

The Impact of IFRS Adoption on the Accuracy of Analysts' Forecasts in the Saudi Stock Exchange*

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ABSTRACT

This paper examines the impact of the mandatory adoption of International Financial Reporting Standards (IFRS) since 2017 on the ability of financial analysts to forecast earnings accurately in Saudi Arabia during the period 2014–2019. Specifically, the research investigates whether mandatory IFRS adoption has improved the accuracy of analysts to forecast earnings. The methodology involves using a static regression on a panel data model with temporal "dummy" variables to test the hypothesis formulated for the study. The study has one hypothesis, i.e., the financial analysts' forecast accuracy is increased after the mandatory adoption of IFRS in Saudi Arabia. The study consists of 17 listed Saudi public companies over 6 extended period for a total of 102 observations. The study findings provide evidence of no improvements in the accuracy of earnings forecasts of Saudi-listed firms after adopting IFRS. The study contributes to the debate on the desirability of the experienced current trends towards one global set of accounting standards.

Keywords: International Financial Reporting Standards, accuracy of financial analysts' forecasts, dispersion of financial analysts' forecasts Saudi listed companies.

* The research is supervised by Prof. Ali Alnodel.

INTRODUCTION

1.1 Background of the Study

The business environment in which corporations operate is becoming increasingly dynamic and global. Organizations now engage in various kinds of transactions with clients and suppliers across the border. As a result, accounting regulations and practices have been geared toward globalization as a fast-growing profession. In this globalized era, local accounting standards are becoming rare, and International Financial Reporting Standards (IFRSs) are gaining more presence worldwide. International Financial Reporting Standards (IFRS) are accounting standards issued by an independent, not-for-profit organization named the International Accounting Standards Board (IASB).

This transformation has been based on several alleged benefits and outcomes. IFRS adoption is considered a key factor for attracting foreign investments (Mulhim, 2018). In addition, researchers report that applying international accounting standards might help support international mergers and acquisitions and increase comparability with other global markets (Cai & Wong, 2010). IFRS also helps attract foreign direct investments and provides international standards that allow preparing unified financial statements for multinational companies, which encourages the openness of domestic financial markets and an increase in foreign investment (DeFond, et al., 2011).

According to Cheong et al. (2010), financial accounting information is essential to many individuals, including analysts, investors, and other interested parties. For this reason, General Accepted Accounting Standards are established to set formal financial reporting standards. The most recent investigations into global accounting have covered more developed countries while neglecting other countries like countries in the Middle East and Saudi Arabia (Miah et al., 2021). This is because of the Middle Eastern region and Saudi Arabia's changes concerning their accounting and economic regulations. The research shows that in recent years in the U.S., the Financial Accounting Standards Board (FASB) established financial accounting and reporting guidelines (Cotter et al., 2012). The development implied that accounting and reporting standards are different in different countries. For example, the accounting standards followed in the United States are different from those that apply in the United Kingdom and those that apply in Saudi Arabia. For this reason, a standard-setting body, the International Accounting Standard Board (IASB) and FASB agree to converge international and U.S. accounting standards. In 2002, these two bodies formalized their agreement by signing the Norwalk Agreement. The IASB established the International Financial Reporting Standards (IFRS).

The purpose of accounting is to translate the economic events of an entity into a final product that is useful for decision-makers. Accounting standards regulate how transactions and other economic events are recognized, measured, presented, and

disclosed in the body or the notes of financial statements. In 2012, a transition plan to adopt IFRSs instead of the local Saudi accounting standards was approved by the Saudi Organization for Certified Public Accountants (SOCPA) to be implemented in several stages. Beginning in 2017, it would start for entities listed in the Saudi market, while it would start for unlisted small and medium entities (IFRS for SMEs) in 2018. This transformation has been based on several alleged benefits and outcomes. IFRS adoption is considered a key factor in attracting foreign investments to invest in the Saudi financial market (Mulhim, 2018). In addition, foreign researchers report that applying international accounting standards might help support international mergers and acquisitions and increase comparability with other global markets (Cai & Wong, 2010). IFRS also helps attract foreign direct investments and provides international standards that allow preparing unified financial statements for multinational companies, which encourages the openness of domestic financial markets and an increase in foreign investment (Alkhtani, 2012; DeFond, et al., 2011). However, reducing the cost of issuing accounting standards, as well as the cost to users of financial statements in utilizing these financial statements, are foremost empirical questions (Daske et al., 2008). To date, the results of empirical tests have been disputed between reduced and non-reduced capital costs (Sayumwe & Francoeur, 2017). In addition, some reported major obstacles to implementing IFRS effectively may reduce the realized benefits, such as a shortage of qualified accountants, high reliance on Big 4 accounting firms, and a lack of research (Nurunnabi, 2018).

The most important characteristic of international accounting standards is its comprehensiveness in terms of its coverage of transactions and events that affect the financial position of the company and the results of its business operation as they cover issues that Saudi standards have not been exposed to. IFRS provides international standards that allow preparing unified financial statements for multinational companies, which contributes to the globalization of the business world. However, the more countries adopt the standards issued by the International Accounting Standards Board (IASB) as their mandatory accounting standards, the greater the debate about the benefits of implementing one set of standards internationally. A major part of that debate is whether the application of IFRS would realize improvements in the functioning of capital markets and reduction in information asymmetry.

However, Garrido-Miralles and Sanabria-García (2014) contend that IFRS adoption has different impacts on different countries due to different institutional and accounting settings and stable legal frameworks that dominate during the period of IFRS adoption. For instance, IFRS adoption may have different effects than other authorities due to differences in institutional features. For this reason, it is effective to investigate and evaluate the effects of committing to IFRS of every country independently (on an individual basis) (Gatsios et al., 2018). Different classifications of accounting standards in Saudi Arabia make its accounting regulation different. Therefore, the accounting practices development in Saudi Arabian institutions aid in

testing IFRS adoption-related effects on the comparability of accounting numbers in different organizations, users of financial reports, and regulators. Horton et al. (2012) contend IFRS is considered clear. Therefore, since it became a legal requirement in 2005, it is now possible for one to generalize their research to all firms across the MENA region.

Analysts have a great responsibility in the stock market as market disseminators. They evaluate and analyze financial information in different companies using the current information at that particular time to forecast the future, hence ensuring efficiency in the market. According to Martinez and Dumer (2012), analysts are required to conduct a lot of research to perform their duties effectively and avoid errors in their forecasts. This is because the information content is vital, especially information concerning companies' financials. Though analysts' forecasts on earnings have differed in the past, the previous research proved that IFRS adoption reduces the occurrences of errors in analysts' forecasts, hence decreasing imbalance in financial information in the stock market (Cotter et al., 2012). However, these effects due to IFRS adoption differ in different countries due to the dominating institutional factors of the countries. Preiato et al. (2010) and Miah et al. (2021) list some of these factors, including legal enforcement, which determines the implementation of standards, development in the stock market, and low motivation of companies to expose information of other institutional factors.

1.2 Research Problem

Previous accounting research in IFRS adoption has focused on developed countries, particularly Europe, Canada, and Australia, while Saudi Arabia (and the Middle Eastern region in general) has been neglected due to low analysts' coverage and constraints in data availability. Although overall findings of researches focused on developed countries support the enhancements in analysts' information environment after IFRS adoption (Kim, et al., 2012; Barth et al., 2014), several studies document the deterioration of the information environment post-IFRS adoption (Martinez et al. (2012). The IFRS set of standards might aid in ensuring transparency, faithful presentation, and comparability of the output of such translation and providing a standardized international framework for how public companies prepare their financial statements (Ball, 2006). However, the financial statements under IFRS Standards require more judgment from the preparers because IFRS are constructed to be "principle-based" compared to Saudi GAAP, which not necessarily always emphasize substance over form due to being "rule-based" standards. Accounting standards with different approaches will likely lead to a different outcome in shaping the preparation and presentation of financial information and what should be disclosed.

IFRS allegedly aims to increase comparability and transparency by decreasing the information gap between the providers of capital and the people to whom they have entrusted their money. A question arises about the magnitude of which financial

analysts' forecast accuracy differs between the post-adoption of the international financial reporting standards compared to the previous Saudi GAAP period. Therefore, this study aims to investigate whether financial analysts' forecast accuracy differs between the pre- and post-adoption of the International Financial Reporting Standards (IFRS) in Saudi Arabia.

1.3 Research Objectives

The main objective of this thesis is the impact of adopting International Financial Reporting Standards on the accuracy and dispersion of financial analysts' forecasts in the Saudi financial market. More specifically, this study addressed this aspect:

1. More accurate forecasts of financial analysts after the mandatory application of International Financial Reporting Standards in the Kingdom of Saudi Arabia.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1 Emerging Trends in Adopting IFRS

Considering previous studies on IFRS adoption and forecasts earnings dispersion and error, there are two categories of IFRS adoption: mandatory and voluntary IFRS adoption. The first type (mandatory) is associated with a law enforcement strategic decision formulated to improve the quality of analysts' forecasts. According to Horton et al. (2012), the mandatory type is usually a result of errors in analysts' forecasts. The second type of IFRS adoption (voluntary) is associated with those countries that accepted and started to follow these standards voluntarily. These countries may include Germany, Italy, Switzerland, and France, among other countries. However, evidence shows that the results from such countries may not be constant. The arguments of Horton et al. (2012) were supported by Wang et al. (2008), who found that accuracy of analysts' earnings forecasts are higher in firms dedicated to local GAAP compared to those that adopted IFRS. In addition, using 18 firms located in different countries as a sample, Tirado-Beltrán and Cabedo-Semper (2020) noted that countries which have restrictions against accounting alternatives, have recorded a rise in the quality (accuracy) of the earnings forecasts. From the discussion, it is evident that adopting a standard financial forecasting method helps in eliminating accounting malpractices and reinforces quality.

In supporting the arguments above, Gatsios et al. (2018) noted that many countries follow their financial reporting standards that are different from the other countries, while others decide to follow standards set in other countries that are perceived to have the highest reporting quality like US GAAP, to govern their financial accounting processes and report. For instance, some countries apply the U.S GAAP. However, Preiato et al. (2010) is of the view that GAAP provided an accounting environment

where the transactions that took place did not follow the GAAP rules, and therefore they were unable to devote fully to the economic reality. Similarly, Rahman et al. (2019) reported that 83 percent of 143 jurisdictions require all public companies and financial institutions to use IFRS standards in their accounting processes. This is because IFRS standards influence the enhancement of information relating to the accounting environment and harmonize the quality of accounting information; hence, increasing its quality. Mandatory IFRS adoption aimed to achieve two objectives: increasing the requirement of financial information disclosure by companies and minimizing accounting options available for management to report economic events, which reflect the true economic value of the reporting entity.

Financial information is essential to analysts in forecasting. Many studies have explored the link between disclosure, as well as analysts' forecasts. These pieces of research have had almost related findings. For instance, Santos et al. (2018) observed that accurate forecasts by analysts are influencing firm-level disclosures positively. Miah et al. (2021) agreed with Santos et al. (2018) that high forecast accuracy, coverage, reduced forecasts revisions, and dispersion increase disclosure levels. Further, Tirado-Beltrán et al. (2020), as well as Cheong et al. (2010) concluded that a mandatory IFRS adoption in addition to increased comparability and disclosure quality indicates a positive effect on improving forecast accuracy. Moreover, Cotter et al. (2012) focused on European firms' IFRS adoption. The authors revealed that it has elevated the comparability of Europeans' financial information, hence increasing the share price.

Adopting IFRS enhances the accuracy as well as reliability of the financial forecasts provided by analysts. Therefore, evidence from past studies strongly supports the adoption of IFRS to achieve better accounting forecasts by analysts. Previous research shows that IFRS adoption has a significant positive impact, as it influences improvement in the way accounting-related information is handled and harmonization of accounting information, thereby increasing financial information comparability. Evidence from studies supports the idea that analysts' forecasts accuracy improvement occurs after adopting IFRS (Santos et al., 2018; Rahman et al., 2019; Tirado-Beltrán et al., 2020). However, other studies argue that the improvement of earning forecasts is partly because of increased quantities of financial information associated with IFRS adoption (Preiato et al., 2010; Maali & Napier, 2010; Miah et al., 2021). Other researchers, like Gatsios et al. (2018) and Santos et al. (2018) suggested that IFRS adoption increases a firm's comparability, thereby improving the quality of analysts' forecasts. In support of these arguments, Garrido-Miralles and Sanabria-García (2014) indicated that earnings forecast dispersion and errors can be minimized by a firm's comparability.

Mandatory IFRS adoption proves to increase comparability. There is an increased and sustained improvement in accuracy, as well as dispersion of earnings forecasts in those firms experiencing an increase in comparability. Past research has assessed how or to what extent does mandatory IFRS adoption affects or contributes to analysts'

forecasts errors. Cotter et al. (2012) revealed that mandatory IFRS adoption reduces the forecasts dispersion and errors. In addition, other studies conducted in Europe support these findings. Research on the adoption of new accounting standards in Europe has had a considerable rise in inaccuracy, as well as a decrease in dispersion (Jiao et al., 2012). According to Rahman et al. (2019), adopting global accounting standards contributed to improving the quality of analysts' forecasts. It is more recognized when these impact are compared to other local standards because they appear to have a hugely significant impact. These assertions are emphasized by Tan et al. (2011), who carried out a study to understand IFRS's effects on 25 countries. The results showed that the quality of financial forecasts only improve in forecasts guided by IFRS standards. Therefore, countries, as well as firms that insist on a single accounting standard, such as the IFRS, report accurate financial forecasts.

Analysts' estimations on earnings are beneficial to investors due to the dissemination that has resulted in different market reactions. Therefore, they are leading to some abnormal returns during the dissemination day or the day after dissemination. In addition, financial analysts are viewed to reduce fiscal imbalances through dissemination. Considering the significant role that the analysts have in making decisions concerning earnings forecasts, the adoption and subsequent implementation of global accounting standards is anticipated to increase the quality of their forecasts. Most researchers predict that the analysts' financial forecasts result from the mandatory IFRS adoption in Saudi Arabia. For example, from an investigation of 6,888 foreign analysts from 49 countries working in 6,169 firms between 1998-2004, Bae et al. (2008) realized that increase in the cost of financial analysts in different nations are a product of variations in accounting standards. Furthermore, in a study investigating analysts' accuracy in the U.K. around an IFRS adoption, Choi et al. (2013) concluded that the value relevance of financial forecasts is high. The arguments were reinforced in Tan et al., (2011), who contend that forecasts errors reduce significantly between the periods of transition from local standards to adopting and implementing IFRS. Thus, an analyst's forecasts errors showed signs of decreasing with the endeavor to adopt IFRS.

2.2 Rationale and Objectives of IFRS Adoption

There are two common goals for IFRS adoption, including improving financial information quality and fostering the comparability of global financial information. The European Parliament has preserved this perception in its regulations 1606/2002, requiring IFRS adoption by the E.U. The regulations illustrate that IFRS adoption intends to enhance comparability, as well as transparency of any presented financial statements. Hence, it increases efficiency in the general functioning of the internal market and capital market among the E.U. community.

2.2.1 Enhance Reporting Comparability

According to Landsman et al. (2012), IFRS promotes international trade by narrowing down financial reports across the countries without necessarily enhancing financial reporting quality. Therefore, it is beneficial to the global economy. Taking an example of E.U. Regulation 1606/2002, these regulations allow companies to compete equally and fully for the available financial resources in the community and world capital market by allowing capital movement into the internal market. In this case, the regulations emphasize reducing the cost and increasing the accounting efficiency through adopting internal accounting standards in cross-country transactions. Similar arguments were presented by Lantto et al. (2009) and Horton and Serafeim (2010), who noted that besides accounting standards, a country's legal, institutional, and cultural structure also significantly affects financial reporting quality. However, some practitioners, and researchers, such as Ball et al. (2000), Ball et al. (2003), and Chen and Khurana (2015), object to the ability of both mandatory and optional adoption of accounting standards to enhance financial statement quality presented. Similarly, Ball et al. (2000) gives empirical evidence indicating that shareholder model companies report economic losses in their accounting numbers compared to stakeholder-model countries. In this context, simply adopting IFRS would not automatically lead to improved quality of forecasts, as desirable and ethical accounting principles must be entrenched.

Financial auditors question the ability of IFRS to sustain global financial statement quality convergence. Cox (2014) argue that full adoption of IFRS standards may not occur in the United States. This is because adopting these standards allows a foreign institution that lacks the country's local accountability to govern the reporting laws. Hence, taking control of all people and their business activities. For this reason, many economies have taken the precaution to protect their business activities by requesting the national standards developers to review and modify these international standards before setting them as law. This kind of approach may lead to countries adopting some of the IFRS standards and rejecting others, and eventually end up using their local standards. However, besides the attainability of global harmonization, Lin et al. (2012) raises another point of concern as to whether adopting one international set of accounting standards is enticing. The authors support a world that would allow institutions to adopt standards of their choice, either the US GAAP or the IFRS. In agreement, Chen and Khurana (2015) contend firms could investigate the impacts of any newly introduced accounting standards and study the advantages and disadvantages of adopting them before committing to them. This way, it would improve innovations regarding the presentation of high-quality financial information due to competition.

2.2.2 Enhance Reporting Quality

IFRS promoters often emphasize the capability of these standards to yield information of high quality (Kim, et al., 2012; Barth et al., 2014). The goal of enhancing the quality of financial reports is enticing, as quality in reporting is beneficial to businesses because it improves issues relating to information imbalances. However, translating this goal into practice can be challenging. For one, there is no explanation for the exact meaning of "high quality." According to Dechow, Schrand, and Ge (2010), decisions made from financial information determine accounting quality. Therefore, it is essential to explain this information in-depth using specific decision model. A good example is asset liquidation values that are more useful to long-term debt holders in decision-making but less helpful when making decisions concerning equity investments. Therefore, it is essential to be precise for better understanding when presenting accounting information in this context. IFRS goals to provide its users with high-quality standards may be challenging to achieve. Further, Dechow et al. (2010) argue that no amount of earnings can exceed decision models in superiority. The position adopted by Dechow et al. (2010) is supported by Ball, Shivakumar, and Li (2015), who concluded that functions of IFRS in evaluation had affected the appropriateness, usefulness, efficacy, as well as relevance of accounting numbers in contract-related ventures. Reporting accurate forecasts based on IFRS has contributed to better earnings for countries emphasizing its uniform application.

Ahmed et al. (2013) argue that formulating accounting standards of high quality does not necessarily guarantee provisions of financial reports of high quality. High-quality financial reports are determined by some aspects, including the performance of the accounting rules and the reporting incentives faced by managers and the financial regulators responsible for enforcing accounting rules, such as capital market auditors, among others. Similarly, Barth et al. (2008) and Chen & Khurana (2015) contend the anticipation that economic factors and incentives that financial regulators and managers face are the same in public companies in an open economy such as the U.K., and those in a relatively closed economy, such as Qatar. The legal, economic, and cultural aspects of a country determine its managerial reporting incentives, as well as its accounting enforcement. For example, the role of numbers illustrated in financial statements in contracts impacts managerial reporting incentives. These incentives may depend on several legal dictates such as cultural values like religious beliefs, some institutional aspects like the framework for a firm's ownership, corporate governance, and trust between people. In agreement with Barth et al. (2008) and Chen & Khurana (2015), Christensen et al. (2015) observed that accounting rule implementation could be affected by the level of business transactions at arm's length. Frequent reliance on closed-door dealings by companies instead of relying on the available public financial reports reduces the motivation of regulators to implement accounting rules. Furthermore, governments' regulations, which place all accounting numbers subject to tax policies, may reduce motivation for reporting and implementation of accounting rules.

THEORETICAL FRAMEWORK AND HYPOTHESES DEVELOPMENT

3.1 Theoretical Framework

Since the establishment of stock markets, market participants have been trying to figure out how to evaluate those stocks and predict their value in the future. The stock market is just like any other market in which its movements depend upon demand and supply for those stocks in finding the appropriate level of equilibrium within the market. Theories join in trying to explain the phenomena. Capital market theory refers to several forms of analysis that aim to predict the flow of supply and demand in the market and, as a result, the value of securities. Capital Market Theory and its integral component Efficient Market Hypothesis (EMH), which is subject to continuous debate, states that stock prices incorporate all market-wide information about the actual value of the underlying stock with the existence of fully rational investors. The capital market theory and associated EMH hypothesis imply how the quality and amount of information influence market efficiency. The form of market efficiency that Saudi Market have is also subject to continuous debate. Asiri and Alrezza (2013), Al-Faryan (2020) reported that the Saudi Market is a Weak-form while Khababa (1998), Salameh et al (2011) and (Khoj and Akeel (2020) concluded that Saudi market is not weak-form efficient. Theoretically speaking, efficient market hypothesis relies partly on the support of the accounting information disclosed through periodic and mandatory publishing of corporate information, which varies among standard setters. Standards' disclosure requirements guide in shaping the preparation and presentation of financial information. To be more specific, accounting standards have an impact on firm-specific information, i.e., stock price informativeness (Tudor & Achim, 2019). Gelb and Zarowin (2002) defined stock price informativeness as the relation between stock returns and changes in earnings in which more informative stock price changes contain more information about changes in earnings of the company.

A more efficient information environment is associated with better information integration into prices. One way of improving such integration is the role of intermediaries between corporations and market participants. Analysts' earnings forecasts play an essential role in reducing uncertainty and information asymmetry of capital markets as intermediaries that result in efficient integration of information. In doing so, analysts translate past and current accounting information into forward-looking forecasts. Therefore, market participants rely on analysts' stock reports and recommendations, which are based on earnings estimates and other accounting variables in the financial statements, to provide a basis for investment decisions. Financial analysts employ financial statement related data in their calculations for earnings forecasts. As a result, the extent to which expectation of future earnings

differ (forecast dispersion) will be affected by the degree of earnings quality. However, management has incentives to meet earnings forecasts, and the financial reporting standards can meet earnings forecasts at the expense of earning quality. In addition, Agency theory provides several predictions regarding the behavior of managers who might have different interests than those of the principles. Investing one's money, the Principles, in a public company is the same as hiring an agent, senior management, to invest it on his behalf. Agency theory covers an agency relationship where it predicts managerial behaviors. An agency relationship, as defined by Jensen and Meckling (1976), refers to a contractual relationship where an individual, or a group of individuals, known as the principle, pursue another individual, known as the agent, to perform specific tasks and services, such as assigning the agent the decision-making author. The agent performs these tasks and services on behalf of the principal. From a company's perspective, the manager of a company is the agent, whereas the shareholders of that company are the principal. From this understanding along with the views of Jensen and Meckling (1976), it is suggested that the agency theory views the organizations that adopt IFRS as a way of reducing agency costs and conflicts that may be involved. Publishing financial and accounting information of high quality aims at reducing agency costs, concerning agency theory. According to Miah et al. (2021), IFRS conceptual framework views investors as having a privilege as users of financial information. This study focuses on financial analysts' forecasts rather than responses from investors. Research documents several capital benefits associated with the adoption of IFRS, such as a decrease in the cost of capital and improvement in liquidity, where their focus is an analysis of the relationship between investors' responses to earnings (Daske et al., 2013). A reduction in dispersion will enable analysts to offer accurate information, thereby influencing the quality improvement of the analysts' earnings forecasts. To protect your investment, you need to trust the agent to whom the authority to act on his behalf is delegated, but the power to control is retained with the principal to ensure the management's loyalty (Jensen & Meckling, 1976). This power of control is exercised, in part, through the diffusion of financial statements and their related disclosures to ensure that the profitability objectives have been met and the good prospects of future performance. Accurate future forecasts provide the principal with better prospects of future performance that enables him to monitor the actions of his agents and reduce the asymmetry of information more efficiently.

3.2 Hypothesis Development

After reviewing prior studies that were conducted to examine the impact of IFRS adoption on the accuracy of financial analysts' forecasts, it is evident that most studies reported evidence of the increase in accounting information quality and decrease in information asymmetry. However, a lower market analysts' forecast error is expected after IFRS adoption, which translates in more accurate analysts' forecasts and a decrease in the dispersion of earnings estimates forecasted by market analysts (Lang

and Lundholm, 1996; Ashbaugh and Pincus, 2001; Bae et al., 2008). Based on what has been detailed, the current study will follow the literature and propose a positive association between the accuracy of financial analysts' forecasts and the mandatory adoption of IFRS in Saudi Arabia. The reasoning related to the hypothesis that mandatory IFRS adoption reduces analysts' forecast error is also valid for reducing forecast dispersion. Therefore, the current study will also propose a negative association between financial analysts' forecasts dispersion and the mandatory adoption of IFRS in Saudi Arabia. In the context of the reviewed literature, the questions concerning IFRS effects on analysts' financial forecasts are just questionable. Rahman et al. (2019) state that if IFRS standards increase the relevance of financial information, there will be a production of accurate information, thereby increasing earnings forecasts accuracy. In addition, the study attempts to investigate if there is a need for analysts to have more time to understand new international standards.

This research's main goal is to understand the effects of IFRS adoption in Saudi Arabia on its analysts' stock market forecasts. To achieve this, the researcher worked under the assumption that mandatory IFRS adoption enables analysts to have improvements in forecasting future earnings. Basing the current dissertation's arguments on the theory that mandatory IFRS adoption enhances financial information quality from companies presented to analysts, which thereby increases their earnings forecasts. Thus, the first hypothesis of the present dissertation is stated as:

H1: The financial analysts' forecasts are more accurate after the mandatory adoption of IFRS in Saudi Arabia.

RESEARCH METHOD

4.1 Research Approach

The research will involve the collection of data on the average annual earnings expectations reported by publicly traded companies listed on the Saudi Stock Exchange for the year-end accounting period "t". This data will specifically include financial analysts' forecasts and forecasted earnings per share. The data will be obtained from the Bloomberg database. Also, this study will review the Saudi Stock Exchange's statistical bulletins for the years 2014-2019 to get the accounting variables, specifically, the stocks' earning per share, return on equity, market capitalization, and revenue growth. The research compare financial analysts' forecasts dispersion and accuracy for three years before and after IFRS adoption in Saudi Arabia.

4.2 Data Sample

The sample of the study is limited to 17 listed Saudi public companies, over 6 extended period for a total of 102 observations. The sample consist of all the companies that met two criteria:

1. Have forecasted EPS covering all research period from 2014 up to 2019.
 2. Have at least two analysts for each EPS forecast of each observed year.
- To test the study's hypotheses, a static multiple regression model is applied to panel data.

4.3 The Research Model

The study measures the accuracy of analysts' information environment using absolute forecast errors as used by Byard et al. (2010) and Kim and Shi (2012).

Absolute forecast errors (AFE) = $|Actual\ Earnings - Mean\ forecast| / Stockprice$

4.4 Research Regression Design

To test the research hypothesis and examine differences in the properties of analysts' forecasts surrounding IFRS mandatory adoption, the study constructs a regression equation that follows previous studies that use the characteristics of analysts' forecasts as proxies for the information environment (Healy et al., 1999; Masoud, 2017). By using two measures to capture analysts' information environment for a firm, absolute forecast errors and forecast dispersion, which yields the following regression equation:

$$FE_{it} = \beta_0 + \beta_1 IFRS_{it} + \beta_2 SIZE_{it} + \beta_3 NANAL_{it} + \beta_4 \Delta EPS_{it} + \beta_5 LOSS_{it} + \beta_6 DECLINE_{it} + \beta_7 ROA_{it} + \beta_8 GROWTH_{it} + \epsilon_{it}$$

Table 1 - Description of the Regression Variables

COD	Variables	Definition and measurement
AFE	Forecasts error	Analyst absolute forecasts' error for firm i and year t
IFRS	International Financial Reporting Standards	A dummy variable, which equals to 1 if firm I adopted the IFRS in year t after 2017 end, and 0 otherwise
Size	Firm size	Is measured by the natural logarithm of the total market capitalization at the end of year t-1.
NANAL	Analyst forecasts	Is measured as the natural logarithm of the number of annual analysts forecasts for year t
EPS	Earnings per share	Absolute value of the change in earnings of firm i between t-1 and t
Loss	Loss-making firms	A dummy variable, which equals to 1 if firm i reports negative earnings for the year t, and 0 otherwise
Decline	Decline	A dummy variable, which equal to 1 if the result of year tis less than that of the year t-1, and 0 otherwise
StdROE	Firm performance volatility	Is measured by the standard deviation of ROE based on the five years before year t
Growth	Firm growth	Is measured as the annual percentage change in total revenue, overaged over

		the five years ending with the forecast year
R	Residuals	Residuals for firm i at time t of the study.

DISCUSSION OF THE RESULTS

6.1 Descriptive and Correlation Analyses

The data gathered showed high volatility that is demonstrated by quite large variance and range. Total of 102 observations were analyzed using eight dependent variables (IFRS adoption) and seven control variables.

Table 2 - Pearson Correlation Coefficients

	Correlation									
	AFE	DISP	IFRS	SIZE	NANAL	_EPS	LOSS	DECLINE	ROE	GROWTH
AFE	1.000000	0.110993	-0.040863	-0.227736	-0.342655	0.516029	0.277861	0.071184	0.088251	0.080064
DISP	0.110993	1.000000	-0.154496	-0.168507	0.066658	-0.083373	0.014084	0.036925	-0.076385	0.002856
IFRS	-0.040863	-0.154496	1.000000	0.036863	0.067121	0.147050	-0.065938	-0.237542	0.199738	-0.261580
SIZE	-0.227736	-0.168507	0.036863	1.000000	0.513812	-0.044042	-0.075466	0.097389	-0.286913	-0.269748
NANAL	-0.342655	0.066658	0.067121	0.513812	1.000000	-0.101522	0.018393	-0.035302	0.037552	-0.171076
_EPS	0.516029	-0.083373	0.147050	-0.044042	-0.101522	1.000000	0.348071	0.022711	0.338694	-0.109748
LOSS	0.277861	0.014084	-0.065938	-0.075466	0.018393	0.348071	1.000000	0.245388	0.072288	-0.113901
DECLINE	0.071184	0.036925	-0.237542	0.097389	-0.035302	0.022711	0.245388	1.000000	-0.151743	0.102528
ROE	0.088251	-0.076385	0.199738	-0.286913	0.037552	0.338694	0.072288	-0.151743	1.000000	0.011578
GROWTH	0.080064	0.002856	-0.261580	-0.269748	-0.171076	-0.109748	-0.113901	0.102528	0.011578	1.000000

Based on the correlation coefficients of IFRS and AFE, there was a sign of a very weak negative correlation experienced between IFRS adoption variable and absolute forecast errors (AFE) variable. Forecast accuracy is measured by forecast errors such that the lower the forecast errors, the higher the forecast accuracy. As a result, the correlation coefficients analysis proves that in case of Saudi Arabia market based on the chosen data sample, there is not evidenced positive relationship between IFRS adoption and analyst forecasts accuracy.

6.2 Regression Results

Table 3 - AFE Regression Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.027024	0.009863	2.739782	0.0074
IFRS	-0.001584	0.002810	-0.563738	0.5743
SIZE	-0.000837	0.001086	-0.770492	0.4430
NANAL	-0.006088	0.002626	-2.318501	0.0226
_EPS	0.006564	0.001262	5.199837	0.0000
LOSS	0.006181	0.004935	1.252456	0.2135
DECLINE	-7.63E-05	0.002830	-0.026970	0.9785
ROA	-0.000370	0.000376	-0.985163	0.3271
GROWTH	5.79E-05	7.01E-05	0.826898	0.4104
R-squared	0.386055	Mean dependent var		0.010800
Adjusted R-squared	0.333242	S.D. dependent var		0.015953
S.E. of regression	0.013026	Akaike info criterion		-5.759617
Sum squared resid	0.015780	Schwarz criterion		-5.528002
Log likelihood	302.7405	Hannan-Quinn criter.		-5.665828
F-statistic	7.309913	Durbin-Watson stat		1.871674
Prob(F-statistic)	0.000000			

While the multiple regression analysis, based on the model above, showed that the analyst forecasts accuracy are positively influenced by IFRS adoption. It is because its coefficient is negative, which reduce the absolute forecasting errors of analysts' EPS forecasts. However, the results were statistically not significant on 5% level, as p-values for coefficients are significantly higher than 5% level and t-stat, which is 0.56 and below the critical value of 2.33 and 1.96 of the level of significance, respectively. Therefore, the study cannot reject the null hypothesis that IFRS adoption has not influenced the accuracy of EPS Analyst forecasts and is not statistically different from zero.

R-square of the model is about 39%, which is quite modest. F-stat of the model is 7.3, which is above the critical value of 1.99 with 9 and 100 degrees of freedom with 5% significance. Thus, the study can reject the null hypothesis that all the variables are set to equal zero and conclude that at least one of the coefficients in the model is statistically significant. The regression analysis results disagree with most research findings that reported forecasts accuracy are positively influenced by IFRS adoption (Lang & Lundholm, 1996; Ashbaugh & Pincus, 2001; Hodgdon et al., 2008). The study closely relate to Martinez et al. (2012) finding that revealed high forecast dispersion and low analysts accuracy recorded in areas with recent adopters compared to early adopters. Another consideration could be the drop in oil price in 2016, which reduced the Saudi government revenue and forced the government to cut spending, resulting in earnings volatility of the companies in the listed market, specially those relaying heavily on government spending. This is closely related to Jiao et al. (2012) and Rahman et al. (2019) findings who reported that earnings forecast errors could increase after mandatory IFRS adoption in cases of earnings volatility.

CONCLUSION AND RECOMMENDATIONS

7.1 Dissertation Summary

IFRS transformation has been based on several alleged benefits and outcomes. IFRS adoption is considered a key factor for attracting foreign investments (Mulhim, 2018). In addition, foreign researchers report that applying international accounting standards might help support international mergers and acquisitions and increase comparability with other global markets (Cai & Wong, 2010). IFRS also helps attract foreign direct investments and provides international standards that allow preparing unified financial statements for multinational companies, which encourages the openness of domestic financial markets and an increase in foreign investment (DeFond et al., 2011; Alkhtani, 2012).

This paper examined the impact of the mandatory adoption of International Financial Reporting Standards (IFRS) since 2017 on the ability of financial analysts to forecast earnings accurately in Saudi Arabia during the period 2014-2019. Specifically, the research investigated whether mandatory IFRS adoption has improved the ability of analysts to forecast earnings. The methodology involved the use of regression on a

panel data model with temporal "dummy" variables to test the two hypotheses formulated for the study. The study consisted of 17 listed Saudi public companies. The findings provided evidence of no improvements in the earnings quality of Saudi-listed Saudi firms after the collective requirement to adopt IFRS have been experienced. The study contributed to the debate on the desirability of the experienced current trends towards one global set of accounting standards.

7.2 Summary of the Findings

The correlation coefficients analysis proves that, in the Saudi Arabia market, there is no positive relationship between IFRS adoption and analyst forecast accuracy based on the chosen data sample. The results were statistically insignificant on the 1% and 5% level, as p-values for coefficients were significantly higher than the 5% level and the t-stat, which was 0.56 and below the critical value of 2.33 and 1.96 of the significance level, respectively. Therefore, the study cannot reject the null hypothesis that IFRS adoption has not influenced the accuracy of EPS analyst forecasts and is not statistically different from zero.

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