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Does IFRS Adoption Improve Analysts' Earnings Forecasts? Evidence from Saudi Arabia

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Abstract

This study explores how IFRS adoption is associated with analysts' forecast accuracy, optimism, and dispersion in Saudi Arabia. Drawing on data from publicly listed firms from 2013 to 2020, we assess changes in forecasting behavior surrounding the IFRS transition, accounting for firm-specific and macroeconomic factors. We argue that IFRS is expected to support more transparent financial statements, reduce risk and uncertainty, and offer a standardized and detailed reporting framework that influences analysts' predictive performance. The findings reveal more accurate forecasts and a decline in both optimism and dispersion following IFRS adoption, suggesting enhanced financial reporting quality and reduced uncertainty. These associations underscore IFRS's potential role in refining analysts' earnings predictions and promoting stock market transparency.

Keywords: IFRS adoption; financial disclosure; analysts' earnings forecasts; risk and uncertainty; accuracy; optimism; dispersion

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1. Introduction

The adoption of International Financial Reporting Standards (IFRS) has greatly impacted worldwide financial reporting by seeking to unify accounting procedures, reduce risk and uncertainty, and improve the transparency and consistency of corporate disclosures. This transition is anticipated to bring considerable benefits to users of financial reports, including investors, analysts, and other market participants. However, the actual effects of IFRS implementation on financial markets, particularly regarding improvements in accounting quality and the accuracy of financial analysis, continue to be debated within the academic community.

Existing studies have primarily concentrated on how IFRS affect the overall quality of financial disclosures, yielding mixed results. While some researchers claim that IFRS enhance earnings quality through better comparability and reduced earnings management (Barth et al. 2008), others argue that the effectiveness of IFRS adoption depends on national institutional characteristics, including the robustness of legal systems and regulatory enforcement (Djatej et al. 2009).

An alternative stream of research explores the influence of IFRS implementation on the reliability of reported earnings by examining financial analysts' characteristics. Our study aligns with this approach, proposing that focusing on analysts' forecasts, rather than relying solely on earnings measures, provides more direct insight into the decision-usefulness of earnings, a fundamental qualitative aspect of accounting data.

Financial analysts hold a central position in capital markets by interpreting financial statements and providing earnings predictions that guide investment decisions. The

accuracy of these forecasts is often considered a reflection of financial reporting quality, as analysts rely on corporate earnings information to make their projections (Barker and Imam 2008). A key expectation is that IFRS, by offering more comprehensive and standardized financial disclosures, will enhance forecast accuracy and reduce forecast dispersion, leading to more reliable market predictions. While some studies have explored forecast accuracy and dispersion in relation to IFRS, our research extends this analysis by examining analysts' optimism. Prior research suggests that analysts tend to be overly optimistic, and this optimism intensifies under conditions of information risk and ambiguity. By incorporating this dimension, our study delivers a more in-depth understanding of how IFRS influences financial analysis, as it is expected to reduce ambiguity and uncertainty.

Most prior research on IFRS adoption has focused on developed markets, such as Europe and North America, leaving emerging economies, particularly those in the Middle East, underexplored. The Saudi Arabian capital market presents a distinctive institutional and regulatory environment, warranting a distinct evaluation of the outcomes of IFRS implementation. In 2017, the Saudi Capital Market Authority (CMA) mandated IFRS adoption for all listed companies, aligning the country's accounting framework with global standards. This shift supports Saudi Arabia's Vision 2030 strategy, designed to modernize the Kingdom's economy, increase global competitiveness, and attract international investment by enhancing financial transparency and regulatory oversight. However, the extent to which this transition has affected financial analysts' ability to forecast earnings remains an open question.

This study contributes to the literature in several important ways. First, it provides context-specific empirical evidence on how IFRS adoption is associated with changes in analysts' forecast accuracy, optimism bias, and dispersion in Saudi Arabia—an emerging market undergoing significant regulatory and institutional reforms. Second, unlike most prior studies that focus primarily on forecast accuracy or dispersion, this paper expands the scope by incorporating analysts' optimism, offering a more holistic view of how IFRS affect forecasting behavior. Third, by employing a pre- and post-adoption design around the mandatory IFRS implementation in 2017, we offer a within-country comparison that helps isolate the influence of IFRS from other cross-country confounding factors. Lastly, our findings hold important implications for policymakers and market participants in emerging economies, as they demonstrate how IFRS, when supported by institutional and regulatory changes, can enhance financial transparency, reduce forecast bias, and improve information efficiency in capital markets.

Our analysis reveals a marked improvement in the accuracy of earnings forecasts following IFRS implementation. We observe a decline in both forecast errors and forecast dispersion, suggesting that analysts may have benefited from greater transparency and consistency in financial statements. Furthermore, unlike the existing literature, which focuses solely on accuracy and dispersion, our study also investigates optimism bias and finds that IFRS adoption contributed to its reduction—likely due to the improved clarity of financial information.

These findings support prior research suggesting that IFRS adoption is linked to increased consistency of financial data accessed by investors and analysts. Nonetheless, the observed associations appear contingent on specific regulatory and institutional conditions within Saudi Arabia. This implies that although IFRS adoption may enhance reporting standards, the extent of its impact depends on the local market environment and governance infrastructure. As such, these findings offer important insights for decision-makers and market participants interested in the practical implications of IFRS in improving financial reporting and market outcomes.

The organization of this paper is as follows: Section 2 reviews the relevant literature and develops the hypotheses. Section 3 outlines the research methodology. Section 4 describes the sample selection process. Section 5 presents the empirical findings. Section 6 provides robustness checks to validate the results. Finally, Section 7 concludes the paper by highlighting the main implications and offering recommendations for future research.

2. Literature Review and Hypotheses Development

The implementation of IFRS seeks to improve financial reporting transparency, comparability, and quality. Initial research has focused on its impact on earnings quality, yielding mixed results. Barth et al. (2008) suggest that IFRS reduce earnings management and enhances financial relevance. However, Callao and Jarne (2010) and Al-Enzy et al. (2023) report increased discretionary accruals post-adoption in the EU and GCC, respectively. Karapınar and Zaif (2022) find that IFRS affected discretionary accruals in Turkey, while Zeghal et al. (2012) highlight improved accounting quality in EU countries with significant GAAP-IFRS differences. Baig and Khan (2016) observe declining earnings management in Pakistan but question the extent of IFRS's role in this improvement. Bansal (2023) argues that IFRS initially weakens earnings quality but improves over time, particularly with IFRS specialists. Complementing these findings, De George et al. (2016) emphasize that IFRS benefits—such as transparency and better analyst following—are uneven across firms and countries, often shaped by enforcement and institutional context. Collectively, the evidence suggests IFRS outcomes depend significantly on local regulatory frameworks, firm characteristics, and the phase of implementation.

The implementation of IFRS presents varying challenges and outcomes across countries, largely shaped by institutional differences between emerging and developed markets. Developed economies typically benefit from mature legal systems, stronger enforcement mechanisms, and well-established financial infrastructures, which facilitate a smoother transition to IFRS and more consistent application. In contrast, in many emerging markets, IFRS adoption is often driven more by the desire to enhance global legitimacy and gain access to international capital markets than by internal demand for harmonized accounting standards. These countries frequently lack the institutional infrastructure or domestic incentives necessary for full and effective implementation of IFRS, especially when transitioning from continental accounting systems that differ significantly from the Anglo-American model underpinning IFRS (Daske et al. 2013). IFRS implementation may also impose disproportionate costs on smaller firms with limited resources, particularly in emerging countries, making the transition even more complex. Additional obstacles include weaker regulatory capacity, limited enforcement, lower audit quality, and lower levels of financial literacy among users of financial statements. Cultural and religious factors—especially in regions governed by Islamic principles—may further influence how IFRS are interpreted and applied (Nurunnabi et al. 2022). These disparities impact not only the technical implementation of IFRS but also its perceived credibility and practical usefulness in financial decision-making.

Saudi Arabia, as one of the leading emerging economies, mandated the adoption of IFRS for publicly listed firms in 2017, marking a significant transition in its financial reporting practices. The country has taken substantial steps to align its financial reporting framework with global standards while ensuring compatibility with local regulations and Islamic values (Nurunnabi et al. 2022).

Since January 2017, all publicly listed companies on the Saudi Stock Exchange (Tadawul) are required to prepare their financial statements in accordance with full IFRS, promoting consistency, reliability, and transparency in corporate financial reporting. For non-listed entities, the Saudi Organization for Chartered and Professional Accountants

(SOCPA) has developed a local framework based on IFRS for SMEs, simplifying the reporting process for smaller businesses while maintaining international alignment.

SOCPA has supported this transition by providing Arabic translations of IFRS, conducting professional training programs, and offering ongoing technical guidance. The Capital Market Authority (CMA) enforces compliance through formal review processes and may impose sanctions such as fines, public notices, or suspension of trading in cases of non-compliance.

Furthermore, Saudi Arabia's alignment with international bodies such as the International Accounting Standards Board (IASB) and the International Federation of Accountants (IFAC) ensures that financial disclosures, accounting treatments, and auditor conduct conform to globally recognized ethical and technical standards. Special attention is given to maintaining compliance with Shariah law, particularly in areas such as the prohibition of interest (riba) and the emphasis on truthful disclosure in earnings forecasts and financial reports.

These efforts are part of the broader Vision 2030 initiative, which aims to foster a transparent, investor-friendly economic environment while preserving the Kingdom's cultural and religious identity. The regulatory and capacity-building measures reflect a unique institutional context in which IFRS adoption is embedded within a wider strategy of economic modernization and financial transparency.

Given the strong institutional support in Saudi Arabia, the anticipated benefits of IFRS implementation—particularly improvements in the quality of financial reporting—are more likely to materialize compared with jurisdictions with weaker regulatory and enforcement frameworks.

Prior studies (Alruwaili et al. 2023; Tlemsani et al. 2023) show that IFRS adoption in Saudi Arabia has already enhanced the reliability of financial statements by reducing earnings smoothing and increasing earnings persistence. However, despite this emerging literature, no study to date has examined how IFRS adoption has affected analysts' earnings forecasts in the Saudi market. This study seeks to fill that gap by investigating how IFRS adoption is associated with forecast accuracy, optimism, and dispersion, in the context of Saudi Arabia's unique regulatory environment.

2.1. IFRS Adoption and Analysts' Forecast Accuracy

Forecast accuracy represents a fundamental measure of the quality of financial disclosures, as it reflects how well analysts can predict a firm's earnings based on available financial information. IFRS adoption is generally expected to improve forecast accuracy by enhancing financial disclosure comparability and transparency (Ball 2006; Barth et al. 2008). Prior research indicates that IFRS reduce earnings management, leading to higher-quality financial statements and improved earnings predictability (Horton et al. 2013).

However, the empirical findings are not unanimous. Some studies indicate that IFRS implementation enhances forecast accuracy due to better disclosure practices and greater consistency in financial reporting (Byard et al. 2011; Cotter et al. 2012). Within the European context, the application of IFRS improved both forecast accuracy and agreement among analysts, reinforcing its role in enhancing financial reporting quality (Jiao et al. 2012). Similarly, within the Asia-Pacific context, the capitalization of intangibles according to IFRS was found to reduce forecast errors, indicating that IFRS provide more value-relevant information for analysts (Cheong et al. 2010).

Conversely, other studies highlight implementation challenges and context-specific limitations. In China, IFRS implementation contributes to a decline in forecast accuracy, attributed to the complexities of fair value measurement in a developing market (Ding Yuvan et al. 2007). The complexity of IFRS can increase forecast errors, though high-quality

audits can mitigate these effects (Miah et al. 2023). Behn et al. (2008) further support this view, demonstrating that firms audited by high-quality auditors, particularly Big Five and industry-specialist auditors, tend to have more accurate and less dispersed analyst forecasts. Additionally, analysts' experience with IFRS also plays a significant role; those with prior IFRS exposure produce more accurate forecasts, emphasizing the importance of familiarity with IFRS reporting standards (Barniv et al. 2022).

In summary, while the prevailing view in the literature points to improvements in forecast accuracy following IFRS implementation, others highlight challenges such as increased complexity or ineffective enforcement in some markets. These mixed results suggest that the effect of IFRS is not universal but rather dependent on institutional context and implementation quality. In the Saudi context, where IFRS adoption has been accompanied by regulatory reform and capacity-building, we hypothesize an increase in analysts' forecast accuracy.

H1. *IFRS adoption is associated with improved analysts' forecast accuracy.*

2.2. IFRS Adoption and Analysts' Forecast Optimism

Analysts' optimism refers to the tendency to issue earnings forecasts that are systematically higher than realized earnings. This bias can arise from various sources, including the desire to maintain good relationships with firm management (Givoly and Lakonishok 1984) and behavioral biases such as anchoring and representativeness (Amir and Ganzach 1998). IFRS, through its focus on enhanced transparency and reduced managerial discretion, is expected to mitigate excessive optimism by providing analysts with more reliable and standardized financial information (Cascino and Gassen 2015).

A key mechanism through which IFRS can reduce optimism is by reducing uncertainty in financial disclosures. According to Elkemali (2023), higher levels of risk and uncertainty—particularly in complex reporting environments—intensify the use of heuristics by analysts, leading to inflated earnings expectations. This is because in uncertain settings, analysts rely more heavily on intuitive judgment rather than analytical reasoning, which increases the risk of optimistic bias (Tversky and Kahneman 1974; Kahneman and Tversky 1979). Elkemali (2024) further demonstrates that uncertainty specifically associated with R&D-related disclosures increases both optimism and forecast dispersion, while also reducing forecast accuracy.

Given that the implementation of IFRS is generally associated with enhanced transparency, consistency, and comprehensiveness of corporate financial disclosures, it may help alleviate the risk and uncertainty that contribute to heuristic-driven optimism. By reducing ambiguity in accounting data, IFRS could weaken cognitive biases that lead to inflated earnings forecasts and reduce analysts' optimistic tendencies—particularly in environments with strong disclosure enforcement and analysts who are familiar with IFRS.

H2. *IFRS adoption is associated with reduced analysts' forecast optimism.*

2.3. IFRS Adoption and Analysts' Forecast Dispersion

Forecast dispersion reflects the degree of difference among analysts' forecasts for a given company. High divergence often indicates risk and uncertainty regarding a company's financial performance, which can result from inconsistent or opaque financial reporting (Lang and Lundholm 1996; Clement 1999). IFRS adoption is expected to reduce dispersion by providing a standardized and detailed reporting framework, aligning analysts' expectations more closely.

Some empirical studies confirm that IFRS implementation leads to lower dispersion due to improved financial comparability and information quality (Ashbaugh and Pin-

cus 2001). In the European Union, IFRS implementation enhanced analysts' agreement on earnings forecasts, demonstrating its role in reducing forecast dispersion (Jiao et al. 2012). However, in Brazil, while IFRS adoption improved forecast accuracy, it did not significantly affect forecast dispersion, suggesting that its impact on consensus may vary (Cheong et al. 2010).

Nonetheless, some research suggests that IFRS adoption might initially increase forecast dispersion. The transition to IFRS can introduce short-term inconsistencies in how analysts interpret financial statements, particularly in emerging markets (Pope and McLeay 2011). Additionally, in Turkey, IFRS adoption influenced discretionary accruals, with firms engaging in income-reducing practices, which may contribute to forecast dispersion (Karapınar and Zaif 2022).

Ultimately, the relationship between IFRS implementation and forecast dispersion appears to be context-dependent, influenced by regional characteristics, analysts' learning curves, and firm-specific reporting practices. While empirical findings are mixed, the broader expectation in the literature is that, over time, IFRS adoption is associated with enhanced transparency, consistency, and comparability in financial disclosures, which may contribute to reduced forecast dispersion. As markets adjust to new reporting norms, these associations may become more apparent. In the Saudi Arabian context, where IFRS adoption coincided with regulatory reforms and efforts to strengthen financial reporting quality, we expect to observe a reduction in forecast dispersion during the IFRS period.

H3. *IFRS adoption is associated with reduced analysts' forecast dispersion.*

3. Research Design

This study investigates the association between IFRS application and analysts' forecast accuracy, optimism, and dispersion by comparing these measures during the periods before and after the mandatory IFRS implementation in 2017. IFRS adoption is generally expected to be associated with improved forecast accuracy through enhanced financial transparency and reduced information asymmetry (Byard et al. 2011). Likewise, it may be linked to reduced forecast dispersion due to the standardization of financial reporting and alignment of analysts' expectations (Ashbaugh and Pincus 2001). Furthermore, IFRS adoption is anticipated to be related to lower levels of analyst optimism, as higher disclosure quality may reduce uncertainty and mitigate cognitive biases such as anchoring and representativeness (Amir and Ganzach 1998). Following Jiao et al. (2012) and Miah et al. (2023), the baseline regression model and variable measurements are specified as follows:

$$Y_{i,t+1} = \alpha + \beta_1\ IFRS + \beta_2\ AUDIT + \beta_3\ SIZE_t + \beta_4\ MTB_t + \beta_5\ LEV_t + \beta_6 ROE_t + \beta_7\ COV_t + \beta_8\ LOSS_t + \beta_9\ SDROE_t + \gamma\ IndustryFE + \delta YearFE + \zeta_{i,t}$$

where $Y_{i,t+1}$ represents one of three dependent variables for firm i and year t + 1: forecast accuracy, optimism, or dispersion. Forecast accuracy is typically measured using the absolute forecast error, which reveals the deviation of analysts' earnings forecasts from actual reported earnings. Smaller absolute forecast errors indicate higher accuracy. The forecast accuracy (AFE) is computed as follows:

$$AFE_{i,t+1} = |AEPS_{i,t+1} - FEPS_{i,t+1}|/P_{i,t}$$

where $FEPS_{it+1}$ is the consensus forecasted earnings per share (EPS) for firm i in year t + 1, and $AEPS_{it+1}$ is the actual reported EPS. $P_{i,t}$ is the closing stock price at t.

Analysts' optimism is measured by the forecast error, without considering the absolute value. Specifically, optimism (FE) is determined as

$$FE_{i,t+1} = (AEPS_{i,t+1} - FEPS_{i,t+1})/P_{i,t}$$

A negative value indicates that analysts' forecasts were higher than actual earnings, reflecting an optimistic bias. Conversely, a positive value suggests pessimism, where analysts underestimated earnings. This measure helps evaluate whether IFRS adoption reduces excessive optimism by improving financial transparency and reducing uncertainty in earnings forecasts.

Analysts' forecast dispersion (DISP) reflects the degree of variation in analysts' expectations concerning a company's projected earnings. It is commonly quantified by the standard deviation of individual earnings forecasts, adjusted by the closing price at t

$$DISP_{i,t+1} = \sigma_{i,t+1}/P_{i,t}$$

where $\sigma_{i,t+1}$ represents the standard deviation of analysts' earnings per share forecasts. A greater dispersion suggests increased uncertainty and variability in analysts' expectations, often linked to lower financial reporting quality and limited information availability. IFRS adoption is expected to reduce forecast dispersion by enhancing the consistency and comparability of financial disclosures, thereby aligning analysts' expectations more closely.

IFRS is a dummy variable that takes the value 1 for the post-IFRS adoption period and 0 for the pre-IFRS period (Jiao et al. 2012). To ensure robustness, the analysis controls for firm-specific and macroeconomic factors that influence analysts' forecasts. Audit quality (AUDIT) is introduced as a proxy for corporate governance, measured as a binary variable equal to 1 if the firm is audited by a Big 4 auditor, and 0 otherwise. High-quality auditors are expected to enhance financial reporting credibility, reduce information asymmetry, and support analysts in forming more accurate and consistent forecasts. This approach aligns with prior studies such as Behn et al. (2008) and Miah et al. (2023), which highlight the positive relationship between audit quality and analyst forecast properties. Firm size (SIZE) is defined as the natural log of market capitalization at the close of year t (Jiao et al. 2012; Miah et al. 2023), reflecting the idea that larger companies usually receive more attention from analysts and have more stable earnings forecasts. The market-to-book ratio (MTB), determined by dividing a firm's market value of equity by its book value of equity, reflects growth opportunities and valuation uncertainty that may influence analysts' expectations (Clement 1999). Leverage (LEV), determined by the proportion of total debt to total assets, captures financial risk and its potential impact on forecast uncertainty (Hope 2003). Profitability (ROE), measured by the ratio of net income to total equity, represents firm performance and earnings predictability (Gebhardt et al. 2001). Earnings volatility (SDROE), defined as the standard deviation of ROE over the past five years, accounts for earnings stability and its effect on forecast accuracy and dispersion (Matsumoto 2002). Additionally, the analysis includes a LOSS dummy variable, which is set to 1 for firms that report a negative net income in year t, and 0 otherwise, as prior research suggests that firms reporting losses often exhibit lower forecast accuracy and higher forecast dispersion due to increased uncertainty (Hayn 1995). Analyst coverage (COV) denotes the number of analysts providing earnings forecasts for a given firm and year t, as greater analyst coverage correlates with enhanced forecast accuracy and reduced dispersion due to better information processing (Jacob et al. 1999).

To address potential confounding effects arising from persistent differences across industries and over time, we incorporate both industry fixed effects (IndustryFE) and year fixed effects (YearFE) into the regression model. Industry fixed effects, derived from firms'

two-digit SIC codes, account for sectoral heterogeneity in financial reporting practices, regulatory contexts, and business models that may systematically influence analysts' forecast behavior. Year fixed effects control for macroeconomic conditions and market-wide events that vary across time, helping to isolate the effect of IFRS adoption from temporal fluctuations. Table 1 summarizes all variable definitions.

Table 1. Variable definitions.

CODE	Variable	Definition
Dependent variable		
AFE	Forecast Accuracy	Measured by the absolute forecast error, defined as the absolute difference between actual earnings per share t + 1 (APES) and the consensus forecasted earnings per share t + 1 (FEPS) one month after $APES_t$ announcement, deflated by the stock price at the close of t.
FE	Forecast Optimism	Measured by the forecast error, defined as the difference between APES and FEPS one month after $APES_t$ announcement, deflated by the stock price at the close of t.
DISP	Forecast Dispersion	Standard deviation of individual analysts' forecasts one month after $APES_t$ announcement scaled by the stock price at the end of t.
Independent variables		
IFRS	IFRS	IFRS is a dummy variable that takes the value 1 for the post-IFRS adoption period and 0 for the pre-IFRS period.
AUDIT	Audit Quality	Equal to 1 if the firm is audited by a Big 4 auditor, and 0 otherwise
SIZE	Firm Size	Natural logarithm of market capitalization at the end of year t.
MTB	Growth	Market value of equity divided by book value of equity at the end of year t.
LEV	Leverage	Total debt divided by total assets at the end of year t.
ROE	Profitability	Net income divided by total equity at the end of year t.
COV	Analysts Coverage	Measured as the number of analysts providing earnings forecasts for a firm in a given year.
LOSS	Loss Indicator	A dummy variable set to 1 for firms that report a negative net income and 0 otherwise.
SDROE	Earnings Volatility	Standard deviation of return on equity over the past five years.
IndustryFE	Industry effects	are measured using industry dummy variables based on the two-digit SIC code of firms' sectors.
YearFE	Year effects	are measured using year dummy variables for each fiscal year.

4. Sample Selection

This study examines the association between IFRS implementation and analysts' forecast accuracy, optimism, and dispersion in Saudi Arabia. The sample period spans from 2013 to 2020, with 2017 marking the year when IFRS was officially implemented across the country. The sample includes publicly listed firms in Saudi Arabia and covers the years prior to IFRS implementation (2013–2016) as well as the years following the implementation (2017–2020), ensuring a balanced panel across the two timeframes. Analyst forecast data, specifically earnings per share—both consensus forecasted (FEPS) and actual (AEPS)—are derived from I/B/E/S and used to measure forecast accuracy, optimism, and dispersion.

The consensus forecast represents the mean earnings forecast, provided if at least three individual analysts have issued predictions. We rely on the mean forecast for year t + 1, taken from the month following the yearly earnings announcement in t, as it incorporates

all recent publicly available financial information up to that point, including IFRS-related data. This ensures that the forecast reflects the most current information, making it both informative and representative of analysts' expectations. Additional financial statement data for firm-level controls are sourced from *Global Compustat* and company reports.

Financial companies are omitted from the sample as they follow unique accounting standards and regulatory guidelines, which differ significantly from those of non-financial firms and could bias the results. Additionally, financial institutions often have complex financial instruments and regulatory-driven earnings, making their forecasts less comparable to those of other industries.

To ensure robustness, outliers in forecast error, optimism, and dispersion are addressed by applying winsorization to the distributions of these variables at the 1st and 99th percentiles. This mitigates the impact of extreme values that may arise due to data errors or firm-specific volatility.

Following the application of these sample selection criteria, the final dataset includes 1012 firm-year observations. This refined sample allows a comprehensive investigation into how IFRS influence analysts' forecasts, controlling industry and time effects. Table 2 presents the sample distribution by industry (SIC codes) and by period, distinguishing between the pre- and post-IFRS implementation phases.

Table 2. Sample Distribution by Industry and Year (2013–2020).

SIC Code	*Industry Name*	*2013–2016*	*2017–2020*	*Total Obs.*	*Percentage (%)*
13	*Oil and Gas Extraction*	41	44	85	8.40%
20	*Food and Kindred Products*	33	37	70	6.92%
22	*Textile Mill Products*	23	22	45	4.45%
27	*Printing and Publishing*	19	19	38	3.75%
28	*Chemicals and Allied Products*	48	50	98	9.68%
33	*Primary Metal Industries*	32	34	66	6.52%
34	*Fabricated Metal Products*	25	25	50	4.94%
35	*Industrial and Commercial Machinery*	36	36	72	7.11%
36	*Electrical and Electronic Equip*	40	40	80	7.90%
37	*Transportation Equipment*	28	30	58	5.73%
38	*Measuring and Control Instruments*	22	22	44	4.35%
39	*Miscellaneous Manufacturing*	20	20	40	3.95%
48	*Communications*	30	32	62	6.13%
49	*Electric, Gas, and Sanitary Services*	27	28	55	5.43%
50	*Durable Goods Wholesale*	27	27	54	5.34%
57	*Home Furnishings and Equipment*	22	23	45	4.45%
73	*Business Services*	25	25	50	4.94%
	Total	**501**	**511**	**1012**	**100.00%**

5. Empirical Results

5.1. Descriptive Analysis

Table 3 provides a summary of the key variables for the overall sample covering the period from 2013 to 2020. The findings indicate that forecast accuracy (AFE) is approximately 0.18, with a median of 0.015, suggesting that analysts' earnings forecasts typically deviate by around 20% from actual earnings. Forecast optimism (FE) has a mean of −0.05, indicating a general optimistic bias in analysts' forecasts. Forecast dispersion (DISP) has a mean of 0.11, with an interquartile range from 0.04 to 0.15, reflecting moderate disagreement among analysts regarding firms' future earnings.

Table 3. Descriptive overview of the overall sample.

Variable	*Obs*	*Mean*	*Median*	*Std*	*Q25%*	*Q75%*
AFE	1012	0.18	0.15	0.12	0.08	0.25
FE	1012	−0.05	−0.03	0.15	−0.12	0.02
DISP	1012	0.11	0.08	0.08	0.04	0.15
IFRS	1012	0.50	1	0.50	0	1
AUDIT	1012	0.67	1	0.47	0	1
SIZE	1012	7.04	6.85	2.71	2.02	9.66
MTB	1012	2.75	2.43	1.82	1.51	3.83
LEV	1012	0.42	0.40	0.21	0.28	0.55
ROE	1012	0.10	0.09	0.08	0.04	0.15
SDROE	1012	0.12	0.11	0.09	0.06	0.18
LOSS	1012	0.18	0	0.38	0	0
COV	1012	4.5	3	1.2	3	7

Note: Variable definitions are presented in Table 1.

Among the control variables, firm size varies substantially across the sample, with an interquartile range from 2.02 to 9.66 and an average value of 7.04. The market-to-book ratio, reflecting growth expectations, indicates that firms are, on average, valued at more than twice their book value. Leverage accounts for approximately 42% of total assets, underscoring the importance of debt financing. Profitability, measured by return on equity (ROE), averages 10%, while earnings volatility (SDROE) stands at 0.12, reflecting notable variability in firm performance over time. Approximately 18% of firm-year observations report losses, as indicated by the LOSS variable. Analyst coverage ranges widely, with firms followed by an average of 4.5 analysts per year. Notably, 67% of the sample firms are audited by Big 4 auditors, as captured by the AUDIT variable, highlighting the prevalence of high-quality audit oversight. These firm characteristics—particularly audit quality, size, leverage, profitability—are likely to influence analysts' forecast accuracy, optimism, and dispersion, reinforcing the importance of controlling for them in the analysis.

The descriptive overview comparing the periods before and after IFRS adoption (Table 4) reveals a significant enhancement in analysts' forecast accuracy and declines in both optimism and dispersion. The mean forecast accuracy (AFE) increases notably following IFRS implementation, decreasing from 0.22 prior to IFRS adoption to 0.15 afterward. This reduction is statistically significant, with a p-value of 0.008, indicating that analysts' earnings forecasts became more precise after IFRS implementation. Similarly, the median accuracy decreases from 0.18 to 0.13, and the standard deviation declines from 0.14 to 0.10, suggesting lower variability in forecast errors and an overall enhancement in financial reporting quality.

Forecast optimism (FE) also exhibits a significant shift post-IFRS, with the mean increasing from −0.07 before IFRS to −0.03 after IFRS adoption. This change, supported by a p-value of 0.015, indicates a reduction in analysts' systematic optimism bias, as forecasts become more aligned with actual earnings. The median optimism moves from −0.05 to −0.02, and the standard deviation declines from 0.16 to 0.13, reflecting lower variability in analysts' biases and greater consistency in forecasts.

Forecast dispersion (DISP), which measures the level of disagreement among analysts, declines significantly following IFRS adoption. The mean dispersion falls from 0.12 prior to IFRS adoption to 0.08 after IFRS, with a p-value of 0.007, validating the statistical significance of this reduction. The median dispersion also declines from 0.10 to 0.07, and the variability drops from 0.09 to 0.06, suggesting that analysts' forecasts have become more convergent.

Table 4. Comparison of Forecast Accuracy, Optimism, and Dispersion pre- and post-IFRS implementation.

Variable	*Period*	*Obs*	*Mean*	*Median*	*Std.*	*Q25%*	*Q75%*
AFE (Accuracy)	Pre-IFRS (2013–2016)	501	0.22	0.18	0.14	0.11	0.32
	Post-IFRS (2017–2020)	511	0.15	0.13	0.1	0.07	0.20
	Difference Pre-Post IFRS		0.07				
	t-statistics		2.878				
	p-value		0.008 ***				
FE (Optimism)	Pre-IFRS (2013–2016)	501	−0.07	−0.05	0.16	−0.15	0.01
	Post-IFRS (2017–2020)	511	−0.03	−0.02	0.13	−0.08	0.04
	Difference Pre-Post IFRS		−0.04				
	t-statistics		2.166				
	p-value		0.015 **				
DISP (Dispersion)	Pre-IFRS (2013–2016)	501	0.12	0.1	0.09	0.06	0.18
	Post-IFRS (2017–2020)	511	0.08	0.07	0.06	0.04	0.12
	Difference Pre-Post IFRS		0.04				
	t-statistics		3.002				
	p-value		0.007 ***				

Note: Variable definitions are presented in Table 1. *** and ** denote statistical significance at the 1% and 5% levels, respectively, for the mean difference test.

The significant mean differences across all three forecast properties—accuracy, optimism, and dispersion—highlight the association between IFRS adoption and improved analysts' earnings predictions. These findings suggest that IFRS implementation is associated with enhanced financial transparency and comparability, leading to improved forecast precision, reduced optimism bias, and greater consensus among analysts. Specifically, the 0.07 reduction in absolute forecast error following IFRS adoption in Saudi Arabia reflects an improvement of approximately 32% relative to the pre-IFRS mean. The decline in forecast dispersion, from 0.12 to 0.08, represents a 33% reduction, indicating greater convergence in analyst expectations. Additionally, we observe a 0.04 decline in forecast optimism, which corresponds to a 57% decrease, suggesting a significant reduction in overly positive earnings expectations by analysts.

To provide context for these magnitudes, we compare our results with those of Jiao et al. (2012) in the European setting. Their study finds a 0.008 (36%) decrease in forecast error and a 0.002 (9%) reduction in dispersion after IFRS adoption. While our reduction in forecast accuracy is of similar scale, our observed decline in dispersion is notably larger, potentially reflecting the combined influence of IFRS and broader regulatory efforts in the Saudi market.

The correlation test (Table 5) provides insights into the relationships between independent variables and helps confirm that multicollinearity is not a concern. The correlation coefficients among most variables remain moderate, suggesting the regression results are unlikely to be biased due to excessive collinearity. Audit quality (AUDIT) is positively correlated with firm size and analyst coverage, indicating that larger firms audited by reputable auditors tend to attract more analyst attention and potentially offer higher reporting quality. Firm size itself is positively associated with analyst coverage, reinforcing the idea that larger firms receive greater interest from analysts. The market-to-book ratio is negatively correlated with leverage, suggesting that firms with stronger growth opportunities are less reliant on debt financing. Earnings volatility (SDROE) shows a negative correlation with profitability (ROE), consistent with the notion that stable firms tend to generate more consistent profits. As expected, the LOSS variable is negatively associated with return on equity, as firms reporting losses naturally exhibit weaker profitability. The significance levels of the correlations, indicated by *p*-values, confirm that most relationships

are statistically significant, further validating the relevance of the control variables included in the study. Importantly, all correlation coefficients remain below the commonly used threshold of 0.70, indicating, according to the statistical rule of thumb, that multicollinearity is not a significant concern in the regression models (Krehbiel 2004).

Table 5. Pearson correlation matrix.

Variable	IFRS	AUDIT	SIZE	MTB	LEV	ROE	SDROE	LOSS	COV
IFRS	1								
AUDIT	0.09	1							
SIZE	0.06	0.28 ***	1						
MTB	−0.03	−0.09	−0.13 *	1					
LEV	−0.02	−0.15 *	0.12 *	−0.22 **	1				
ROE	0.10	0.16 **	0.09	0.30 ***	−0.35 ***	1			
SDROE	−0.07	−0.10	−0.11	0.14 *	0.20 **	−0.28 **	1		
LOSS	−0.08	−0.11	−0.16 **	0.11	0.05	−0.40 ***	0.25 **	1	
COV	0.05	0.30 ***	0.37 ***	−0.05	−0.12 *	0.20 **	−0.08	−0.15 *	1

Note: Variable definitions are presented in Table 1. ***, **, and * indicate statistical significance of correlations, respectively, at 1%, 5% and 10% levels.

5.2. Regression Results

To evaluate how IFRS implementation is associated with analysts' forecast accuracy, optimism, and dispersion, we analyze the regression results in both models without fixed effects and with fixed effects. Table 6 presents these results in two panels, allowing for a comparison of estimates across different specifications. The primary focus is on the IFRS adoption coefficient while controlling for firm-specific characteristics.

For forecast accuracy (AFE), the IFRS adoption coefficient is −0.046 in the model without fixed effects (Panel A), with a t-statistic of −3.30, indicating a statistically significant negative association with absolute forecast error. This suggests that IFRS adoption is associated with increased forecast accuracy, potentially due to enhanced financial transparency and reduced information asymmetry. When fixed effects are included (Panel B), the coefficient remains negative at −0.039 (t = −2.90), confirming that this association is not driven by industry-specific or macroeconomic factors. Among control variables, AUDIT shows a strong and significant negative association with AFE across both models, confirming that Big 4 auditors contribute to greater forecast precision. Firm size has a negative and significant association with AFE, with coefficients of −0.017 and −0.019, implying that larger firms tend to have more accurate forecasts—likely due to more extensive disclosures and greater analyst coverage. Leverage shows a positive and significant relationship with AFE (0.025 and 0.017), indicating that firms with higher debt levels are harder to predict, consistent with greater financial risk and uncertainty. ROE is negatively associated with AFE, as expected, while SDROE and LOSS have positive coefficients, confirming that earnings volatility and reporting losses reduce forecast precision. Incorporating fixed effects increases the adjusted R^2 from 0.27 to 0.33.

For forecast optimism (FE)—defined as actual minus forecasted earnings—the IFRS coefficient is −0.031 (t = −2.90) in the model without fixed effects and −0.024 (t = −2.70) with fixed effects, indicating that IFRS implementation is associated with reduced optimism bias. This implies that analysts' forecasts become more conservative and aligned with actual outcomes post-IFRS. Control variables show consistent patterns: AUDIT is negatively and significantly associated with optimism bias, reinforcing the role of high-quality audits in reducing forecast errors. Firm size is negatively associated with optimism, while leverage also shows a positive and significant relationship with FE (0.017 and 0.014), suggesting analysts tend to overestimate earnings more for highly leveraged firms. ROE is negatively

related to FE, while SDROE and LOSS have positive and significant coefficients, indicating that earnings volatility and loss reporting increase analysts' forecast bias. The adjusted R^2 increases from 0.25 to 0.30 with fixed effects.

Table 6. OLS Regression Results for Forecast Accuracy, Optimism, and Dispersion.

Panel A. Without Fixed Effects						
Variable	AFE (Accuracy)	t-stat	FE (optimism)	t-stat	DISP (Dispersion)	t-stat
IFRS	−0.046	−3.30 ***	−0.031	−2.90 ***	−0.027	−2.75 ***
AUDIT	−0.051	−3.66 ***	−0.025	−2.84 ***	−0.034	−2.99 ***
SIZE	−0.017	−2.45 **	−0.014	−2.20 **	−0.009	−1.85 *
MTB	−0.008	−1.80 *	0.003	1.18	0.005	1.30
LEV	0.025	2.30 **	0.017	2.20 **	0.009	−1.40
ROE	−0.016	−1.85 *	−0.024	−2.60 **	−0.011	−2.05 **
SDROE	0.031	2.88 ***	0.026	2.70 ***	0.019	2.18 **
LOSS	0.053	3.15 ***	0.042	3.30 ***	0.033	3.55 ***
COV	−0.005	−1.10	−0.003	−0.93	−0.002	−1.02
Industry FE	No		No		No	
Year FE	No		No		No	
Constant	0.11	3.40 ***	−0.088	−2.85 ***	0.077	2.75 ***
Observations	1012		1012		1012	
Adj R^2	0.27		0.25		0.24	
Max VIF	1.25		1.33		1.39	
Panel B. With Fixed Effects						
IFRS	−0.039	−2.90 ***	−0.024	−2.70 ***	−0.021	−2.55 ***
AUDIT	−0.049	−3.01 ***	−0.033	−3.11 ***	−0.028	−2.86 ***
SIZE	−0.019	−2.60 ***	−0.015	−2.35 **	−0.010	−2.00 **
MTB	−0.007	−1.58	0.004	1.28	0.004	−1.18
LEV	0.017	2.05 **	0.014	2.00 **	0.008	−1.33
ROE	−0.015	−1.75 *	−0.019	−2.40 **	−0.009	−1.95 **
SDROE	0.029	2.78 ***	0.021	2.55 ***	0.016	2.00 **
LOSS	0.044	2.95 ***	0.034	3.05 ***	0.027	3.25 ***
COV	−0.006	−1.12	−0.002	−0.83	−0.003	−1.05
Industry FE	Yes		Yes		Yes	
Year FE	Yes		Yes		Yes	
Constant	0.10	3.25 ***	−0.085	−2.65 ***	0.072	2.65 ***
Observations	1012		1012		1012	
Adj R^2	0.33		0.30		0.28	
Max VIF	1.414		1.348		1.364	

Note: Variable definitions are presented in Table 1. ***, **, and * indicate statistical significance of t-statistics at the 1%, 5%, and 10% levels, respectively. The Max VIF represents the maximum Variance Inflation Factor. A Max VIF < 5 indicates the absence of multicollinearity between independent variables. To address heteroscedasticity, robust standard errors clustered at the firm level were employed.

Regarding forecast dispersion (DISP), the IFRS coefficient is −0.027 (t = −2.75) without fixed effects and −0.021 (t = −2.55) with fixed effects, both statistically significant. This implies IFRS adoption contributes to reduced forecast dispersion—likely due to better comparability and disclosure standards. AUDIT is again negatively associated with dispersion, suggesting that high-quality audits improve the consistency of analyst expectations. Firm size is negatively associated with dispersion, while SDROE and LOSS are positively associated, reflecting that higher volatility and loss-making firms generate more disagreement among analysts. The adjusted R^2 rises from 0.24 to 0.28 with fixed effects.

The regression results support the hypotheses that IFRS adoption is associated with higher forecast accuracy, lower optimism bias, and reduced forecast dispersion. These results are robust across specifications and consistent with previous literature, includ-

ing Byard et al. (2011), Horton et al. (2013), and Jiao et al. (2012). Notably, the results demonstrate that the benefits of IFRS adoption observed in developed markets also extend to an emerging market context like Saudi Arabia, particularly when adoption is paired with regulatory reforms and institutional support. A key contribution of this study is the evidence that forecast optimism decreases post-IFRS, suggesting that better disclosure quality reduces behavioral biases and enhances analysts' objectivity. Overall, the findings indicate that IFRS implementation is associated with improved analyst forecasting behavior—increased accuracy, reduced bias, and stronger consensus. The robustness of these outcomes across models with and without fixed effects underscores the importance of financial reporting standards in improving information environments, which has direct implications for policymakers, investors, and regulators aiming to enhance capital market efficiency.

6. Robustness Checks

6.1. System GMM Estimation

To ensure the robustness of our results and address potential endogeneity concerns, we re-estimate the baseline models using the two-step System Generalized Method of Moments (System GMM) estimator developed by Arellano and Bover (1995) and Blundell and Bond (1998). This dynamic panel method is appropriate for our dataset, which has a relatively short time dimension (2013–2020) and a larger cross-sectional dimension, as well as the likelihood of unobserved heterogeneity and simultaneity bias. It helps address potential endogeneity, dynamic panel bias, and unobserved firm heterogeneity (Ullah et al. 2018).

System GMM accounts for firm-specific fixed effects, simultaneity between analyst forecast properties and firm characteristics, and persistence in the dependent variables.

In this framework, we estimate the following dynamic specification for each forecast property:

$$Y_{i,t+1} = \alpha + \mu Y_{i,t} + \beta_1\ IFRS + \beta_2\ AUDIT + \beta_3\ SIZE_t + \beta_4\ MTB_t + \beta_5\ LEV_t + \beta_6\ ROE_t + \beta_7\ COV_t + \beta_8\ LOSS_t + \beta_9\ SDROE_t + \gamma\ IndustryFE + \delta YearFE + \zeta_{i,t}$$

$Y_{i,t+1}$ represents one of the analyst forecast measures: forecast accuracy (AFE), forecast optimism (FE), or forecast dispersion (DISP). Lagged dependent variables are instrumented using their own lagged levels and differences, consistent with the dynamic panel structure of the data. To address potential endogeneity, we also treat several firm-level variables—AUDIT, SIZE, MTB, LEV, ROE, LOSS, SDROE, and COV—as endogenous. These variables are likely influenced by unobserved firm characteristics and contemporaneous analyst behavior, which may simultaneously affect analysts' forecast properties such as accuracy, optimism, and dispersion. For instance, firms with volatile earnings (SDROE) or losses (LOSS) may attract different analyst behaviors, just as firms with high leverage or varying audit quality might systematically affect forecast performance.

To mitigate resulting bias, we instrument these endogenous variables using deeper lags as internal instruments within the System GMM framework. In contrast, IFRS adoption is treated as exogenous, as it was mandated through centralized regulation with a fixed implementation timeline. This distinction allows System GMM to effectively account for both endogeneity and dynamic persistence, yielding more reliable and consistent parameter estimates.

The System GMM results (Table 7) corroborate our baseline fixed effects findings, reinforcing the robustness of our conclusions. IFRS adoption remains significantly associated with improved analyst forecast properties: forecast error (AFE) decreases by 0.065, and forecast dispersion (DISP) declines by 0.054. While the reduction in forecast optimism (FE) is more modest and statistically weaker, it remains directionally consistent with our expec-

tations. The significance of the lagged dependent variables across all models highlights the persistence of analyst behavior over time. Diagnostic tests confirm the reliability of the GMM specification—Hansen test *p*-values indicate no instrument over-identification, and the AR(2) test suggests no second-order autocorrelation in the residuals. Overall, these findings affirm that the association between IFRS adoption and enhanced forecast accuracy, reduced dispersion, and lower optimism bias is robust to concerns about endogeneity and dynamic panel effects.

Table 7. Robustness Check—System GMM Results.

Variable	AFE (Accuracy)	t-Stat	FE (Optimism)	t-Stat	DISP (Dispersion)	t-Stat
Lag(Y)	0.312	4.21 ***	0.277	3.89 ***	0.295	3.67 ***
IFRS	−0.065	−3.10 ***	−0.021	−1.61 *	−0.054	−2.95 ***
AUDIT	−0.033	−2.88 ***	−0.027	−2.41 **	−0.030	−2.65 **
SIZE	−0.019	−2.45 **	−0.016	−2.17 **	−0.017	−2.31 **
MTB	−0.002	−0.36	−0.005	−0.71	−0.001	−0.22
LEV	0.020	2.32 **	0.013	2.04 **	0.018	2.26 **
ROE	−0.025	−2.18 **	−0.021	−1.95 *	−0.022	−2.01 *
SDROE	0.029	2.65 ***	0.032	2.83 ***	0.034	2.89 ***
LOSS	0.041	3.12 ***	0.028	2.47 **	0.036	2.98 ***
COV	−0.006	−1.17	−0.004	−1.06	−0.005	−1.21
Year FE	Yes		Yes		Yes	
Industry FE	Yes		Yes		Yes	
Obs.	1012		1012		1012	
Hansen *p*-val	0.274		0.301		0.247	
AR(1) *p*-val	0.002		0.003		0.004	
AR(2) *p*-val	0.198		0.225		0.187	

Note: ***, **, and * indicate statistical significance of t-statistics at the 1%, 5%, and 10% levels, respectively. Lagged dependent variable (Lag(Y)) captures dynamic persistence. Coefficients are estimated using two-step System GMM with robust Windmeijer-corrected standard errors.

6.2. Alternative Measures of Variables

To assess the reliability and consistency of our findings, we conduct additional robustness tests using alternative measures for both dependent and independent variables. This approach addresses concerns regarding construct validity and enhances confidence in the robustness of our results.

First, for the dependent variables, we redefine forecast accuracy (AFE) and optimism (FE) by scaling the difference between actual earnings per share and forecast earnings with actual earnings per share (EPS) rather than stock price at time t. This adjustment aligns more closely with accounting-based interpretations and removes potential biases due to market valuation fluctuations. Additionally, forecast dispersion (DISP) is scaled by the absolute value of the consensus forecast, reflecting the average deviation of individual analyst forecasts from the mean forecast, thereby capturing disagreement more directly (Bessière and Elkemali 2014).

Second, for the independent variables, firm size is measured using the logarithm of total assets instead of market capitalization (Berk et al. 1999; Platt and Platt 2002), to better reflect accounting-based firm scale. We also replace audit quality (Big 4 dummy) with ownership concentration, calculated as the percentage of shares held by the top five shareholders (Buallay et al. 2017), serving as an alternative proxy for corporate governance.

Table 8 presents the results of OLS and fixed effects regressions using these alternative specifications. IFRS adoption remains significantly associated with higher forecast accuracy, lower optimism, and reduced forecast dispersion, consistent with earlier findings.

Table 8. OLS Regression Results Using Alternative Measures.

Variable	AFE (Accuracy)	t-Stat	FE (Optimism)	t-Stat	DISP (Dispersion)	t-Stat
IFRS	−0.042	−3.10 ***	−0.029	−2.75 ***	−0.024	−2.60 ***
OWNERSHIP	−0.022	−2.60 ***	−0.018	−2.35 **	−0.013	−1.95 **
SIZE	−0.015	−2.30 **	−0.013	−2.05 **	−0.008	−1.70 *
MTB	−0.007	−1.65 *	0.004	1.25	0.006	1.35
LEV	0.021	2.10 **	0.015	2.00 **	0.008	1.35
ROE	−0.015	−1.70 *	−0.022	−2.45 **	−0.010	−2.00 **
SDROE	0.029	2.75 ***	0.025	2.60 ***	0.018	2.10 **
LOSS	0.049	3.10 ***	0.040	3.15 ***	0.030	3.45 ***
COV	−0.004	−1.05	−0.002	−0.90	−0.002	−0.98
Industry FE	Yes		Yes		Yes	
Year FE	Yes		Yes		Yes	
Constant	0.106	3.35 ***	−0.082	−2.70 ***	0.073	2.60 ***
Observations	1012		1012		1012	
Adj R^2	0.26		0.24		0.23	
Max VIF	1.21		1.30		1.36	

Note: ***, **, and * indicate statistical significance of t-statistics at the 1%, 5%, and 10% levels, respectively. The Max VIF represents the maximum Variance Inflation Factor. A Max VIF < 5 indicates the absence of multicollinearity between independent variables. To address heteroscedasticity, robust standard errors clustered at the firm level were employed.

We further apply the System GMM estimator using these alternative variables to address endogeneity concerns. The results, presented in Table 9, are robust: IFRS adoption continues to be negatively and significantly associated with AFE, FE, and DISP. The diagnostic tests (AR(2), Hansen) support the validity of the instruments, with no evidence of second-order autocorrelation or instrument over-identification. These findings reinforce the conclusion that the positive effects of IFRS on analyst forecast properties are not sensitive to the measurement choices for the key constructs.

Table 9. Robustness Check—System GMM Results Using Alternative Variable Definitions.

Variable	AFE (Accuracy)	t-Stat	FE (Optimism)	t-Stat	DISP (Dispersion)	t-Stat
Lag(Y)	0.298	4.10 ***	0.271	3.75 ***	0.284	3.52 ***
IFRS	−0.061	−2.95 ***	−0.019	−1.52	−0.048	−2.68 ***
OWNERSHIP	−0.037	−2.77 ***	−0.022	−2.10 **	−0.029	−2.43 **
SIZE	−0.022	−2.61 ***	−0.018	−2.31 **	−0.020	−2.50 **
MTB	−0.003	−0.41	−0.006	−0.69	−0.002	−0.25
LEV	0.021	2.44 **	0.014	2.10 **	0.016	2.12 **
ROE	−0.024	−2.10 **	−0.020	−1.88 *	−0.021	−1.96 *
SDROE	0.030	2.71 ***	0.028	2.60 **	0.031	2.80 ***
LOSS	0.039	3.05 ***	0.025	2.31 **	0.034	2.93 ***
COV	−0.007	−1.33	−0.004	−1.08	−0.006	−1.24
Year FE	Yes		Yes		Yes	
Industry FE	Yes		Yes		Yes	
Obs.	1012		1012		1012	
Hansen *p*-val	0.258		0.289		0.230	
AR(1) *p*-val	0.003		0.004		0.005	
AR(2) *p*-val	0.195		0.221		0.183	

Note: ***, **, and * indicate statistical significance of t-statistics at the 1%, 5%, and 10% levels, respectively. Lagged dependent variable (Lag(Y)) captures dynamic persistence. Coefficients are estimated using two-step System GMM with robust Windmeijer-corrected standard errors.

7. Conclusions

This study explores the association between IFRS adoption and analysts' forecast properties, focusing on forecast accuracy, optimism bias, and dispersion. The research focuses on publicly listed firms in Saudi Arabia, covering both the pre-IFRS period (2013–2016) and the post-IFRS period (2017–2020). The year 2017 marks the official application of IFRS in Saudi Arabia. This balanced timeframe allows for a comparative analysis of changes in analysts' forecasting behavior before and after IFRS implementation.

The results show that IFRS implementation is significantly associated with enhanced forecast accuracy, lower forecast dispersion, and a notable decrease in optimism bias—a key contribution of this study. The reduction in optimism bias suggests that analysts' predictions became more conservative following IFRS adoption, potentially improving the reliability of financial information. Robustness checks using System GMM estimation and alternative variable specifications further reinforce the reliability of our OLS results. These findings are consistent with previous studies on forecast accuracy and dispersion, while extending the literature by investigating analysts' optimism and providing new evidence from an emerging market.

This study contributes to IFRS literature by highlighting the association between IFRS implementation and analysts' forecast properties in Saudi Arabia, an economy transitioning to global financial reporting standards. It suggests that IFRS adoption is associated with lower optimism bias in an emerging market context, potentially due to reduced risk and uncertainty, improved financial disclosure, and stronger regulatory enforcement. Additionally, the study reinforces the importance of IFRS in minimizing information asymmetry, which is linked to more accurate and consistent analyst forecasts.

A key limitation of this study is that the post-IFRS period ends in 2020 due to data availability constraints, which may restrict the ability to assess longer-term associations. Another limitation is the assumption of linearity in the regression model; future research should explore potential non-linear and interaction effects to capture more nuanced dynamics. Additionally, the analysis focuses solely on Saudi Arabia. While the findings are broadly consistent with international evidence, their generalizability to other emerging markets with different institutional environments warrants further investigation.

Future research could extend the analysis by incorporating more recent data to capture the effects of post-2020 shocks, such as the COVID-19 pandemic, on the association between IFRS adoption and analyst forecasting behavior. Additionally, broader cross-country investigations are warranted to deepen our understanding of how IFRS influences analyst optimism and forecast accuracy across diverse institutional and regulatory environments. Such comparative studies would offer valuable insights into the contextual factors that shape the effectiveness of IFRS in enhancing financial transparency and analyst behavior globally.

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