


THE IMPACT OF INTERNATIONAL FINANCIAL REPORTING STANDARDS ON AGGRESSIVE ACCRUAL: EVIDENCE FROM SAUDI SECURITY EXCHANGE

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ARTICLE INFO	ABSTRACT
<p>Article history:</p> <p>Received 20 February 2023</p> <p>Accepted 04 May 2023</p>	<p>Purpose: This study investigated the impact of international financial reporting standards on aggressive accrual. The distinguishing feature of this research is the study of the recent adoption of international financial reporting standards in one of the most important economies and emerging markets in the world; the Saudi Security Exchange (Tadawul).</p>
<p>Keywords:</p> <p>International Financial Reporting Standards; Aggressive Accruals; Saudi Security Exchange.</p>	<p>Theoretical framework: One important issue that has dominated accounting research for many years is the mandatory IFRS adoption. More specifically, the impact of mandatory IFRS adoption on accounting figures, notably accruals. Most of the studies document mixed effects resulting from IFRS adoption.</p> <p>Design/methodology/methodology: This study focuses on Kingdom of Saudi Arabia's Financial Market due to the recent mandatory adoption of the IFRS by Saudi companies in 2017, using 781 firm-year observations. Our study sample will cover 6 years from 2014-2019, three years before adoption (2014-2015-2016) and three years after adoption (2017-2018-2019).</p>
	<p>Find: The findings of this study were consistent with previous accounting literature. The study shows a decrease in aggressiveness accruals after adopting international financial reporting standards. The study concluded that the companies listed on the Saudi Stock Exchange (Tadawul), especially after the adoption of international financial reporting standards, do not often provide inflated financial reports with distractions that could lead to customers making irrational decisions.</p> <p>Research, practical and social implications: This study put a spotlight on Aggressive Accrual resulting from mandatory IFRS adoption in emerging markets, such as the Kingdom of Saudi Arabia's Financial Market. Therefore, this study provides an exciting opportunity to advance standards setters' knowledge of the quality of financial reporting in emerging markets.</p> <p>Originality/value: This is the first study to use Aggressive Accrual around mandatory IFRS adoption. worth noting that apart from the prior literature, no study was devoted to the aggressive accrual in the Kingdom of Saudi Arabia's Financial Market.</p> <p>Doi: https://doi.org/10.26668/businessreview/2023.v8i5.1736</p>

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O IMPACTO DAS NORMAS INTERNACIONAIS DE RELATÓRIOS FINANCEIROS SOBRE ACCRUAL AGRESSIVO: EVIDÊNCIAS DA BOLSA DE VALORES SAUDITAS

RESUMO

Objetivo: Este estudo investigou o impacto das normas internacionais de contabilidade sobre o regime de competência agressiva. O diferencial desta pesquisa é o estudo da recente adoção das normas internacionais de relato financeiro em uma das mais importantes economias e mercados emergentes do mundo; Bolsa de Valores Saudita (Tadawul).

Referencial teórico: Uma questão importante que tem dominado a pesquisa contábil por muitos anos é a adoção obrigatória das IFRS. Mais especificamente, o impacto da adoção obrigatória do IFRS nos números contábeis, notadamente os acréscimos. A maioria dos estudos documenta efeitos mistos resultantes da adoção do IFRS.

Desenho/metodologia/metodologia: Este estudo enfoca o mercado financeiro do Reino da Arábia Saudita devido à recente adoção obrigatória do IFRS por empresas sauditas em 2017, usando 781 observações ano-firma. Nossa amostra de estudo cobrirá 6 anos de 2014-2019, três anos antes da adoção (2014-2015-2016) e três anos após a adoção (2017-2018-2019).

Descoberta: As descobertas deste estudo foram consistentes com a literatura contábil anterior. O estudo mostra uma diminuição nos accruals de agressividade após a adoção dos padrões internacionais de relatórios financeiros. O estudo concluiu que as empresas listadas na Bolsa de Valores da Arábia Saudita (Tadawul), especialmente após a adoção dos padrões internacionais de relatórios financeiros, não costumam fornecer relatórios financeiros inflacionados com distrações que possam levar os clientes a tomar decisões irracionais.

Pesquisa, implicações práticas e sociais: Este estudo destacou o Accrual Agressivo resultante da adoção obrigatória do IFRS em mercados emergentes, como o Mercado Financeiro do Reino da Arábia Saudita. Portanto, este estudo oferece uma excelente oportunidade para promover o conhecimento dos criadores de padrões sobre a qualidade dos relatórios financeiros em mercados emergentes.

Originalidade/valor: Este é o primeiro estudo a usar o Aggressive Accrual em torno da adoção obrigatória do IFRS. vale a pena notar que, além da literatura anterior, nenhum estudo foi dedicado à acumulação agressiva no mercado financeiro do Reino da Arábia Saudita.

Palavras-chave: Padrões Internacionais de Relatórios Financeiros, Accruals Agressivos, Bolsa de Valores da Arábia Saudita.

EL IMPACTO DE LAS NORMAS INTERNACIONALES DE INFORMACIÓN FINANCIERA EN LA ACUMULACIÓN AGRESIVA: EVIDENCIA DE LA BOLSA DE VALORES DE SAUDÍ

RESUMEN

Propósito: Este estudio investigó el impacto de las normas internacionales de información financiera sobre la acumulación agresiva. El rasgo distintivo de esta investigación es el estudio de la reciente adopción de las normas internacionales de información financiera en una de las economías y mercados emergentes más importantes del mundo; la Bolsa de Valores de Arabia Saudita (Tadawul).

Marco teórico: Un tema importante que ha dominado la investigación contable durante muchos años es la adopción obligatoria de las NIIF. Más concretamente, el impacto de la adopción obligatoria de las NIIF sobre las cifras contables, en particular sobre los devengos. La mayoría de los estudios documentan efectos mixtos resultantes de la adopción de las NIIF.

Diseño/metodología/metodología: este estudio se centra en el mercado financiero del Reino de Arabia Saudita debido a la reciente adopción obligatoria de las NIIF por parte de las empresas saudíes en 2017, utilizando 781 observaciones de años firmes. Nuestra muestra de estudio cubrirá 6 años desde 2014-2019, tres años antes de la adopción (2014-2015-2016) y tres años después de la adopción (2017-2018-2019).

Encontrar: Los hallazgos de este estudio fueron consistentes con la literatura contable anterior. El estudio muestra una disminución en las acumulaciones de agresividad después de adoptar los estándares internacionales de información financiera. El estudio concluyó que las empresas que cotizan en la Bolsa de Valores de Arabia Saudita (Tadawul), especialmente después de la adopción de los estándares internacionales de información financiera, no suelen proporcionar informes financieros inflados con distracciones que podrían llevar a los clientes a tomar decisiones irracionales.

Implicaciones sociales, prácticas y de investigación: este estudio puso de relieve la acumulación agresiva resultante de la adopción obligatoria de las NIIF en los mercados emergentes, como el mercado financiero del Reino de Arabia Saudita. Por lo tanto, este estudio brinda una excelente oportunidad para avanzar en el conocimiento de los emisores de estándares sobre la calidad de la información financiera en los mercados emergentes.

Originalidad/valor: Este es el primer estudio que utiliza la acumulación agresiva en torno a la adopción obligatoria de las NIIF. Vale la pena señalar que, aparte de la literatura anterior, no se dedicó ningún estudio a la acumulación agresiva en el mercado financiero del Reino de Arabia Saudita.

Palabras clave: Normas Internacionales de Información Financiera, Acumulaciones Agresivas, Bolsa de Valores de Arabia Saudita.

INTRODUCTION

This study examines whether aggressive earnings would decrease after adopting international financial reporting standards (hereafter IFRS), compared to local accounting standards that existed before adopting international financial reporting standards. The motivation for this study stems from the widespread interest in adopting one accounting standards around the world, with more than 140 countries having adopted, or in the process of adopting, international financial reporting standards. More specifically, the Kingdom of Saudi Arabia required its listed companies to adopt IFRS as of 2017. The process of adopting IFRS has received many discussions and studies. However, the large number of these studies did not resolve the matter regarding the impact and consequences of these standards in different environments, as IFRS are not the only factor that constitutes the financial report. It is not clear how the mandatory application of IFRS in Saudi Arabia would affect financial reports and, in particular, the characteristics of accounting earnings: this is referred to as aggressive accruals in this context. On the one hand, the mandatory adoption of IFRS may reduce aggressive accrual by increasing the level of conservatism in financial reporting (see Andre et al., 2015). On the other hand, (Ahmed et al., 2013) study show that financial reporting standards increase accruals aggressiveness. This difference in the impact of IFRS is attributed to the assumption of "one size fits all" on which international accounting standards are based. This assumption led to the application of IFRS unevenly across countries and companies. For example, accounting literature has found that financial reporting standards can reduce manipulation because they are based on accounting principles (Atwood et al., 2011). The study of (Andre et al., 2015) explain that IFRS reduced the level of conservatism. In this context, the study of (Ahmed et al., 2013) concluded that financial reporting standards increase earnings aggressiveness. To implement this study, the study of (Ahmed et al., 2013) was followed by employing a logistic regression model to capture aggressive accrual. The study sample includes 781 observations of Saudi companies listed on the Saudi Stock Exchange (Tadawul), which have adopted IFRS for the period 2014-2019. This was done by identifying three years after adoption (2017, 2018, 2019) and three years before adoption (2014, 2015, 2016). The findings of the study show that

aggressive earnings of Saudi companies have decreased after adopting IFRS more than they were before adopting them, where the local accounting system was prevailed. When conducting an additional analysis related to managing earnings around zero, the same result was obtained, as the aggressive earnings decreased for Saudi companies that mandatory adopted IFRS.

While many countries, especially countries with emerging economies such as K.S.A., are moving towards adopting international financial reporting standards, there is still debate as to whether this adoption has an impact on the accounting numbers that are disclosed, representing what they should represent without manipulation. Meaning that the accounting figures embody economic events and transactions as they are. The adoption of international financial reporting standards requires the transformation of the prevailing local accounting system before the adoption of IFRS into a global accounting system that is IFRS. This transformation will effects on financial reporting in terms of the standards orientation to serve investors in the financial market in particular. Therefore, the financial reports prepared according to IFRS have become more optimistic. This optimism leads to optimistic earnings management, that is, companies tend to aggressive (inflate) their profits, in this case companies work to make their profits aggressive. Consequently, this transformation entails a possible change in the accounting numbers, and in particular the accounting profit management. Therefore, this study attempts highlight on the effect of adopting international financial reporting standards on aggressive earnings in one of the most important emerging economies in the world, which is the Saudi market that adopted IFRS in 2017. Therefore, the study problem can be formulated in the following question:

Are aggressive earnings decrease after adopting international financial reporting standards compared to local accounting standards?

Several previous studies have examined the impact of adopting international financial reporting standards on earnings management. And where those studies were conducted in developed and developing countries. But our study aimed to explore the effect of IFRS on earnings management in K.S.A. It is one of the most important emerging markets in the world. In more detail, we study the effect of IFRS on the aggressive earnings of listed Saudi companies. The researchers hope that this study will contribute to adding knowledge and benefit to future researchers. The importance of the study lies in the following:

- 1- This study is useful for standards setters and regulators, especially when studying the decisions of change in the accounting regulation.

2- From a practical point of view, this study is considered useful to investors who are primarily concerned with the profit figure and its absence from manipulation and aggressive.

This study was divided into sections: The first section discusses the introduction. Section two presents background of Kingdom of Saudi Arabia. Section three reviews the previous accounting literature. Section four presents the validation of the hypotheses. Section five describes the Practical part. Finally, presents the conclusions of the study.

The Kingdom of Saudi Arabia was established in 1932, with a population of thirty-five million and an area of 2,149,690 square kilometers. The Kingdom of Saudi Arabia is one of the economically important countries, as it is a member of the Group of Twenty of the largest economies in the world. It is also the largest oil exporter in the world and the most important member of the Organization of Petroleum Exporting Countries (OPEC). The gross domestic product is 833541236.57 billion US dollars for the year 2021, as the per capita of GDP reached 23185.90 us dollars (World Bank, 2023).

As a profession, accounting has developed in Saudi Arabia with the government intervention through issuing regulations governing accounting work as follows: 1) In 1931, the commercial system was issued, which included some bookkeeping provisions. 2) In 1965, the Companies Law was issued, which obligated them to prepare financial statements and have them audited by a licensed external auditor. 3) In 1975, the Chartered Accountants Regulation was issued, which regulated the accounting profession in the country. 4) In 1991, the Ministry of Commerce issued Decree No.12, which determined the Saudi Organization for Certified Public Accountants to develop the accounting profession. Concerning the prevailing of accounting system in Saudi Arabia, since 2017, Saudi companies have adopted international financial reporting standards. Still, before that date, Saudi companies were preparing their financial statements in accordance with the Saudi standards issued by the Saudi Organization for Certified Public Accountants.

LITERATURE REVIEW

The first stream of accounting studies focused on earnings aggressiveness as a component of earnings opacity, in addition to other components like income smoothing and loss avoidance. These studies have tried to establish a measure of the earnings opacity of companies listed in the financial markets, whether at the level of one country or at the level of a number of countries. For example, (Bhattacharya et al., 2003) examine the relationship

between factors affecting financial reporting quality and earnings uncertainty. The effect of earnings uncertainty on the cost of equity and trading volume was tested in 34 countries for the period 1985-1998, using a sample of 58,653 observations. The study shows a negative relationship between the number of auditors and each of earnings aggressiveness and loss avoidance. In contrast, the relationship is positive between the number of auditors and earnings smoothing. It also found a negative relationship between accounting standards and earnings aggressiveness and loss avoidance, while the relationship is positive between accounting standards and earnings smoothing. The study concluded that there is a positive effect of earnings opacity on the cost of equity and a negative effect of earnings opacity on the volume of trading in the stock market. In line with this, (Picur, 2004) examine the quality of disclosure, earnings opacity, and corruption. The authors indicated a positive effect between the earnings opacity and the level of corruption. That is, the greater the earnings opacity, the higher the incidence of corruption. In other words, politicians and corporations may take advantage of a lack of quality accounting knowledge to serve their own interests. These findings were similar to those reported by (Belkaoui & Alnajjar, 2006) in their paper entitled "*Earnings opacity internationally and elements of social, economic and accounting order*". The study aimed to identify and test the determinants of earnings opacity at the international level. The study identified these determinants with the elements of the social, economic, and accounting systems in each of the 34 countries of the study. The study found that earnings opacity at the international level decreases with increasing economic freedom. In other words, countries characterized by great economic freedom are characterized by a strict legal system at the country level, in which the board of directors and the general assembly hold managers accountable for performance that is not favorable to what is desirable at the corporate level. Therefore, managers could face penalties like being replaced by other managers or investors investing their money in companies that are less prone to distorting earnings; this prompts managers to reduce the earnings opacity. (Hejazi & Rahmani, 2011) also examine the effect of economic growth and economic freedom on earnings opacity. Using a sample of 3306 observations of companies listed on the Tehran Stock Exchange for the period 1998-2007, they found that economic growth positively affected earnings opacity, while economic freedom did not affect earnings opacity. (Boulton et al., 2011) determined the quality of earnings by using measures of 1) income smoothing, 2) earnings aggressiveness, and 3) loss avoidance. This contrasts the above studies in considering the three indicators as earnings quality measures, not earnings opacity (by avoiding not multiplying the results of the three measures by -1). The study

was conducted on a sample of 10,783 IPO events from 37 countries. The researchers found that the IPO for companies is lower in countries where the quality of accounting information is high.

The second stream of the literature review focuses on earnings management, considering aggressive earnings as only one form of earnings management. In this context, (Shen & Chih, 2007) study earnings management and its impact on corporate governance. Earnings management was evaluated by 1) earnings aggressiveness and 2) Income smoothing using a sample of 204 companies in the Asian markets. The researchers found an inverse relationship between good company management and aggressive earnings (as a representative of earnings management). This finding was reinforced by the study of (Hardiningsih et al., 2019), which aimed to study the effect of earnings and tax aggressiveness using corporate governance as a mediating variable. The study was conducted on a sample of 68 Indonesian companies listed on the Indonesia Stock Exchange for the period 2015-2017. Two measures were used to estimate earnings consistency: the first is the persistence of earnings based on net profit before ordinary items, and the second is the quality of accrual. As for the earnings aggressiveness, it was measured through the total accrual, while the tax aggressiveness was measured by the book tax differences: which is the difference between the accounting and taxable earnings, where the greater the difference, the greater the level of tax evasion. The study concluded that both earnings and tax aggressiveness negatively impact the persistence of earnings. (Hermawan et al., 2021) studied the effect of earnings aggressiveness and persistence on the cost of equity using a sample of 28 companies listed on the Indonesia Stock Exchange for 2014-2018. The results of the study indicated that earnings aggressiveness had a positive effect on the cost of equity. This indicates an increase in benefits and a decrease in costs. As a result, the current year's earnings are relatively high, which the management uses as a positive sign of the growth of current profits, as reflected in the dividends, which provide a measure of the cost of equity. Thus, the earnings growth will impact the increase in the cost of equity; that is, the accruals create aggressiveness in earnings and will positively impact the cost of equity. The study also found that earnings persistence weakens the relationship between earnings aggressiveness and the cost of equity. Meanwhile, (Scholtens & Kang, 2013) found an inverse relationship between earnings management, social responsibility, and investor protection. This implies that companies that do better in terms of social responsibility engage less in earnings management and that earnings management occurs less in countries where investors enjoy greater protection by the country's legal system. (Mohamed et al., 2011) discovered that the independence and diversity of the board of directors had an impact on earnings management.

This result was confirmed by a study's (Diem & Hiep, 2023). The study of (Chih et al., 2008) revealed a direct relationship between earnings aggressiveness and corporate social responsibility. However, By using data from Tunisia and Iraq Stock Exchanges, (Flayyih & khiari, 2022) document, on average, the firms tend to follow different earnings management patterns.

The third stream of accounting literature studied aggressive reports without considering it as a proxy for another variable. (Yang & Abeyesdera, 2019) study the effect of stock valuation on aggressive earnings disclosure. That is, the study investigated whether the duration of overvaluation of stocks influences the choice of managers to use earnings management on an accrual basis and aggressive disclosure of basic earnings. It also examine whether corporate governance influences managers' choice of different earnings management mechanisms. The study was conducted on a sample of 200 Australian companies from 2009-2016. Earnings management was measured on an accrual basis through discretionary accruals. As for the overvaluation of shares, it was measured by the ratio of share price to book value. The study showed that in the early stage of overvaluation, managers use earnings management on an accrual basis. In the later stage, when earnings management options are implemented on an accrual basis, managers resort to aggressive disclosure of basic earnings in order to maintain overvaluation. The study also concluded that companies with a high percentage of independent directors on the board do not choose to manage earnings on an accrual basis to maintain overvaluation but prefer aggressive disclosure of basic earnings in the later stage of overvaluation. Companies with a low percentage of independent directors use both mechanisms to keep valuations. In the study entitled "*The Relation between Aggressive Financial Reporting and Aggressive Tax Reporting: Evidence from Ex-Arthur Andersen Clients*", (Heltzer et al., 2012) examine the trade-off that managers face due to conflicting incentives to reporting a high book profit in the financial statements while simultaneously reporting for a low taxable profit. This study examined 1123 observations of clients of Arthur Andersen Company, which has been proven to adopt aggressive financial reports for companies dealing with them in the US environment after being audited for the period 1996-2000. Aggressive tax reporting was measured using three metrics: estimated tax (the unexplained portion of permanent tax variances), the book tax rate, and the cash tax rate. The study concluded that companies that submit aggressive financial reports do not necessarily affect their tax reports.

The last stream of accounting literature deals with aggressive earnings without being considered another proxy indicator. (Khaddaf et al., 2014) tested the effect of earnings

aggressiveness and income smoothing on earnings per share using a sample of 32 companies listed on the Indonesia Stock Exchange for the period 2007-2011. The study concluded that both profit aggressiveness and profit smoothing have a significant effect on trading volume (as there is a negative and important effect on trading volume), while there is a positive and significant effect of earnings aggressiveness on trading volume. The persistence of earnings strengthens the effect of earnings aggressiveness and earnings smoothing on the activity of trading volume. In a study of 209 Indonesian companies, (Sunarto et al., 2016) observed the effect of earnings aggressiveness, income smoothing, and profit transparency on the cost of equity, with the use of profit information as a mediating variable for companies listed on the Indonesia Stock Exchange during the period 2011-2013. The study concluded that the aggressiveness of profits and the smoothing of income positively affect the cost of equity. On the other hand, (Ahmed et al., 2013) test the impact of IFRS on accounting quality. The study was conducted on a reference (control) and a main samples. The control sample was 1631 from 15 countries that do not adopt IFRS, and the main sample was 1631 from 20 countries that adopt IFRS. The study found a significant increase in aggressive accruals reporting among companies adopting international financial reporting standards.

DEVELOPMENT OF STUDY HYPOTHESIS

Our concept of aggressive earnings is the same as (Bhattacharya et al., 2003) expressed: conveying loss news (bad news) to users, particularly market participants, contains noise. However, this noise will be greater in the event of sending positive profits in an exaggerated manner, because the exaggeration of profits is linked to the optimism of management, i.e., the motives of management in order to harness the aggressive (optimistic) accounting numbers to maximize their personal interests (returns). When comparing withholding bad news from market participants with exaggerating profits in an optimistic manner, it turned out that optimistic profits are more dangerous to the decisions of market participants because of the loud noise they contain.

For Saudi companies, IFRS is expected to lead to aggressive earnings growth. IFRS are more optimistic than the local standards, as the accounting literature indicated that they, IFRS, have improved the transparency of financial reports (Barth et al., 2013), compared the financial reports (Young and Yip, 2012), increased the quality of financial reports (Ahmed et al., 2013; Barth et al., 2008), improved the accounting information environment for financial analysts (Landsman et al., 2012), reduce the cost of capital (Li, 2011), and improved earnings

predictability (Atwood et al., 2011). However, the mandatory adoption of IFRS was late (in 2007) compared to countries that adopted it 20 years ago (such as the countries of the European Union). On the other hand, few studies focus on the impact of adopting IFRS in the financial reports of Saudi companies. This leads to the fact that the impact of IFRS on the Saudi Stock Exchange is an inconclusive issue. Finally, whether or not earnings are aggressive after the mandatory adoption of IFRS by Saudi companies is an empirical issue.

Therefore, the current study hypothesis is proposed:

Main hypothesis: that there is a decrease in the level of aggressive accrual after the mandatory adoption of IFRS by Saudi companies.

MATERIALS AND METHODOLOGY

The Study Sample

This study focuses on the Saudi Stock Exchange (Tadawul) due to the recent mandatory adoption of the IFRS by Saudi companies in 2017. Therefore, our study sample will cover 6 years from 2014-2019, three years before adoption (2014-2015-2016) and three years after adoption (2017-2018-2019). Companies operating in the financial sector have been excluded due to the specificity of the laws governing their work, as well as the differentiation of the accounting system and its outputs from those operating outside this sector. Companies providing their data after 2017 (i.e., those included after adoption), such as Aramco, were also excluded. The final study sample consisted of 781 firm-year observations.

The Study Model

In order to measure aggressive earnings, the study of Ahmed et al. (2013) was followed by measuring aggressive earnings through the regression model (OLS) shown in equation (1). This included accrual as a dependent variable, which is calculated by the difference between each of the changes in total current assets, change in cash, change in total current liabilities, change in short-term debt, change in taxes due and depreciation, and the division of the total assets for the previous year divided by the total assets for the previous year. As for the independent variable, it is the IFRS, which is a dummy variable that takes a value of 1 if the observation occurred in the years 2017-2018-2019; otherwise, it takes a value of 0 based on the period in which the observation occurred for the company under investigation.

In addition to the dependent and independent variables, the model included control variables to control the characteristics of the company that could affect the results of the

analysis, such as: 1) The difference between the change in revenue and the change in debtors divided by the total assets for the previous year, 2) Properties, plant, and equipment (PPE) divided by the total assets for the previous year. Growth, whether linked to the company's value, was also controlled by adding the book value ratio to the market value (BTM), or by the company's operating growth related to sales. The properties of the sectors were also controlled by adding the fixed effect of the sector (fixed effect). In order to discover the effect of mandatory IFRS on aggressive accrual, the regression coefficient α_1 was examined. A positive and statistically significant α_1 is interpreted as an indicator of an increase in the managers' estimates regarding earnings, but if the coefficient is negative and statistically significant, this indicates a decrease in the discretionary authority of managers regarding earnings.

$$ACC_{it} = \alpha_0 + \alpha_1 POST_{it} + \alpha_2 (change\ REV - change\ REC)_{it} + \alpha_3 PPE + \alpha_4 \left(\frac{1}{assets}\right)_{it} + \alpha_4 BTM_{it} + \alpha_5 Growth_{it} + \alpha_6 Eissue_{it} + \alpha_7 LEV_{it} + \alpha_8 Dissue_{it} + \alpha_9 TURN_{it} + \alpha_{10} SIZE_{it} + \alpha_{11} CF_{it} + \alpha_{12} INDUSTRY\ FE_{it} + \varepsilon_{it} \dots \dots \dots (1)$$

Where:

ACC_{it} : The total accrual of the company (i) in period (t) resulting from the change in total current assets minus the change in cash - the change in total current liabilities - the change in short-term debt - the change in payable taxes - depreciation divided by the total assets for the previous year.

$POST_{it}$: Takes a value of 1 when it occurs in the years 2017-2018-2019 and a value of 0 otherwise.

$Growth_{it}$: Growth in sales

$Dissue_{it}$: Change in the common stock of company (i) in period (t).

LEV_{it} : The financial leverage of the company (i) in the period (t).

$Dissue_{it}$: The change in the total liabilities of the company (i) in the period (t).

$TURN_{it}$: The asset turnover rate of the company (i) in the period (t).

$SIZE_{it}$: The natural logarithm of the total assets of the company (i) in the period (t).

CF_{it} : The operating cash flow of the company (i) in period (t) divided by the total assets of the previous year.

$(change\ REV - change\ REC)_{it}$: The change in revenue - the change in the accounts receivable of the company (i) in the period (t).

PPE : The total property, plant, and equipment divided by the total assets of the company (i) in the period (t) divided by the total assets of the previous year.

BTM : The book value to the market value of the shares of the company (i) in the period (t).

ε_{it} : The random variable of the regression model.

RESULTS AND DISCUSSION

Descriptive statistics of data

Table (1) presents the descriptive statistics of the study variables for the period from 2014-2019 for companies listed on the Saudi Stock Exchange (Tadawul).

Table (1) Descriptive statistics of variables

Variables	Obs.	Mean	Std. Dev	Max	Min
SPOS	781	0.089	0.285	1	0
POST	781	0.514	0.500	1	0
ACCT	781	-0.047	0.202	0.444	-5.240
Growth	781	-1.492	34.131	1	-944.491
LEV	781	0.075	0.085	0.629	0
Dissue	781	-0.125	3.600	0.922	-100.164
Eissue	781	-1.211	31.725	0.974	-886.956
Turn	781	0.552	0.503	4.465	0.000
Size	781	14.630	1.568	19.988	9.856
CF	781	0.055	0.061	0.295	-0.253
Rev-Rec	781	-0.001	0.154	1.286	-3.077
PPE	781	0.285	0.165	0.853	0.000
1/total assets	781	1.180	2.590	0.000	0.000
BTM	781	2.410	4.827	85.899	0

Source: Prepared by the authors (2023)

The descriptive statistics of the study variables demonstrate that the average frequency of small positive earnings as dependent variable measures the level of earnings management practice of about (0.089) with a standard deviation greater than the average (0.285). This indicates the dispersion of the sample in the practice of earnings management. The average of the discretionary accruals as a dependent variable that measures the level of earnings management practice was (-0.047), with a standard deviation greater than the average (0.202). This indicates the dispersion of the sample in the practice of earnings management. The results of descriptive statistics also indicate that the average adoption IFRS was (0.514), with a standard deviation less than the average (0.500), implying that the sample of companies applies IFRS in a similar manner. On the other hand, the average growth was (-1.492), with a standard deviation greater than the average (34.131), indicating that the sample was dispersed, and this is considered normal in a financial market that includes companies of different sizes. The average leverage was (0.075) with a standard deviation greater than the average (0.085), indicating that the sample items are dispersed in the financial leverage. This is considered normal in a financial market that includes companies of different sizes. The average change in total liabilities was (-0.125), with a standard deviation greater than the average (3.600), indicating that the sample items are dispersed in total liabilities. This is considered normal in a financial market that includes companies of different sizes. The average change in ordinary shares was (-1.211), with a standard deviation greater than the average (31.725), indicating that the sample items dispersed in ordinary shares are considered normal in a financial market that includes companies of different sizes. The average asset turnover was (0.552), with a standard deviation less than the average (0.503), indicating a high asset turnover rate for all companies. The average size of the companies was (14.630) with a standard deviation less than the average

(1.568), which indicates an increase in the size of the market value of all companies. The average operating cash flow was (0.055), with a standard deviation greater than the average (0.061), indicating that the sample items are dispersed in the operating cash flow, and this is considered normal in a financial market that includes companies of different sizes. The average change in revenues minus the change in accounts receivable was (-0.001), with a standard deviation greater than the average (0.154), indicating the dispersion of the sample items in the change in revenues minus the change in accounts receivable. This is considered normal in a financial market that includes companies of different sizes. The average of the total property, plant, and equipment was (0.285), with a standard deviation less than the average (0.165), indicating an increase in the total property, plant and equipment in all companies. The average book to the market value was (2.410), with a standard deviation greater than the average (4.827), which indicates that the dispersion of the sample items in the book value of the shares to the market value is considered normal in a financial market that includes companies of different sizes. The average of the total assets was (1.180), with a standard deviation greater than the average (2.590), indicating that the sample items are dispersed in the total assets. This is considered normal in a financial market that includes companies of different sizes.

Correlation Test

Table (2) The results of the correlation among the variables

Variable	SPOS	POST	Growth	LEV	Dissue	Eissue	Turn	Size	CF	ACCT	REV_ REC	PPE	1/total assets	BTM
SPOS														
POST	0.036													
Growth	0.014	0.0384												
LEV	0.0043	0.038	0.0303											
Dissue	0.0163	-0.037	0.0484	0.037										
Eissue	-0.1135	-0.0373	-0.0014	0.024	-0.008									
Turn	-0.1008	-0.092	0.048	0.475	0.0374	0.0362								
Size	0.1052	-0.0075	0.0726	-0.044	0.024	-0.07	-0.168							
CF	-0.1763	-0.2136	0.0515	0.0223	0.0363	0.0237	0.2863	0.1236						
ACCT	0.0324	-0.0343	-0.0073	0.0354	-0.0242	0.007	-0.007	0.0962	-0.063					
REV_ REC	-0.0002	-0.003	0.7164	0.1022	0.115	-0.0005	0.269	-0.0004	0.0872	-0.197				
PPE	0.0213	-0.0151	0.068	-0.189	0.0643	0.042	-0.1465	0.1745	0.193	-0.021	0.0452			
1/total assets	-0.0018	0.023	-0.0962	0.0082	-0.0062	0.0083	0.0604	-0.5456	-0.2271	-0.656	0.1245	-0.09		
BTM	0.1034	-0.0575	-0.005	0.0940	0.016	-0.099	0.081	-0.1536	0.0102	-0.09	0.056	0.04	0.2923	

Source: Prepared by the authors (2023)

Table (2) demonstrates the Pearson correlation matrix between the variables included in the statistical hypothesis test models to identify the nature of the relationship between the independent and the dependent variables. It becomes evident to the researcher that there is a

positive relationship among the variables: Post, Growth, Leverage, Dissue it is the change in the total liabilities of the firm, Size, PPE is the total property, plant, and equipment divided by the total assets of the firm, and BTM is the book value to the market value of the shares of the firm with aggressive accrual. This indicates that companies after adopting IFRS and companies that have high levels of growth, change in liabilities, financial leverage, volume, property, plant, and equipment, have high aggressive accrual. The results reveal a negative relationship between aggressive accrual and each of the variables Eissue is the change in the common stock of firm, Turn it is the asset turnover rate of the company, cf it is the operating cash flow of the firm, REV- REC it is the change in revenue – the change in the accounts receivable of the firm, and 1/assets. This implies that companies with high levels of volatility in the issuance of shares, asset turnover, and high revenues have low aggressive accrual.

Testing the hypothesis of the study

Table (3) The impact of international financial reporting standards on aggressive accruals

Variable	Coefficients	t-statistic
Intercept	0.794***	11.85
POST	-0.0227*	(-2.46)
REV_REC	-0.135**	(-2.83)
PPE	-0.0404	(-1.08)
1/ total assets	-75026.0***	(-31.99)
BTM	0.00598***	5.77
GROWTH	0.0000548	0.27
Eissue	0.0000531	0.37
LEV	-0.339***	(-4.68)
Dissue	-0.000306	(-0.24)
Turn	0.0612***	4.62
Size	-0.0462***	(-11.83)
CF	-0.979***	(-11.24)
IND_FE	Yes	
R2	0.6362	
adjusted R2	0.6221	
N	781	

Source: Prepared by the authors (2023)

Table (3) shows the application of IFRS. The presence of control variables explains a very large percentage of the change in the level of earnings management practices, as the value of R2 reached (0.6362). The results also indicate a negative relationship between the international financial reporting standards variable 'post' and aggressive accrual, as the post coefficient was (-0.0227), which means that the application of financial reporting standards has reduced the aggressive accrual. This relationship is statistically significant because the p-value of the IFRS post variable (0.014) is less than the significance level of (0.05). The results of the

regression model indicate that each of the variables: REV_REC it is the change in revenue – the change in the accounts receivable of the firm, 1/total assets, the leverage, size, and Cf it is the operating cash flow of the firm have a negative relationship with aggressive accruals. This relationship is statistically significant because the p-value of these variables (0.005, 0.000, 0.000, 0.000, 0.000) is less than the significance level of (0.05). The results of the regression model indicate that each of the PPE variables is the total property, plant, and equipment divided by the total assets of the firm and the Dissue variable it is the change in the total liabilities of the firm have a negative relationship with aggressive accruals. This relationship is statistically insignificant because the p-value of these variables (0.282, 0.808) is greater than the significance level (0.05). The results of the regression model indicate that each of the BTM variables is the book value to the market value of the shares of the firm and the Turn variable it is the asset turnover rate of the firm have a positive relationship with aggressive accruals. This relationship is statistically significant because the p-value of these variables (0.000, 0.000) is less than the significance level (0.05). The results of the regression model indicate that each of the Growth variables and Eissue variable is the change in the common stock of firm have a positive relationship with aggressive accruals. This relationship is statistically insignificant because the p-value of these variables (0.788, 0.713) is greater than the significance level (0.05).

Additional Analysis

The regression model was applied to examine the impact of IFRS on loss avoidance in order to verify the results. The frequency of small positive earnings rate (SPOS) was used to measure loss avoidance as one of the earnings management indicators, which takes the value of (1) if the net profit to total assets is between 0 and 0.01 and takes the value of (zero) otherwise (Sun et al., 2011; Lang et al., 2003; Lang et al., 2006).

The idea of this measure is that the administration would prefer to report small positive earnings rather than low earnings and; therefore, this will be involved in earnings management actions in order to achieve or beat the target earning level (Marra et al., 2011). In other words, earnings management is done to prevent earnings from declining. Earnings management is measured by the frequency of small positive earnings, where abnormally low frequencies of small earnings decline, and abnormally high frequencies of small positive earnings indicate that reported earnings are managed to avoid losses (Burgstahler & Dichev, 1997). The managers have motives to avoid the loss, as they use their discretion in preparing the financial statements, and; therefore, they are unable to report profits in the presence of large losses, i.e., the small

losses are within their estimates. The ratio of small reported earnings to small reported losses reflects the extent to which earnings are managed by managers to avoid reporting losses (Leuz et al., 2003). For the purpose of measuring earnings management to avoid loss, the following studies will be followed: (Burgstahler & Dichev, 1997; Barth et al., 2008; Leuz et al., 2003; Sun et al., 2011; Marra et al., 2011).

$$SPOS_{it} = \alpha_0 + \alpha_1 POST_{it} + \alpha_2 Growth_{it} + \alpha_3 Eissue + \alpha_4 LEV_{it} + \alpha_5 Dissue_{it} + \alpha_6 TURN_{it} + \alpha_7 SIZE_{it} + \alpha_8 CF_{it} + \alpha_9 INDUSTRY FE_{it} + \varepsilon_{it} \dots \dots \dots (2)$$

SPOS_{it}: The frequency of small positive earnings for company (i) in period (t) as a measure of the level of earnings management.

All other variables were previously explained in Table (1).

Table (4) The impact of international financial reporting standards on profit management around zero

Variables	Coefficients	t-statistic
POST	-0.00604	(-0.29)
GROWTH	0.000178	0.6
Eissue	-0.000829**	(-2.59)
Dissue	0.00125	0.45
levdebtasset	0.244	1.53
Turn	-0.0526	(-1.93)
Size	0.0245**	3.3
CF	-0.757***	(-4.04)
_cons	-0.237	(-1.82)
Industry- FE	Yes	
R2	0.0926	
Adjusted R2	0.0626	
N	781	

Source: Prepared by the authors (2023)

It is clear from the above table that the application of IFRS in the presence of control variables explains a very large percentage of the change in the level of earnings management practices, as the value of R2 was (0.0926). The results also indicate that there is a negative relationship between IFRS (POST) and the frequency of small positive earnings rate (SPOS), where the coefficient (α_1) is (-0.00604). This means that the application of IFRS has reduced the attempt to report small positive earnings. However, this relationship is statistically insignificant because the p-value of the IFRS variable (POST) is (0.768), which is greater than the significance level (0.05), meaning that there is no effect of international financial reporting standards on preventing the administration's attempt to report small positive earnings. The

results of the regression model also indicate that the growth and change in total liabilities and financial leverage have a positive relationship with the frequency of small positive earnings. Still, these relationships are statistically insignificant because the p-values of these variables are: (0.546), (0.546), (0.651), and (0.126), which are greater than the level of significance (0.05).

Moreover, it was found that each of the changes in ordinary shares and operating cash flow have a negative relationship with the frequency of small positive earnings rate, and these relationships are statistically significant because the value of p-value sig for these variables (0.010) and (0.000) are less than the significance level (0.05). So, there is a negative effect of the change in ordinary shares as well as the operating cash flow on the frequency of small positive earnings rate. It is also clear that the asset turnover rate has a negative relationship with the frequency of small positive earnings rate, but these relationships are statistically insignificant because the p-value of this variable is (0.055), which is greater than the level of significance (0.05). The size variable appears to have a positive relationship with the frequency of small positive earnings. This relationship is statistically significant because the p-value of this variable is (0.001), which is less than the significance level (0.05). That is, there is a positive effect of the size on the frequency of small positive earnings.

CONCLUSION

This study investigate the impact of the mandatory adoption of IFRS on the aggressive accrual of companies listed on the Saudi Stock Exchange (Tadawul). A sample of 781 observations was used, and the regression model was applied to determine the change in the aggressive accrual between the period of mandatory adoption of financial reporting standards (years 2017, 2018, 2019) and the period before adoption, i.e., that period in which local accounting standards prevailed (years 2016, 2015, 2014). This study find that aggressive accrual in Saudi companies decreases after adopting international financial reporting standards, which means that managers' estimations regarding financial reports decrease due to the impact of the new accounting system (i.e.IFRS). In the additional analysis, positive earnings around zero were employed, and their impact on the mandatory adoption of IFRS was addressed. The findings of this study revealed that IFRS had no impact on earnings management around zero.

This research is not devoid of limitations, as the study stopped in 2019 due to the Corona pandemic, and the lockdowns that accompanied the pandemic period have affected the work of

companies; therefore, the financial reports no longer reflect their actual operational performance. In order to rely on undistorted data, our study stopped at the year 2019.

Future work will examine the long-term effects of adopting IFRS through the use of long time series data, as well as study the impact of the mental attitudes of accountants, which are shaped by the environment in which they work on earnings management.

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