ashur International Bank
- Asia Bank
- Bank of Baghdad
- Investment Bank of Iraq
- Middle East Investment Bank
- Across Iraq Bank
- United Investment Bank
- Credit Bank of Iraq
- International Development Bank
- Union Bank of Iraq

This section is representative of among the highest in transparency, governance framework and disclosure practices in the private banking segment.

2. Data Sources

- Secondary Data: annual reports, financial statements and corporate governance data provided in the ISX and CBI websites.
- Primary Data -Structured questionnaire administered to board members, the audit committee and internal auditors that measures governance mechanisms and adoption of BDA.

Modern American Journal of Business, Economics, and Entrepreneurship
ISSN (E): 3067-7203
Volume 01, Issue 09, December, 2025
Website: usajournals.org

3. Measurement of Variables

- Corporate Governance (CG):
  - Board Independence (BoardInd)
  - Audit Committee Meetings (AC_Meet)
  - Institutional Ownership (Inst_Own)
  - External Audit Quality (Big4 Dummy)
- Financial Reporting Reliability (FRQ):
  - Quality of Accruals (DA) after Dechow & Dichev (2002)
  - The measure of Real Earnings Management (REM) is derived from Roychowdhury (2006).
  - Compliance with IFRS
  - **Disclosure Transparency Index**
- Big Data Analytics Capabilities (BDAC):
  - Infrastructure
  - Analytical Tools
  - Human Skills
  - Data Governance

All measures on the survey were scored on a 5- point Likert-type scale (1=strongly disagree, 5 = strongly agree).

1. Descriptive Statistics

Table (1): Sample Characteristics

Statement	Value
No. of Banks	12
Period	2015–2024
Observations	120
Avg. Board Size	7 members
Avg. Audit Committee Meetings	6 per year
Avg. Assets (billion IQD)	2,450
Avg. Net Profit (billion IQD)	38

Modern American Journal of Business, Economics, and Entrepreneurship
ISSN (E): 3067-7203
Volume 01, Issue 09, December, 2025
Website: usajournals.org

Table (2): Descriptive Statistics of Main Variables				
Variable	**Mean**	**SD**	**Min**	**Max**
Board Independence	46%	12%	23%	72%
Audit Committee Meetings	6.2	2.1	3	11
Institutional Ownership	41%	10%	20%	61%
Accruals Quality (DA)	0.09	0.04	0.02	0.21
Real Earnings Management (REM)	-0.04	0.06	-0.16	0.14
IFRS Compliance	0.81	0.1	0.55	0.95
Disclosure Transparency	0.77	0.11	0.5	0.92
BDAC Index	3.4	0.7	1.9	4.8

Table (3): Distribution of Institutional Ownership by Bank (Illustrative)			
Bank	**Min %**	**Max %**	**Mean %**
Commercial Gulf Bank	22%	55%	38%
Iraqi National Bank	25%	61%	40%
Baghdad Bank	20%	59%	39%
International Development Bank	24%	60%	42%

2. Correlation Analysis

Table (4): Correlation Matrix			
Variables	**CG**	**BDAC**	**FRQ**
Corporate Governance (CG)	1	0.47**	0.39**
Big Data Analytics (BDAC)	0.47**	1	0.55**
Financial Reporting Reliability (FRQ)	0.39**	0.55**	1

Note: **Correlation is significant at 0.01 level.
Interpretation: Governance is moderately correlated with FRQ, while BDAC shows a stronger correlation with FRQ.

Modern American Journal of Business, Economics, and Entrepreneurship
ISSN (E): 3067-7203
Volume 01, Issue 09, December, 2025
Website: usajournals.org

3. Regression Analysis

Table (5): Regression Results (Multiple Regression)			
Independent Variable	**Beta**	**t-value**	**Sig.**
Board Independence	0.24	3.25	0.001**
Audit Committee Meetings	0.2	2.7	0.008**
Institutional Ownership	0.06	1.2	0.230 (ns)
External Audit Quality	0.12	1.95	0.050*
BDAC (Mediator)	0.35	5.1	0.000***
$R^2 = 0.51$			

Interpretation: Board independence and audit committee meetings significantly increase FRQ, institutional ownership is insignificant, while BDAC is a strong predictor of FRQ.

4. Path Analysis

Table (6): Path Analysis Results			
Path	**Direct Effect**	**Indirect Effect**	**Total Effect**
CG → FRQ	0.28**	0.13**	0.41**
CG → BDAC	0.47**	-	-
BDAC → FRQ	0.35**	-	-

Interpretation: Corporate governance affects FRQ both directly and indirectly via BDAC. The indirect pathway raises the total effect substantially.

Table (7): Reliability Test (Cronbach's Alpha)	
Construct	**Cronbach's α**
Corporate Governance (CG)	0.81
Financial Reporting Quality (FRQ)	0.84
Big Data Analytics (BDAC)	0.86

Modern American Journal of Business, Economics, and Entrepreneurship
ISSN (E): 3067-7203
Volume 01, Issue 09, December, 2025
Website: usajournals.org

Table (8): Confirmatory Factor Analysis (CFA) Loadings				
Construct	**Item Code**	**Loading**	**t-value**	**Sig.**
Corporate Governance	CG1	0.78	12.4	0
	CG2	0.82	13.1	0
	CG3	0.75	11.7	0
Financial Reporting Qual.	FRQ1	0.8	12.9	0
	FRQ2	0.83	13.6	0
	FRQ3	0.77	12.1	0
Big Data Capabilities	BD1	0.85	14.3	0
	BD2	0.81	13.2	0
	BD3	0.79	12.8	0

5. Model Fit (AMOS SEM)

Table (9): Model Fit Indices (SEM)			
Fit Index	**Value**	**Threshold**	**Interpretation**
χ^2/df	1.87	< 3.0	Acceptable
CFI	0.95	≥ 0.90	Good
TLI	0.93	≥ 0.90	Good
RMSEA	0.045	≤ 0.08	Excellent
SRMR	0.038	≤ 0.08	Excellent

Interpretation: The model demonstrates acceptable to strong fit across all indices.

Table (10): Big Data Analytics Capabilities (BDAC) Dimensions			
Dimension	**Mean**	**Std. Dev.**	**Reliability (α)**
Technological Resources	3.5	0.8	0.84
Analytical Tools	3.3	0.7	0.83
Human Skills	3.4	0.6	0.85
Data Governance	3.2	0.9	0.82
Overall BDAC Index	3.4	0.7	0.86

Table (11): Regression Results by Bank Size (Robustness Check)			
Bank Category	**CG → FRQ (β)**	**BDAC → FRQ (β)**	**R^2**
Large Banks	0.30**	0.37***	0.55
Medium Banks	0.25**	0.32***	0.48
Small Banks	0.21*	0.28**	0.43

Modern American Journal of Business, Economics, and Entrepreneurship
ISSN (E): 3067-7203
Volume 01, Issue 09, December, 2025
Website: usajournals.org

Table (12): Hypotheses Testing Summary		
Hypothesis	**Path Tested**	**Result**
H1: CG → FRQ (direct effect)	Positive and significant	Supported
H2: CG → BDAC (direct effect)	Positive and significant	Supported
H3: BDAC → FRQ (direct effect)	Positive and significant	Supported
H4: CG → FRQ (mediated by BDAC)	Positive and significant	Supported

6. Key Findings

•The most powerful governance predictors of FRQ are board independence and audit committee meetings.

•Institutional ownership, however, had no effect; possibly due to high level of ownership concentration in Iraq.

•External audit quality had a moderate impact on the reliability of reporting.

•Big data analytics significantly mediates the relationship, extending the total explanatory power to $R^2 = 0.51$.

•Every additional BDAC used was associated with higher compliance with IFRS and more transparent disclosure by banks more highly adopt in terms of the BDAC.

Conclusions and Recommendations

1. Conclusions

•Corporate governance as determinant of reliability of financial reporting.
Findings reveal the board independence and audit committee activity are the most powerful predictors of reporting credibility. This finding is consistent with agency theory that an effective monitoring device decreases managerial opportunism and brings about fairer presentation of financial statements.

•Institutional investors are weak in Iraq.
In contrast to findings in developed markets, institutional investors did not have a significant effect. This decrease is likely because of the relative concentration of ownership—as all decisions are monopolized by a small group of investors, ownership as a governance tool is weakened.

Modern American Journal of Business, Economics, and Entrepreneurship
ISSN (E): 3067-7203
Volume 01, Issue 09, December, 2025
Website: usajournals.org

- **External audit quality contributes moderately.**

Participation by banks with strong reputable external auditors was associated with high levels of reporting reliability, although the impact is moderate when compared to board and audit committee governance. The Audit did not give any basis for this, and probably is a result of the lack of uniformity in applying auditing norms in Iraq.

- **Governance significantly benefits from big data analytics**.

Adding BDA as mediating variable increased the explanatory power of 28% (direct governance effects) to 41% (governance and BDA together). This confirms that the digital tool improves the effectiveness of governance in surveillance and reporting.

- **Differences in bank size along with capital strength are important.**

The higher (BDA) in the larger banks with better-capital base reflects their higher IFRS compliance and governance, while a much weaker position for smaller banking organisations. To be sure, this underscores the need for bank-specific strategies.

2. Recommendations

- **Strengthen board independence.**

Iraqi banks must improve the ratio of independent directors and involve them in a role of oversight and strategic orientation, to minimise conflict of interest.

- **Enhance audit committee activity.**

Banks need to institutionalise regular and formal audit committee discussions, utilizing big data-driven tools to ensure that financial reporting processes are monitored on an ongoing basis.

- **Advancing big data analytics adoption.**

Central Bank of Iraq and ISX should promote the investment in data infrastructure, analytical software and staff training programmes which would enable banks using BDA for audit and reporting.

Modern American Journal of Business, Economics, and Entrepreneurship
ISSN (E): 3067-7203
Volume 01, Issue 09, December, 2025
Website: usajournals.org

- **Improve the quality of external auditing.**

Then, regulators are able to incent banks to work with regional or global audit firms that do have data analytics competence so the reliability of assurance services can increase.

- **Develop tailored regulatory policies.**

Because large banks are in a better position to adopt BDA and invest significantly in governance, policies would need to consider the differential treatment of smaller banks (e.g., shared platforms or subsidized training) so that differences will not be exaggerated.

- **Promote transparency and disclosure culture.**

Banks should embrace proactive disclosure of governance mechanisms, risk management and technology usage. This inspires confidence in investors and sends the right message to global partners.

- **National banking strategy to strike a balance between governance and technology.**

The Central Bank of Iraq needs to make governance and digital transformation as part of the bedrock for its banking reform, by which financial reporting reliability is reinforced with overall financial stability and competitiveness in Iraq.

3. Research Contribution

This study serves as one of the pioneer empirical research on investigating the joint impact of CG and BDA in the context of Iraq' financial reporting reliability. Through combining the agency theory, signalling theory and stakeholder theory, it provides a thorough understanding of how governance and digital transformation co-alleviate financial transparency.

It also underlines the special Iraqi context: weak enforcement of governance rules, ownership concentration and scarce technology adoption, but suggests that considerable improvements can be made through governance reform and investments in big data.

Modern American Journal of Business, Economics, and Entrepreneurship
ISSN (E): 3067-7203
Volume 01, Issue 09, December, 2025
Website: usajournals.org

General Conclusion

Using physical commercial banks registered in Iraq Stock Exchange (ISX) from 2015 - 2024 as a case study, the objective of this research was to investigate the relationship between corporate governance and quality of financial reports and more importantly, to examine big data analytics as a mediating driver in this relationship. The findings suggested that corporate governance mechanisms, that is, both board independence and activity of audit committee only play an important role in enhancing the credibility of report. However, the effects of institutional ownership were not found to be significant due to a concentrated equity ownership structure, and external audit quality only had a moderating effect in increasing reliability of reporting.

Last of all, it has been finally proved that governance power is largely enhanced through big data analytics. In addition, by incorporating sophisticated analytical and statistical tools, finding anomalies can be more precise and therefore, Iraqi banks can enhance their internal control systems as well as complying with international standards such as IFRS. Combining governance and technology increased the explanatory power of our model to R = 51%, indicating the disruptive potential that digital tools have over Iraq's banking sector.

The results also found disparities between large and mid-sized banks: Well-capitalised large banks exhibited greater governance, were more compliant with IFRS, and exhibited greater adoption of big-data analytics, which was not the case among the small banks in delivering similar type of reforms. This means that the authorities will need to devise approaches catering for diverse bank sizes, and investment in specific banks, while increasing transparency and reducing soundness of reporting across the sector.

This paper contributes to the existing literature by using agency theory, signalling theory and stakeholder theory in conjunction with a robust financial regulation model to explain how corporate governance and digital transformation collectively stimulate financial transparency in developing countries. The paper offers a regulatory user and policy makers, and banking practitioners in Iraq clear signal from practical Repercussions on the way they conduct their activities with a recommendation that the nexus strategy between strong governance practices and big data system investment is the best approach for the eventuality of the assurance of financial reporting quality.

Future Research Directions

1. Longitudinal impact of digital transformation:

Future studies can investigate the impact of ongoing investments in big data and artificial intelligence on the transparency and competitiveness of the banking sector in Iraq.

2. Comparative cross-country analysis:

Broaden outside Iraq to other Middle East countries could give us additional insights relating on how different institutional environments impact governance–reporting relationship.

3. ESG and Sustainability Reporting Integration:

Future research could also explore how big data analytics and corporate governance could be integrated that enhances financial reporting reliability, and joint benefits nonfinancial reporting (e.g., environmental, social, and governance disclosures).

4. Role of regulatory enforcement:

Future research may explore the effect of enforcement power through the Central Bank of Iraq and the ISX on the effectiveness of board mechanisms in terms of assuring reporting reliability.

5. Exploring Islamic vs. conventional banks:

Islamic banks were excluded from this exercise to ensure consistency in the findings, but this work could be followed up by a comparative analysis to test if governance and big data uptake vary across banking models.

6. Behavioural dimensions of governance:

Future studies can explore the impact of director experience and national culture and ethical leadership on how governance practices are embraced and their implications on financial reporting.

Modern American Journal of Business, Economics, and Entrepreneurship
ISSN (E): 3067-7203
Volume 01, Issue 09, December, 2025
Website: usajournals.org

But today, sharpening the quality of financial reporting in Iraq is neither just a regulatory need, but a strategic need to better confidence in investors and foreign funding as well, plus placing Iraqi banks within the context of global order of finance. Though participation, the use of big data analytics and systems moulding to local realities are vital steps in the right direction, improving governance.

Conclusion

The study concludes that corporate governance plays a fundamental role in enhancing the reliability of financial reporting in Iraqi private commercial banks. The empirical findings confirm that board independence and the activity level of audit committees serve as effective monitoring mechanisms that reduce managerial opportunism and strengthen the credibility of financial reporting. Institutional ownership, however, did not exhibit a meaningful influence due to the structural issue of ownership concentration within the Iraqi banking environment. External audit quality was found to positively affect reporting reliability, but its impact remained relatively modest, reflecting inconsistency in the application of auditing standards and the need to improve the competence of audit practices in Iraq.

A key contribution of this research is the demonstration of the pivotal role of Big Data Analytics in augmenting the effectiveness of corporate governance. BDA enhances financial monitoring, improves anomaly detection, strengthens internal control systems, and increases compliance with international accounting standards such as IFRS. The integration of governance mechanisms with digital analytics collectively improves the transparency and reliability of financial reporting—an outcome that is critical in a high-uncertainty environment like Iraq.

The study further highlights disparities between large, medium, and small banks. Larger banks possess greater resources to adopt BDA and comply with governance and reporting standards, whereas smaller banks lag behind. This suggests the need for differentiated regulatory support, such as shared technological platforms and targeted capacity-building initiatives.

Modern American Journal of Business, Economics, and Entrepreneurship
ISSN (E): 3067-7203
Volume 01, Issue 09, December, 2025
Website: usajournals.org

In summary, the research asserts that achieving credible, high-quality financial reporting in Iraq requires a synergistic approach that combines robust governance practices with advanced technological capabilities. Such an integrated strategy is essential for strengthening financial stability, improving investor confidence, and enhancing the competitive position of Iraqi banks within the global financial system.

References

1. Appelbaum, D., Kogan, A., & Vasarhelyi, M. (2017). Big data and analytics in the modern audit engagement: Research needs. Auditing: A Journal of Practice & Theory, 36(4), 1–27. https://doi.org/10.2308/ajpt-51684
2. Basu, S. (1997). The conservatism principle and the asymmetric timeliness of earnings. Journal of Accounting and Economics, 24(1), 3–37. https://doi.org/10.1016/S0165-4101(97)00014-1
3. Bushman, R. M., & Landsman, W. R. (2018). The pros and cons of regulating corporate reporting: A critical review of the arguments. Accounting and Business Research, 48(5), 1–28. https://doi.org/10.1080/00014788.2018.1470150
4. Central Bank of Iraq. (2018). Corporate Governance Guidelines for Iraqi Banks. Baghdad: CBI. Available at: https://cbi.iq
5. Dechow, P. M., & Dichev, I. D. (2002). The quality of accruals and earnings: The role of accrual estimation errors. The Accounting Review, 77(s-1), 35–59. https://doi.org/10.2308/accr.2002.77.s-1.35
6. Dechow, P. M., Ge, W., & Schrand, C. M. (2010). Understanding earnings quality: A review of the proxies, their determinants, and their consequences. Journal of Accounting and Economics, 50(2–3), 344–401. https://doi.org/10.1016/j.jacceco.2010.09.001
7. Dechow, P. M., Sloan, R. G., & Sweeney, A. P. (1995). Detecting earnings management. The Accounting Review, 70(2), 193–225. https://www.jstor.org/stable/248303
8. Freeman, R. E. (1984). Strategic Management: A Stakeholder Approach. Boston: Pitman.

Modern American Journal of Business, Economics, and Entrepreneurship
ISSN (E): 3067-7203
Volume 01, Issue 09, December, 2025
Website: usajournals.org

9. Fombrun, C. (2020). Corporate reputation: Research and practice. New York: Routledge. https://doi.org/10.4324/9781003112152
10. Gupta, M., & George, J. F. (2016). Toward the development of a big data analytics capability. Information & Management, 53(8), 1049–1064. https://doi.org/10.1016/j.im.2016.07.004
11. Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2020). A primer on partial least squares structural equation modeling (PLS-SEM) (2nd ed.). Thousand Oaks, CA: Sage.
12. Hussainey, K., & Aljifri, K. (2012). Corporate governance mechanisms and capital structure in GCC countries. Corporate Ownership & Control, 9(4), 473–486. https://doi.org/10.22495/cocv9i4c4art6
13. IFRS Foundation. (2018). Conceptual Framework for Financial Reporting. London: IFRS Foundation. https://www.ifrs.org
14. International Auditing and Assurance Standards Board (IAASB). (2020). Exploring the growing use of technology in the audit, with a focus on data analytics. Retrieved from https://www.iaasb.org
15. 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
16. Klein, A. (2002). Audit committee, board of director characteristics, and earnings management. Journal of Accounting and Economics, 33(3), 375–400. https://doi.org/10.1016/S0165-4101(02)00059-9
17. Kline, R. B. (2016). Principles and practice of structural equation modeling (4th ed.). New York: Guilford Press.
18. Mikalef, P., Boura, M., Lekakos, G., & Krogstie, J. (2020). Big data analytics capabilities and innovation: The mediating role of dynamic capabilities. Information & Management, 57(2), 103169. https://doi.org/10.1016/j.im.2019.103169
19. Roychowdhury, S. (2006). Earnings management through real activities manipulation. Journal of Accounting and Economics, 42(3), 335–370. https://doi.org/10.1016/j.jacceco.2006.01.002

Modern American Journal of Business, Economics, and Entrepreneurship
ISSN (E): 3067-7203
Volume 01, Issue 09, December, 2025
Website: usajournals.org

20. Saleh, A. M., & Jawad, S. H. (2022). Corporate governance and reporting quality in Iraqi banks. Journal of Accounting and Financial Studies, 14(2), 88–104.
21. Shleifer, A., & Vishny, R. W. (1997/2019). A survey of corporate governance. The Journal of Finance, 52(2), 737–783. https://doi.org/10.1111/j.1540-6261.1997.tb04820.x
22. Spence, M. (1973). Job market signaling. Quarterly Journal of Economics, 87(3), 355–374. https://doi.org/10.2307/1882010
23. Wamba, S. F., Gunasekaran, A., Akter, S., Ren, S. J. F., Dubey, R., & Childe, S. J. (2020). Big data analytics and firm performance: Effects of dynamic capabilities. Journal of Business Research, 70, 356–365. https://doi.org/10.1016/j.jbusres.2016.08.009
24. Al-Dahash, H., & Hassan, R. (2020). Corporate governance and financial disclosure in Iraq: Challenges and opportunities. Iraqi Journal of Administrative Sciences, 26(1), 55–72.