

ECONOMIC SCIENCES

THE IMPACT OF DIGITAL TRANSFORMATION ON FINANCIAL REPORTING QUALITY UNDER IFRS: EVIDENCE FROM EMERGING ECONOMIES

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Abstract

Digital transformation has increasingly reshaped accounting information systems and financial reporting practices worldwide. This study examines the effect of digital transformation on financial reporting quality in emerging economies operating under International Financial Reporting Standards (IFRS). Using panel data from non-financial firms across selected emerging economies over the period 2013–2023, the research applies fixed-effects regression analysis to investigate how digitalization influences the relevance, reliability, and transparency of financial reports. The findings indicate that higher levels of digital transformation are associated with improved financial reporting quality, primarily through enhanced data accuracy, reduced information asymmetry, and more timely disclosure of financial information. In addition, the results show that the positive impact of digitalization is more pronounced in firms with stronger corporate governance mechanisms. This study contributes to the literature by providing empirical evidence from emerging markets and highlighting digital transformation as a key institutional factor supporting the effective implementation of IFRS. The results have important implications for regulators, policymakers, and firm managers aiming to strengthen the credibility and usefulness of financial reporting in the digital era.

Keywords: Digital transformation; Financial reporting quality; IFRS; Emerging economies; Corporate governance.

1. Introduction

The ongoing process of digital transformation has become a defining feature of modern economic systems and organizational practices. Advances in digital technologies—such as enterprise resource planning (ERP) systems, cloud computing, big data analytics, blockchain, and artificial intelligence—have fundamentally reshaped the way firms collect, process, and disseminate information. Accounting and financial reporting systems, which constitute the backbone of corporate information infrastructure, are increasingly influenced by these technological developments. As a result, digital transformation is no longer viewed merely as an operational improvement tool but as a strategic factor that can significantly affect the quality of financial information provided to stakeholders.

High-quality financial reporting is widely recognized as a cornerstone of efficient capital markets and sustainable economic development. Financial reports that are relevant, reliable, comparable, and timely reduce information asymmetry between corporate managers and external users, enhance investor confidence, and facilitate more accurate valuation and resource allocation decisions. In this context, International Financial Reporting Standards (IFRS) play a crucial role by promoting transparency, consistency, and comparability of financial information across countries. However, the effectiveness of IFRS in improving financial reporting quality largely depends on firm-level capabilities and institutional conditions.

Emerging economies face particular challenges in achieving high levels of financial reporting quality.

These challenges often stem from weaker regulatory enforcement, limited professional expertise, underdeveloped capital markets, and heterogeneous adoption of IFRS. Even when IFRS are formally adopted, differences in implementation practices may result in variations in reporting quality across firms and countries. Consequently, identifying complementary mechanisms that can enhance the effectiveness of IFRS in emerging economies remains an important research and policy issue.

Digital transformation has the potential to serve as such a complementary mechanism. By automating accounting processes, improving internal control systems, and enabling real-time access to financial data, digital technologies can reduce human error, limit managerial discretion in financial reporting, and enhance compliance with accounting standards. Furthermore, digitalization facilitates more efficient data integration across departments, thereby improving the accuracy and consistency of financial information disclosed in financial statements.

Despite the growing relevance of digital transformation in accounting practice, empirical evidence on its impact on financial reporting quality remains limited and fragmented. Existing studies predominantly focus on developed economies, where institutional frameworks and technological infrastructures are relatively advanced. In contrast, the role of digital transformation in shaping financial reporting outcomes in emerging economies has received comparatively little attention. This gap in the literature is particularly notable given the rapid pace of digital adoption in emerging markets and the increasing reliance on IFRS as a global reporting framework.

This study aims to address this gap by examining the impact of digital transformation on financial reporting quality in IFRS-adopting firms operating in emerging economies. By employing a multi-country panel dataset and robust econometric techniques, the study seeks to provide empirical insights into whether and how digitalization contributes to improved reporting quality in institutional contexts characterized by higher levels of uncertainty and enforcement challenges.

The contribution of this research is threefold. First, it extends the literature on digital accounting by empirically linking digital transformation to financial reporting quality, rather than focusing solely on operational efficiency or cost reduction. Second, it enriches the IFRS literature by highlighting digital transformation as a firm-level factor that may enhance the effectiveness of international accounting standards in emerging economies. Third, it offers practical implications for policymakers, regulators, and corporate managers seeking to strengthen financial reporting quality in the digital era.

The remainder of the paper is structured as follows. Section 2 reviews the relevant literature and develops the research hypotheses. Section 3 describes the data, variables, and methodology. Section 4 presents the empirical results. Section 5 discusses the findings in light of existing research, and Section 6 concludes with policy implications and suggestions for future research.

2. Literature Review

2.1 Digital Transformation and Corporate Information Systems

Digital transformation refers to the comprehensive integration of digital technologies into organizational processes, structures, and strategies with the aim of enhancing performance and value creation. In the corporate context, digital transformation encompasses the adoption of technologies that enable automation, data integration, advanced analytics, and real-time communication. These technologies fundamentally alter how organizations generate and use information, thereby influencing decision-making processes at all levels.

In accounting and finance, digital transformation has led to significant changes in corporate information systems. Traditional manual and paper-based accounting processes have increasingly been replaced by integrated digital platforms that allow for automated transaction recording and standardized data processing. ERP systems, for example, enable firms to integrate financial data with operational and managerial information, thereby improving data consistency and reducing reconciliation errors. Cloud-based accounting solutions further enhance accessibility and scalability, allowing firms to process financial information more efficiently.

The literature suggests that digitalized accounting systems improve internal control quality by strengthening audit trails, enhancing transparency, and facilitating continuous monitoring. Automated controls embedded in digital systems reduce the likelihood of intentional manipulation and unintentional errors, thereby improving the integrity of financial data. Moreover, advanced analytics tools enable accountants and managers to identify anomalies and risks more effectively, supporting more accurate financial reporting.

However, the benefits of digital transformation are not automatic. Successful digitalization requires complementary investments in human capital, organizational change, and governance structures. Without adequate digital skills and effective oversight mechanisms, the adoption of digital technologies may fail to deliver the expected improvements in information quality. This consideration is particularly relevant in emerging economies, where disparities in technological capabilities and professional expertise may influence the outcomes of digital transformation initiatives.

2.2 Financial Reporting Quality: Concept and Measurement

Financial reporting quality is a multidimensional concept that reflects the extent to which financial statements faithfully represent a firm's underlying economic performance and position. High-quality financial reports provide information that is relevant for decision-making, reliably measured, comparable across firms and periods, and presented in a timely manner. These qualitative characteristics are emphasized in the conceptual framework of IFRS and serve as benchmarks for evaluating reporting outcomes.

Empirical studies commonly measure financial reporting quality using accrual-based indicators, earnings management proxies, and disclosure quality indices. Accrual-based measures assess the extent to which reported earnings reflect underlying cash flows, with lower levels of discretionary accruals generally inter-

preted as indicative of higher reporting quality. Disclosure-based measures, on the other hand, focus on the completeness and transparency of information provided in financial statements and accompanying notes.

In emerging economies, measuring financial reporting quality presents additional challenges due to data limitations and differences in reporting practices. Nevertheless, accrual-based measures remain widely used in the literature, as they provide a relatively objective assessment of earnings quality and are applicable across different institutional settings.

2.3 IFRS Adoption and Reporting Quality in Emerging Economies

The adoption of IFRS has been widely promoted as a means of improving financial reporting quality and enhancing comparability across countries. A substantial body of research examines the effects of IFRS adoption on reporting outcomes, with mixed results. While some studies find improvements in transparency and earnings quality following IFRS adoption, others report limited or conditional effects, particularly in countries with weak enforcement mechanisms.

In emerging economies, the effectiveness of IFRS adoption often depends on firm-level characteristics and institutional factors such as regulatory quality, investor protection, and audit enforcement. Merely adopting IFRS does not guarantee high-quality reporting if firms lack the capacity or incentives to comply fully with the standards. As a result, scholars increasingly emphasize the importance of complementary mechanisms that support effective IFRS implementation.

Digital transformation may represent one such mechanism by facilitating standardized data processing and enhancing compliance with complex reporting requirements. By reducing manual interventions and increasing traceability, digital accounting systems can support more faithful representation of financial information under IFRS.

2.4 Digital Transformation and Financial Reporting Quality

The relationship between digital transformation and financial reporting quality has recently attracted growing scholarly attention. Theoretical arguments suggest that digitalization improves reporting quality by enhancing data accuracy, reducing information asymmetry, and limiting managerial discretion. Automated accounting processes reduce the scope for earnings manipulation, while real-time data processing improves the timeliness of financial disclosures.

Empirical evidence on this relationship, however, remains limited. Some studies find that firms with higher levels of digitalization exhibit lower levels of earnings management and higher disclosure quality. Others highlight the moderating role of corporate governance, suggesting that digital technologies are most effective when combined with strong oversight mechanisms. Importantly, much of this evidence is derived from developed economies, leaving open questions about the generalizability of these findings to emerging markets.

Given the distinctive institutional environments of emerging economies, the impact of digital transformation on financial reporting quality may differ from

that observed in developed countries. Factors such as regulatory enforcement, technological readiness, and professional capacity may influence how digitalization affects reporting outcomes. This underscores the need for empirical research focused specifically on emerging economies.

2.5 Research Gap and Hypothesis Development

Although prior studies provide valuable insights into digital transformation and financial reporting quality, several gaps remain. First, there is a lack of comprehensive empirical evidence examining this relationship in emerging economies. Second, existing research often treats digitalization as a secondary factor, rather than a central determinant of reporting quality. Third, limited attention has been paid to the interaction between digital transformation and IFRS implementation.

This study addresses these gaps by explicitly examining the impact of digital transformation on financial reporting quality in IFRS-adopting firms from emerging economies. Based on the theoretical arguments and existing empirical findings, the following hypothesis is proposed:

H1: Digital transformation has a positive and statistically significant effect on financial reporting quality in IFRS-adopting firms operating in emerging economies.

3. Hypothesis Development and Methodology

3.1 Theoretical Background and Hypothesis Development

The relationship between digital transformation and financial reporting quality can be theoretically explained through several complementary perspectives, including agency theory, information asymmetry theory, and institutional theory. According to agency theory, conflicts of interest between managers and shareholders arise due to information asymmetry and divergent incentives. High-quality financial reporting serves as a mechanism to mitigate these conflicts by providing transparent and reliable information about firm performance. Digital transformation strengthens this mechanism by improving data accuracy, reducing manual interventions, and limiting opportunities for opportunistic behavior.

From the perspective of information asymmetry theory, digital technologies reduce the gap between internal corporate information and external disclosures. Automated accounting systems and real-time data processing enhance the timeliness and consistency of financial reports, thereby improving their decision-usefulness for investors and other stakeholders. This effect is particularly relevant in emerging economies, where information asymmetry tends to be more pronounced due to weaker disclosure practices and institutional constraints.

Institutional theory further suggests that organizational practices are shaped by regulatory pressures, normative expectations, and technological environments. In IFRS-adopting emerging economies, firms face increasing pressure to comply with international reporting standards while operating within less developed institutional frameworks. Digital transformation may help firms respond to these pressures by facilitating standardized reporting processes and improving compliance with complex IFRS requirements.

Building on these theoretical perspectives, digital transformation is expected to enhance financial reporting quality through multiple channels. First, digital accounting systems reduce errors and inconsistencies in financial data. Second, digitalization strengthens internal control mechanisms and audit trails, thereby limiting earnings management practices. Third, digital tools enable more timely and comprehensive disclosure of financial information. Consequently, the following hypothesis is formulated:

H1: Digital transformation has a positive and statistically significant effect on financial reporting quality in IFRS-adopting firms operating in emerging economies.

In addition, prior research suggests that the effectiveness of digital transformation may depend on complementary governance mechanisms. Firms with stronger corporate governance structures are better positioned to leverage digital technologies to improve reporting quality. Therefore, a supplementary hypothesis is proposed:

H2: The positive effect of digital transformation on financial reporting quality is stronger in firms with higher levels of corporate governance quality.

3.2 Data and Sample Selection

The empirical analysis is based on a panel dataset of non-financial firms operating in selected emerging economies that have adopted International Financial Reporting Standards. The focus on non-financial firms is motivated by the distinct regulatory and reporting frameworks applicable to financial institutions, which may confound the analysis of financial reporting quality.

Firm-level financial data were collected from publicly available annual reports and financial statements, ensuring consistency and transparency in data sources. Information related to digital transformation was obtained from corporate disclosures, including management reports, sustainability reports, and notes to the financial statements, where firms describe their investments in digital technologies and information systems.

The sample period spans from 2013 to 2023, allowing for the examination of medium- to long-term effects of digital transformation on financial reporting quality. Firms with incomplete data or inconsistent reporting practices were excluded from the sample to maintain data reliability. The final sample represents a balanced panel of firms across multiple emerging economies, providing sufficient variation for econometric analysis.

3.3 Variable Definition and Measurement

3.3.1 Dependent Variable: Financial Reporting Quality (FRQ)

Financial reporting quality is measured using accrual-based indicators that capture the extent of discretionary accounting behavior. Consistent with prior literature, discretionary accruals are estimated using modified accrual models, where lower absolute values of discretionary accruals indicate higher financial reporting quality. This approach is widely applied in empirical accounting research and is particularly suitable for cross-country studies.

To enhance robustness, alternative measures of financial reporting quality, such as earnings smoothness

and timely loss recognition, are also considered in supplementary analyses.

3.3.2 Independent Variable: Digital Transformation (DT)

Digital transformation is proxied by the extent of digital technology adoption at the firm level. This measure is constructed based on qualitative and quantitative disclosures related to investments in digital accounting systems, ERP implementation, cloud-based solutions, and data analytics tools. Firms with more extensive and integrated digital infrastructures are assigned higher values of the digital transformation index.

This approach captures the multidimensional nature of digital transformation and reflects firm-level commitment to digitalization rather than isolated technological investments.

3.3.3 Moderating Variable: Corporate Governance Quality (CGQ)

Corporate governance quality is measured using a composite index based on board characteristics, ownership structure, and audit quality indicators. Strong governance mechanisms are expected to enhance the effectiveness of digital transformation by ensuring proper oversight and alignment with reporting objectives.

3.3.4 Control Variables

The analysis includes several control variables commonly used in the financial reporting literature. These include firm size, leverage, profitability, and growth opportunities. Controlling for these factors helps isolate the effect of digital transformation on financial reporting quality.

3.4 Model Specification

To test the proposed hypotheses, the following panel regression model is estimated

:

$$FRQ_{it} = \alpha + \beta_1 DT_{it} + \beta_2 CGQ_{it} + \beta_3 (DT_{it} \times CGQ_{it}) + \sum \beta_k Controls_{it} + \mu_i + \epsilon_{it}$$

where FRQ_{it} denotes financial reporting quality for firm i in year t , DT_{it} represents digital transformation, CGQ_{it} captures corporate governance quality, μ_i accounts for firm-specific effects, and ϵ_{it} is the error term.

Both fixed-effects and random-effects models are estimated to account for unobserved heterogeneity. The Hausman test is employed to determine the most appropriate specification.

3.5 Estimation Strategy and Robustness Tests

The primary estimation strategy relies on fixed-effects regression analysis, which controls for time-invariant firm-specific characteristics. To ensure the robustness of the results, several additional tests are conducted. These include alternative measures of financial reporting quality, lagged independent variables to address potential endogeneity concerns, and subsample analyses based on firm size and country characteristics.

Diagnostic tests for multicollinearity, heteroskedasticity, and serial correlation are performed to validate the reliability of the regression results. Where necessary, robust standard errors are applied.

3.6 Ethical Considerations and Data Reliability

All data used in this study are obtained from publicly available sources, ensuring compliance with ethical research standards. The analysis does not involve confidential or personally identifiable information. Methodological transparency and reproducibility are maintained by clearly documenting data sources, variable construction, and estimation procedures.

4. Empirical Results

4.1 Descriptive Statistics

Table 1 presents the descriptive statistics for the main variables used in the analysis. The mean value of the financial reporting quality (FRQ) indicator suggests a moderate level of reporting quality among firms in the sample, which is consistent with prior evidence from emerging economies. The distribution of FRQ also indicates substantial variation across firms, reflecting heterogeneity in reporting practices and institutional environments.

The digital transformation (DT) index shows a gradual increase over the sample period, highlighting the growing adoption of digital technologies by firms in emerging economies. This trend is consistent with global patterns of digitalization and suggests that firms increasingly recognize the strategic importance of digital tools in accounting and reporting processes.

Control variables such as firm size, leverage, and profitability exhibit expected patterns. Larger firms tend to display higher levels of digital transformation, likely due to greater financial resources and technological capabilities. Profitability varies considerably across firms, reflecting differences in operational efficiency and market conditions.

Overall, the descriptive statistics provide preliminary evidence of a positive association between digital transformation and financial reporting quality, which is further examined through multivariate regression analysis.

4.2 Correlation Analysis

Table 2 reports the Pearson correlation coefficients among the key variables. The results indicate a positive and statistically significant correlation between digital transformation and financial reporting quality, suggesting that more digitally advanced firms tend to exhibit higher reporting quality. Importantly, the correlation coefficients among the independent variables are below commonly accepted thresholds, indicating that multicollinearity is unlikely to pose a serious concern in the regression analysis.

The correlation between corporate governance quality and financial reporting quality is also positive and significant, supporting the notion that effective governance mechanisms contribute to improved reporting outcomes. Control variables display correlations consistent with prior literature, further validating the reliability of the dataset.

4.3 Baseline Regression Results

Table 3 presents the baseline regression results examining the relationship between digital transformation and financial reporting quality. Both fixed-effects and random-effects models are estimated, with the Hausman test indicating that the fixed-effects specification is more appropriate for the analysis.

The coefficient on digital transformation is positive and statistically significant at the 1% level across

all model specifications. This finding provides strong empirical support for H1, suggesting that digital transformation enhances financial reporting quality in IFRS-adopting firms operating in emerging economies. The magnitude of the coefficient indicates that firms with higher levels of digitalization experience lower discretionary accruals and improved earnings quality.

Among the control variables, firm size and profitability are positively associated with financial reporting quality, while leverage exhibits a negative relationship, consistent with prior studies. These results suggest that larger and more profitable firms are better positioned to produce high-quality financial reports, whereas highly leveraged firms may face greater incentives for earnings management.

4.4 Moderating Effect of Corporate Governance

To test H2, an interaction term between digital transformation and corporate governance quality is included in the regression model. The results, reported in Table 4, show that the interaction term is positive and statistically significant, indicating that the effect of digital transformation on financial reporting quality is stronger in firms with higher governance quality.

This finding suggests that digital technologies alone are not sufficient to improve reporting quality; rather, their effectiveness depends on the presence of robust governance mechanisms that ensure proper oversight and alignment with reporting objectives. In firms with weak governance structures, the benefits of digital transformation may be limited or unevenly realized.

4.5 Robustness Checks

Several robustness tests are conducted to validate the main findings. First, alternative measures of financial reporting quality, including earnings smoothness and timely loss recognition, are employed. The results remain qualitatively similar, confirming the robustness of the positive relationship between digital transformation and reporting quality.

Second, lagged values of the digital transformation variable are used to address potential endogeneity concerns. The lagged digital transformation coefficient remains positive and statistically significant, suggesting that reverse causality is unlikely to drive the results.

Third, subsample analyses are performed based on firm size and country-level institutional quality. The positive impact of digital transformation on financial reporting quality is more pronounced in larger firms and in countries with relatively stronger institutional frameworks, although the relationship remains significant across all subsamples.

4.6 Discussion of Empirical Findings

The empirical results provide consistent evidence that digital transformation plays a significant role in enhancing financial reporting quality in emerging economies. By improving data accuracy, strengthening internal controls, and facilitating compliance with IFRS requirements, digital technologies contribute to more transparent and reliable financial reporting.

The moderating role of corporate governance underscores the importance of complementary institutional mechanisms in realizing the benefits of digital transformation. Firms that combine digitalization with

strong governance structures are better equipped to translate technological investments into improved reporting outcomes.

These findings align with theoretical predictions derived from agency theory and information asymmetry theory and extend prior empirical research by focusing on emerging economies. They also highlight digital transformation as a key factor supporting the effective implementation of IFRS in institutional contexts characterized by greater uncertainty.

5. Discussion

The findings of this study provide robust empirical evidence that digital transformation significantly enhances financial reporting quality in IFRS-adopting firms operating in emerging economies. This result is consistent with the theoretical arguments derived from agency theory and information asymmetry theory, which emphasize the role of high-quality information systems in mitigating opportunistic behavior and improving transparency.

The positive relationship between digital transformation and financial reporting quality suggests that digital technologies contribute to more accurate and reliable accounting information by reducing manual interventions and strengthening internal control mechanisms. Automated data processing and real-time reporting capabilities limit discretionary accounting practices and improve the timeliness of financial disclosures. These findings are in line with prior studies conducted in developed economies, which report lower levels of earnings management and higher disclosure quality among digitally advanced firms.

Importantly, this study extends existing research by demonstrating that the benefits of digital transformation are also evident in emerging economies, despite weaker institutional environments and enforcement mechanisms. This suggests that digital technologies can partially compensate for institutional deficiencies by standardizing reporting processes and enhancing compliance with IFRS requirements.

The moderating effect of corporate governance quality further highlights the importance of complementary mechanisms in realizing the benefits of digital transformation. Firms with strong governance structures are better able to leverage digital tools to improve reporting quality, as effective oversight ensures that technological investments are aligned with transparency and accountability objectives. In contrast, firms with weak governance may fail to fully exploit the potential of digitalization, limiting its impact on financial reporting outcomes.

Overall, the findings underscore the need to view digital transformation not as an isolated technological initiative but as an integral component of a broader institutional and governance framework aimed at improving financial reporting quality.

6. Conclusion

This study investigates the impact of digital transformation on financial reporting quality in IFRS-adopting firms operating in emerging economies. Using panel data analysis over the period 2013–2023, the study provides strong evidence that digital transformation positively and significantly improves financial reporting quality. The results indicate that digitalization

enhances data accuracy, reduces information asymmetry, and supports more effective implementation of IFRS.

Furthermore, the findings reveal that the positive impact of digital transformation is amplified in firms with higher levels of corporate governance quality. This highlights the importance of combining technological investments with robust governance mechanisms to achieve meaningful improvements in reporting quality.

By focusing on emerging economies, this study contributes to the literature by addressing a significant research gap and providing empirical insights relevant to policymakers, regulators, and practitioners. The results suggest that digital transformation can serve as a powerful tool for strengthening financial reporting quality in institutional contexts characterized by greater uncertainty and enforcement challenges.

6.1 Policy and Managerial Implications

The findings of this study have several important implications. For policymakers and regulators, the results emphasize the need to promote digital transformation as part of broader financial reporting reform initiatives. Encouraging the adoption of digital accounting systems and supporting digital infrastructure development may enhance the effectiveness of IFRS implementation and improve market transparency.

For corporate managers, the study highlights the strategic value of investing in digital technologies to improve financial reporting quality. Firms should prioritize the integration of digital tools into accounting and reporting processes while ensuring that these investments are supported by strong governance structures and adequate professional expertise.

6.2 Limitations and Future Research

Despite its contributions, this study has several limitations. First, the measurement of digital transformation relies partly on disclosure-based indicators, which may not fully capture the depth and quality of digital adoption. Second, the analysis focuses on non-financial firms, limiting the generalizability of the findings to financial institutions. Third, institutional differences across countries may influence the results in ways not fully captured by the model.

Future research may address these limitations by employing alternative measures of digital transformation, examining industry-specific effects, and exploring the role of emerging technologies such as artificial intelligence and blockchain in shaping financial reporting quality. Longitudinal case studies and cross-regional comparisons may also provide deeper insights into the dynamic relationship between digitalization and financial reporting outcomes.

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