# THE IMPACT OF MANDATORY ADOPTION OF INTERNATIONAL ACCOUNTING STANDARDS (IAS/IFRS) ON THE RELATIONSHIP BETWEEN ACCOUNTING ESTIMATES AND CASH FLOWS: AN EMPIRICAL STUDY

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***Abstract***
*This paper aims to investigate the impact of the mandatory application of international accounting and financial reporting standards (IAS/IFRS) on the relationship between accounting estimates and future cash flows of Iraqi banks, the research sample listed on the Iraq Stock Exchange. The research sample included a large number of commercial banks listed on the Iraq Stock Exchange, including (18) banks for a ten-year time series from 2011 to 2020. The problem and hypotheses of the research focused on whether there was a discrepancy in the levels of accounting estimates and future cash flows for Iraqi banks. The research sample and whether the relationship between accounting estimates and future cash flows has improved in the period after the mandatory application of international financial accounting and reporting standards. The results show that there is a clear and large discrepancy in the difference between the current and future cash flows and the levels of accounting estimates during the research period as a whole and for the period before and after the mandatory application of international accounting and financial reporting standards. Importantly, the research results indicated that the predictive and explanatory power of accounting estimates has increased significantly after the application of international accounting standards in predicting future cash flows from the operational activities of Iraqi banks, the research sample. Accordingly, this may give a higher ability to managers in banks to make decisions more wisely and correctly in light of future expectations related to cash flows from their operational activities. The adoption of international accounting and financial reporting standards (IAS / IFRS) in the Iraqi environment will keep pace with the development taking place in the world, and therefore it is necessary to urge the regulatory authorities in Iraq to the compulsory application of accounting standards and international financial reporting at the level of various business sectors in Iraq Because of the great advantages that the standards enjoy, they will contribute effectively to increasing the quality of reports and financial statements and increasing the quality of accounting work as a whole, which is reflected importantly and positively on the level of the general economy of the country.*

***Keywords***: *IFRS, IAS, accounting estimate, cash flows, accounting standards.*

## 1. INTRODUCTION

In the last three decades, interest in international financial reporting and accounting standards (IAS/IFRS) has increased due to the urgent need for standards that serve as the unified language between economic units and the basis for recognizing, measuring, and disclosing operations in the global business world. Numerous developed and even third-world nations have made significant progress in implementing international financial accounting and reporting standards. The application of these standards has had significantly favorable effects on a variety of companies-, economy-, and financial-market levels in the country of application and on global markets. And in light of the sounds and efforts of economic and financial reform that the state seeks, the Central Bank of Iraq has directed all commercial banks operating in Iraq to apply international accounting and financial reporting standards beginning in the fiscal year 2016 as a first step, provided that the application of standards and all sectors are required shortly to keep up with global developments and increase efforts to open up to the global market. The application of international accounting and financial reporting standards has a significant and fundamental impact on the nature and quality of accounting information provided by companies through their reports and financial statements. Several prior studies indicate that the adoption of international accounting and financial reporting standards led to some managers exercising their discretion in financial reporting about their performance and financial position in a high-quality manner to reflect their estimated expectations, thereby enhancing the planning relationship between accounting estimates and future operating cash flows. Consequently, the purpose of this study was to cast light on an important topic, namely the effect of the mandatory application of international accounting and financial reporting standards on the predictive power of accounting estimates and their ability to predict future cash flows. In this study, we presume that the relationship between accounting estimates and prospective cash flows has strengthened and improved since the implementation of accounting and international financial reporting standards for the sample of Iraqi banks. Although all accounting estimates entail some management estimates and judgments, not all accounting estimates are necessarily equally useful for forecasting future cash flows. It is also expected, to a large extent, that the accounting judgments and estimates that managers make for repeated accounting estimates, some of which improve over time as a result of the experience they gain as a result of conducting this type of estimates similarly over and over again over time, which leads to drawing a stronger relationship for estimates, will improve over time as a result of the experience they gain from conducting this type of estimates similarly over and over again over time. Current period with future cash flow projections. On this basis, managers can forecast future cash flows using accounting estimates for the current period, assuming that any improvement in the strength of the relationship between current accounting estimates and future cash flows as a result of adopting (IAS/IFRS) standards will most likely occur through the "information" component of accounting estimates. On the other hand, it is not entirely evident how the application of (IAS/IFRS) standards will affect certain categories of frequent accounting estimates. Therefore, the purpose of this study was to determine if the relationship between certain types of repeated accounting estimates, such as the change in accounts receivable, depreciation of fixed assets, and other accounting estimates, and future cash flows has improved in the period following the mandatory application of international financial accounting and reporting standards (IAS/IFRS) to the sample of Iraqi banks.

## 2. LITERATURE REVIEW

The decision of whether or not a country adopts international accounting standards rests with the country's service and regulatory bodies. However, the adoption of such a decision is contingent on the common factors and conditions that are anticipated to exist at that time. Talaga and Ndubizu (1986) suggest that a country's accounting standards should be adapted to its local circumstances. The environmental conditions of a country are the driving force behind its accounting system. These variables may originate from either the internal or external environment. Cooke, 1990, and, Wallace argues that macroeconomic factors such as economic growth, level of wealth, level of literacy, legal system, development of the financial market, history and culture of the country, the reputation of the accounting profession, and presence of multinational institutions all contribute to the formation of a country's accounting system. In a similar vein, Alhashim and Apran (1992) classify these elements as economic forces, social forces, cultural forces, and legal and political forces. As an accounting system, the forces influencing a country's adoption of IFRS do not deviate from those described by Cook and Wallace (1990).

Since the commencement of IFRS adoption, numerous factors have been cited as influencing IFRS application. Zeghal and Mhedhbi (2006) suggested categorizing these variables into two distinct schools of thought. According to the first school of thought, some nations employ IFRS because they perceive global comparability and quality reporting to be advantages. The second school of thought assumes that countries adopt IFRS because they are economically relevant. This study indicated, however, that the majority of developing nations adopt IFRS not for their economic benefits or relevance, but to appease their development partners such as the World Bank, the International Monetary Fund, and the World Trade Organization. Consequently, while some countries analyze the utility of IFRS before adopting it (the first school of thought) or adapting to their environment (the second school of thought), others, primarily African nations, adopt IFRS under duress before analyzing its consequences.

In the early millennia of the current century, many nations tended to adopt international accounting standards on a large scale to benefit from the quality and readiness of international accounting standards, avoid the problems of local standards, and save money on developing their standards. In July 2002, the European Union issued a directive mandating the adoption of international accounting standards by all member states' companies, effective January 1, 2005 (Doupnik et al., 2020, p. 82).

In the wake of the pervasive mandatory application of IFRS in 2005, researchers examine a variety of capital market effects resulting from the mandatory adoption of IFRS. Companies adhering to domestic accounting standards were required to conduct a study of anomalous fluctuations that revealed abnormal returns and trading volumes surrounding earnings announcements following the adoption of IFRS. Another study found evidence that IFRS companies' stock markets react more firmly to their earnings announcements. For other IFRS subsidiaries in the same industry after 2005, under the increased information transfer and external benefits resulting from the mandatory application of IFRS. Although one study indicates that there is insufficient evidence of a low cost of capital and low market liquidity as a result of the adoption of IFRS, there is some evidence. Using an extended period after adoption, the researchers discovered evidence of a decrease in the cost of capital in the EU as a result of the adoption of IFRS (2019 DeFond et al.,).

After the adoption of IFRS in the EU, the expected variance errors of analysts decreased, indicating that IFRS profits are more predictable than domestic GAAP profits. A group of researchers found that the market reacted more positively to events related to IFRS adoption in European Union for companies with lower quality pre-adoption information and asymmetric pre-certification information, in line with investors' expectations, and that the market reaction is increasingly negative for companies resident in law countries, consistent with investors' concerns about the implementation of IFRS in those countries (DeFond et al., 2019). A common finding in the aforementioned studies is that the benefits of adopting standards for International Financial Reporting accrue predominantly to companies in countries with effective law enforcement, where international standards are most likely to be applied reliably. (Defond et al., 2019: 4)
According to Pietila (2017), the introduction of IFRS to the capital market has yielded a small number of significant benefits. One researcher observes that mandatory adopters experience a substantial reduction in the cost of equity following the implementation of IFRS. On the other hand, it indicates that those who employ IFRS voluntarily do not experience a significant change in the cost of equity after the mandatory application of IFRS for the preparation of Financial reports in 2005 (Pietila, 2017: 27). Saha (2015) cited a study by Verriest, Gaeremynck, and Thornton (2013) examining compliance with IFRS1, which focuses on the initial adoption of IFRS. The relationship between corporate governance and disclosure options concerning the adoption of financial reporting standards. International for the initial occasion in 2005. Nearly 20% of companies in the sample did not comply with IFRS requirements (1), and more than half of the sample did not comply with at least one of the fifteen mandatory disclosure items investigated. According to (IFRS Foundation, 2018) statistics, the Middle East is subject to IFRS standards except for the Republic of Lebanon. The table below depicts the implementation of IFRS standards and their chronology in Middle Eastern nations until 2021.

Table (1) Application of IFRS Standards in the Arab Middle East Countries

| Country | Mandatory application to local companies | Voluntary application to local companies | Mandatory or voluntary for foreign companies | Application history |
|---|---|---|---|---|
| **Iraq** | For banks only | Voluntary | Voluntary | 2016 |
| **Syria** | Obligation. | - | There are no foreign companies whose shares are traded on the Damascus Stock Exchange | 2006 |
| **Jordan** | Obligation. | - | Voluntary | 1997 |
| **Palestine** | International Financial Reporting Standards are required for listed companies and financial institutions. | - | Voluntary | 2016 |
| **Kuwait** | Obligation. | - | Securities of foreign companies are not publicly traded in Kuwait. | 2008 |
| **Saudi Arabia** | Obligation. | - | There are no foreign companies whose shares are publicly traded in Saudi Arabia | 2017 |
| **Bahrain** | Obligation. | - | Voluntary | Law No. 21 of 2001 |
| **Qatar** | Obligation. | - | Foreign companies not listed on the Qatar Stock Exchange | Under Commercial Law No. 5 of 2002 |

| | | | | |
|---|---|---|---|---|
| **Uae** | International Financial Reporting Standards are required for companies listed on Nasdaq Dubai, Dubai Financial Services Authority, and Abu Dhabi Securities Exchange. International Financial Reporting Standards standards are permitted for companies listed on the Dubai Financial Market. | - | Voluntary | 2015 |
| **Oman** | Obligation. | - | Local laws do not allow companies | Capital Market Law (Royal Decree |
| | | | Foreign Trade | 80/1998) |
| | | | Public Securities in Oman | |
| **Yemen** | Banks and large taxable entities are required to use IFRS standards | - | There is no stock market | 2020 |
| **Egypt** | IFRS standards are not allowed | - | Voluntary | 2013 |
| **Comoros** | Obligation. | - | Obligation. | 2019 |

A study found that voluntary adopters of IFRS integrate company-specific information into stock prices more than others, even after controlling for all other factors including analyst follow-up, accounting ambiguity, frequency of reports, cross-inclusion, and differences between local standards. and International Financial Reporting Standards. The result indicates that the adoption of IFRS is seen in the market as a commitment to improving disclosure (Pietilä, 2017: 28).

(Saho, 2015) that the researchers examined the accounting policies and disclosures of large companies around the world. While the companies examined claimed to have voluntarily adopted and complied with International Accounting Standards (IAS) in 1996, the authors found significant non-compliance with IFRS. Some specific findings include:
1. Capitalization of some development costs.
2. Failure to provide all required disclosures of property, companies, and equipment
3. Non-compliance with the requirements for disclosure of retirement salaries.

(Street & Bryant, 2000) provides additional evidence of compliance with disclosure IAS and whether corporate IAS disclosure levels are higher for companies listed on filings and filings in the United States with the U.S. Securities and Exchange Commission. They found that companies with U.S. lists or files are more IAS compliant, suggesting that IFRS enforcement may be less problematic for companies with U.S. listings and filings. However, for companies without U.S. listings or files, compliance is already A major concern (Street & Bryant, 2000). The rate of IFRS application worldwide was 87% of jurisdictions requiring IFRS standards for most locally accountable companies. 144 jurisdictions requiring IFRS for all or most companies (IFRS Foundation, 2018).

As shown in the following table, the data until 2018

**Table (2) Application of IFRS Standards in Continents**

| Continent Name | Mandatory application in jurisdictions | Voluntary application in jurisdictions | Not allowed for application |
|---|---|---|---|
| Africa & Middle East | 49 Countries | 1 Country | 1 Country |

| | | | |
|---|---|---|---|
| America | 27 Countries | 8 Countries | 2 Countries |
| Asia Oceania | 25 Countries | 3 | 6 Countries |
| Europe | 43 Countries | 1 Country | 0 Countries |

The accounting literature has confirmed that institutional factors for any country play a key role in the development or adoption of various regulations (Tauron, 2005). In this context, Guler, Guillen, and Macpherson (2002) assume that institutional factors have influenced the adoption of many applied standards, for example, the applications of ISO 9000 standards worldwide. Similarly, the development and adoption of accounting standards also follow a similar trend to the adoption of any regulation for any country (Müller et al., 1994). The corporate theory has been widely used in the fields of social research to explain the adoption of international accounting standards around the world, as the forces of adoption of international accounting and financial reporting standards can be better identified through corporate theory. The corporate theory has been adopted by Judge et al. (2010) to test the adoption of International Financial Accounting and Reporting Standards and by (Boolaky & Soobaroyen, 2017) to explain the adoption of International Standards on Auditing (ISA).

Several researchers examined IFRS adoption cases in 50 emerging economies around the world (Kossentini & Othman, 2015). To operationalize the IFRS adoption case, the authors classified the country's adoption of IAS on seven points of ordinary measures, from (1) representing the non-adoption of IFRS for listed companies to (7) representing the approved standards as published by the IASB for all listed companies. They argued that the classification Prior as in studies by (Hope, 2006), ( Jin & Kang, 2006), (Stovall, 2010), and (Neil et al., 2011), using a bicoding system to identify countries that have been adopted and which have not been adopted under IFRS failed to capture countries that were essentially adopting IFRS as national standards but with modification. Furthermore, they assume that extended codification by (Judge et al., 2010) And (Ramanna & Sletten, 2009) was also limited when it came to countries such as Tunisia and Singapore, which prohibit IFRS despite developing their national accounting system under IFRS. Therefore, Kossentini & Othman (2015) claims that their seven-tier classification ranks each country's note in terms of one category and only one category per country in the year from 2001 to 2011, making the markup mutually excluded. To understand the prevalence of IFRS through corporate theory, Kossentini & Othman, 2015 used foreign aid and resubmission criteria (ROSC) as an alternative to forced similarity, commercial freedom, the density of offices of the auditing firm Big4 as simulation symmetry variables, membership of the International Federation of Accountants and the number of chartered accountants per population group as standard agents. Economic determinants were analyzed through the lens of network benefits measured As a percentage of IFRS adopters in the top five trading partner countries. They used random effects, compiled OLS, and ordered logical regression as analytical techniques. Their study revealed that both forced and simulated similarities have a positive and significant impact on the decision to adopt IFRS in the country. A 2011 study (Albu et al) supports the hypothesis that coercive and simulated institutional pressures are the strong determinants of IFRS adoption in emerging economies. On the contrary, studies (Phuong & Nguyen, 2012), (Muniandy & Ali, 2012), Albu et al, 2011 (and Perumpal et al, 2009), see qualified accountants and professional training as elements for effective implementation, a study revealed), 2015 Kossentini & Othman (A significant negative relationship exists between standardized uniformity and the adoption of IFRS. This means that the stronger the accounting profession in an emerging country, the less likely a country is to adopt IFRS. So, descriptive statistics have shown that IFAC membership is more important for countries that adopt IFRS with the amendment (Malaysia, India, Korea, Singapore) than for countries that have fully adopted it. The reason is that emerging economies lacking qualified professional accountants are more likely to adopt IFRS because they cannot set their national standards. Their findings confirm the findings of early scientists such as Madawaki, 2012 (and Joshi, Bremser, & Al-Ajmi, 2008) that some countries adopt IFRS to reduce or eliminate the cost of developing their national standards.

The results of Kossentini (2015) & Othman (on economic determinants) revealed that the level of development in financial markets has a significant positive correlation with the application of IFRS. Thus, according to Phuong & Nguyen (2012), Ramanna (2009) (Sletten (2010) and (Irvine, 2008). The country that trades the most with IFRS adopters is motivated to adopt IFRS. Despite the in-depth analysis of this study, the unjustified exclusion of some countries such as Egypt, Liberia, and Libya, limits the generalization of the results to Africa. On the other hand, Hope et al,(2006), applied the theory of cultural interdependence to only 38 countries but did not find a significant relationship between culture and the adoption of IFRS. They developed studies and the theory of new institutions applied to identify the determinants of IFRS among 132 countries using a 2008 dataset. To determine the difference in IFRS adoption, the authors grouped 132 samples from countries under four different IFRS adoption modes based on Deloitte collections in Deloitte IAS-plus, 2008 (which were as follows:

(1) IFRS are not allowed,
(2) IFRS are permitted,
(3) IFRS required by certain IFRS
(4) IFRS is not required.

Their study revealed that all similar institutional pressures measured as foreign aid, import penetration, and educational attainment are important indicators of a country's decision to adopt IFRS. The authors argue that institutional variables as used in their studies have more significant effects on IFRS adoption in a country than legal and cultural variables used by Ding et al (2005) and Hope et al. (2006). Moreover, it turns out that of the three institutional pressures, standardized uniformity (educational attainment) is the strongest influence on the adoption of IFRS. They claimed that professional standards and practices were expected to transcend national beliefs and common practices. The authors supported their argument with findings from the Parboteeah study, 2012).

Parboteeah, Addae, & Cullen, (2012) assume that accounting standards exceed national standards in the United States and Japan. Although Judge et al., 2010) provide insight into the determinants of IFRS application in developing countries from the perspective of new institutions, the study lacks some input, paving the way for further research. The study relied solely on Deloitte iasplus.com as the sole source of information on the state of the country in the adoption of IFRS. Since there is no single reliable source for a country's adoption of IFRS status, a combination of IFRS.org (compiled by IFRS), iasplu.com (Deloitte), and PWC jurisdiction profiles will result in more comprehensive data on country accreditation rather than using a single-source file as it did in Judge et al,2010). Third, mixing developing countries with developed countries from different continents may also lead to misleading results due to differences in the ecological environments of continents. At least, countries from the same continent or region are more likely to share common features than countries from different continents. For example, their results are likely to be driven by countries with high literacy such as Australia, the USA, New Zealand, Belgium, and Canada towards educational attainment making standardized symmetry an important predictor. The situation may not be the same for developing countries with high foreign aid and low literacy rate. Besides, symmetry agents (import penetration and market capitalization) are contradictory in both developing and developed countries. While developing countries will have significant import penetration and low market capitalization, as they are import-dependent, developed countries have high market capitalization and low import access. Ritsumeikan (2011) investigated the institutional pressures for the adoption of IFRS in 46 developing countries through the bilateral codification of accredited and non-accredited countries. The problem with coding as defined by Ramanna, 2009 & Sletten is that it does not give room to countries that allow IFRS. This notation does not reflect the status of IFRS adoption ) which is real and likely to affect the results. The study used foreign aid as a percentage of GDP as an alternative to forced similarity, market capitalization to simulate symmetry, and average secondary school enrollment as an indicator of the norm. Both linear and logarithmic regression results have shown that institutional uniformity is an influencing factor in the adoption of IFRS.

Furthermore, both models showed external (coercive) assistance as an important indicator followed by secondary school enrollment (standard) and market capitalization (simulation) for developing countries. Contrary to the perceived economic determinants of IFRS, the findings (Ritsumeikan, 2011) did not provide evidence for such claims among developing countries. The author concluded that FDI flows and GDP growth are not important predictive factors and that institutional factors better explain the decision to adopt IFRS in the country. Accordingly, the author argues that the adoption of IFRS by developing countries is a social motivation for legitimacy. It is not for economic logic, as previous studies have suggested. The results of Ritsumeikan (2011) showing the strongest effect of forced similarity are partly due to weak agents of the other two types of symmetry. Arguably, normative agents and simulators do not fully accommodate institutional pressure as shown by DiMaggio and Powell (1983). Ritsumeikan (2011) argues that market capitalization growth as a percentage of GDP suggests that the country is more integrated and open. However, a country's market value can grow through domestic investors without foreign participation. Thus, simple growth alone cannot be equivalent to openness. A suitable agent can be growth in foreign investors or growth in multinational companies.

## 3. METHODOLOGY

The research community is represented by all the banks listed in the Iraq Stock Exchange, which are forty-four (44) banks. The research sample represented by commercial banks (18) was selected for their application of international accounting and financial reporting standards (IAS / IFRS) according to the directives of the Central Bank, Banking Control Department No. (9/2/5820) to adopt international accounting and financial reporting standards. As shown in the table below:

**Table (3). Names of the banks of the research sample**

| # | Bank Name | Date of Establishment | Capital as at 31/12/2020 |
|---|---|---|---|
| 1 | Ashur International Investment Bank | 2005 | 250000000000 |
| 2 | Union Bank of Iraq | 2002 | 252000000000 |
| 3 | Iraqi Investment Bank | 1993 | 250000000000 |
| 4 | Economy Bank | 1999 | 250000000000 |
| 5 | National Bank of Iraq | 1995 | 250000000000 |
| 6 | Credit Bank of Iraq | 1998 | 250000000000 |
| 7 | Commercial Bank of Iraq | 1992 | 250000000000 |
| 8 | International Development Bank for Investment and Finance | 2011 | 250000000000 |
| 9 | Gulf Commercial Bank | 1999 | 300000000000 |
| 10 | Middle East Investment Bank | 1993 | 250000000000 |
| 11 | Al Shamal Bank for Finance and Investment | 2004 | 300000000000 |
| 12 | United Investment Bank | 1994 | 300000000000 |
| 13 | Mansour Investment Bank | 2005 | 250000000000 |
| 14 | Mosul Bank for Development and Investment | 2001 | 252500000000 |
| 15 | Babylon | 1999 | 250000000000 |
| 16 | Bank of Baghdad | 1992 | 250000000000 |
| 17 | Sumer Commercial Bank | 1999 | 250000000000 |
| 18 | Trans Iraq Investment Bank | 2006 | 264000000000 |

## 4. RESULTS

To discover and determine the impact of some of the accounting estimates specifically, that can predict future cash flows after the mandatory adoption of the application of International Financial Accounting and Reporting Standards (IAS/IFRS) for Iraqi banks, the research sample was relied on the regression model (2) to verify this.

Also, before conducting the statistical test of the regression model (2) to measure the above effect relationship, the results of the Hausman test were relied upon to choose the appropriate regression model according to the P-value result of Chi2. Table 33 shows the results of the Hausman test for the regression model (2).

The results of the Hausman test for the regression model (2) presented in Table (2) show that the value of (p-value) is less than (0.05 ) and by (Prob > Chi2 = 0.0004). Therefore, based on this result, the statistical model of the statistically appropriate regression that will be used in testing the impact relationship of the research variables is the regression model according to the fixed effects. This can eliminate any biases that may appear in the result due to the difference like the data from the regression model used.

**Table (4) Hausman test results for regression model (2)**

| Variables | Coefficients | | |
|---|---|---|---|
| | fixed | r&om | Difference |
| **CFO** | 0.413 | 0.343 | 0.070 |
| **ΔMWC** | 0.183 | 0.118 | 0.065 |
| **CAPEX** | 0.033 | 0.025 | 0.008 |
| **ΔAR** | 0.040 | 0.177 | -0.137 |
| **DEP** | 2.834 | -5.621 | 8.455 |

| | | | |
|---|---|---|---|
| **MISC** | 0.190 | 0.116 | 0.074 |
| **POST** | 0.044 | 0.050 | -0.007 |
| **POST×CFO** | 0.379 | 0.463 | -0.084 |
| **POST×ΔMWC** | 0.362 | 0.342 | 0.020 |
| **POST×CAPEX** | -0.634 | -0.516 | -0.118 |
| **POST×ΔAR** | 2.166 | 1.596 | 0.569 |
| **POST×BEAUTIFUL** | 12.064 | 14.247 | -2.183 |
| **POST×MISC** | 0.140 | 0.206 | -0.067 |
| **Prob > Chi2 = 0.0004** | | | **Chi2 = 36.87** |

**Source:** Prepared by the researcher based on the financial statements of the banks of the research sample.

Table (4) shows the results of the regression model test (2) according to the fixed effects of the effect of the mandatory application of international accounting and financial reporting standards on the relationship between the variables of accounting estimates and future cash flows of the Iraqi banks of the research sample. The above results also show that the regression model (2) is statistically significant (Prob > $chi^2$ = 0.000).

The results presented in Table (5) also indicate that the value of the coefficient of determination ratio (R-squared) ranged between (0.700 – 0.737) with a total percentage of (0.719). The R-squared ratio also represents the extent of the variance ratio in the dependent variable (future cash flows) which can be predicted by the independent variables (sub-variables of accounting estimates and other variables in the model) of the research. It should be noted here that based on the value of the coefficient of determination (R-squared) The explanatory power of the regression model (2) is stronger than the regression model (1). As the above percentage indicates that about (72%) of the independent variables enable them to explain the changes that may occur in future cash flows from the operating activities of the Iraqi banks in the research sample. The increase in the explanatory power of the regression model (2) is due to the breakdown of accounting estimates into three variables, which gives more space to provide stronger explanations and forecasts to predict future cash flows.

**Table (5) Results of Regression Model (3) to measure the effect of applying IAS/IFRS standards on the relationship between cash flows and accounting estimates variables**

$$\begin{aligned}\mathbf{CFO_{it+1}} = {} & \boldsymbol{\beta_0} + \boldsymbol{\beta_1}\,\mathbf{CFO_{it}} + \boldsymbol{\beta_2}\,\mathbf{\Delta MWC_{it}} + \boldsymbol{\beta_3}\,\mathbf{CAPEX_{it}} + \boldsymbol{\beta_4}\,\mathbf{\Delta AR_{it}} + \boldsymbol{\beta_5}\,\mathbf{DEP_{it}} + \boldsymbol{\beta_6}\,\mathbf{MISC_{it}} + \boldsymbol{\beta_7}\,\mathbf{POST} \\ & + \boldsymbol{\beta_8}\,\mathbf{POST \times CFO_{it}} + \boldsymbol{\beta_9}\,\mathbf{POST \times \Delta MWC_{it}} + \boldsymbol{\beta_{10}}\,\mathbf{POST \times CAPEX_{it}} + \boldsymbol{\beta_{11}}\,\mathbf{POST \times \Delta AR_{it}} \\ & + \boldsymbol{\beta_{12}}\,\mathbf{POST \times DEP_{it}} + \boldsymbol{\beta_{13}}\,\mathbf{POST \times MISC_{it}} + \boldsymbol{\varepsilon_{it}} \qquad (2)\end{aligned}$$

| Variables | Coef. | Std. Err. | with | P>z |
|---|---|---|---|---|
| **CFO** | 0.413 | 0.104 | 3.960 | 0.000*** |
| **ΔMWC** | 0.183 | 0.145 | 1.270 | 0.208 |
| **CAPEX** | 0.033 | 0.258 | 0.130 | 0.898 |
| **ΔAR** | 0.040 | 0.348 | 0.120 | 0.908 |
| **DEP** | 2.834 | 6.822 | 0.420 | 0.678 |
| **MISC** | 0.190 | 0.076 | 2.510 | 0.013** |
| **POST** | 0.044 | 0.024 | 1.800 | 0.075* |
| **POST×CFO** | 0.379 | 0.136 | 2.780 | 0.006*** |
| **POST×ΔMWC** | 0.362 | 0.176 | 2.050 | 0.042** |
| **POST×CAPEX** | -0.634 | 0.345 | -1.840 | 0.068* |
| **POST×ΔAR** | 2.166 | 0.493 | 4.390 | 0.000*** |
| **POST×BEAUTIFUL** | 12.064 | 6.684 | 1.800 | 0.073* |
| **POST×MISC** | 0.206 | 0.088 | 2.340 | 0.019** |

| | | | | |
|---|---|---|---|---|
| **Constant** | -0.035 | 0.022 | -1.600 | 0.111 |
| **No. of obs. = 180** | **= 423.86** | **Wald Chi$^2$ (7)** | **= 0.737** | **R-sq: within** |
| **No. of groups = 18** | **= 0.000** | **Prob > chi$^2$** | **= 0.700** | **between** |
| | | | **= 0.719** | **overall** |

IFRS = represents the ratio of compliance with IFRS; SIZE = Size of the bank represented by total assets; PROFIT = Represents the bank's profitability as measured by net income divided by total assets; AUDIT = Represents audit fees; INTER = International character measured by the bank's association with external banks; LEVER = Leverage measured by total liabilities divided by total assets; AGE = represents the life of the measured bank of the year of examination minus the year of incorporation plus one; LIQUID = Liquidity measured in the ratio of current assets to current liabilities; POST = Represents the application of IAS/IFRS standards. All variables multiplied (POST) Represent variables after the application of IAS/IFRS standards.
Number of banks = 18 companies, number of views N = 180 views, period = 2011-2020.
, **,* indicates that the relationship is significant at significant significance levels 0.01, 0.05, and 0.10 respectively.

**Source:** Prepared by the researcher based on the financial statements of the banks of the research sample.

The results presented in Table (34) also show, in line with the regression model (1), that there is a strong positive effect relationship of current cash flows from operating activities (CFO) on the levels of future cash flows from operating activities ($CFO_{it+1}$) for the Iraqi banks of the research sample and with a high significance at the level of (0.000) and a regression coefficient (0.413).

We note from the results also in Table (34) that there is no significant effect of the variables (change in adjusted working capital (ΔMWC), capital expenditure (CAPEX), change in receivables (ΔAR) and extinction of fixed assets (DEP) on the future cash flows of the banks of the research sample for the ten years as a result of the large disparities between future cash flows and these variables for the period before and after the application of International accounting and financial reporting standards and the overlap of time impacts on them.

On the other hand, the above results indicate that there is a strong positive effect relationship for other accounting estimates (MISC) on the levels of future cash flows from operating activities ($CFO_{it+1}$) for the banks of the research sample and insignificant terms at the level of (0.013) and with a regression coefficient (0.19). This variable represents all other remaining accounting estimates except accounts receivable and the extinction of fixed assets and may include many examples of these accounting estimates such as (the amortization expense of assets is tangible, deferred asset amortization expense, estimates of other fair value of assets and liabilities, impairment goodwill losses, adjustments to employee pension obligations, research and development expenses, equity compensation expenses, etc.).

Importantly, the results in Table (34) show that there is a positive effect relationship for the variable of the application of International Financial Accounting and Reporting Standards (POST) on future cash flow levels ($CFO_{it+1}$) with a significant significance at the level of (0.075) and a regression coefficient of (0.044). This result indicates that there is a positive impact relationship of significant significance between the mandatory application of international accounting and financial reporting standards and the future cash flows of the Iraqi banks of the research sample. It is striking Also, the results show that there is a significant positive effect relationship between future cash flows ($CFO_{it+1}$) and all interactive research variables during the mandatory application period of (IAS/IFRS) standards, except for the capital expenditure variable (CAPEX), which has a negative impact relationship with future cash flows and is significant.

Based on these results, the basic hypothesis of the research can be proved, which is **"that there is an effect of the mandatory application of international accounting and financial reporting standards on the relationship between accounting estimates and future cash flows of Iraqi banks in the research**

**sample."** Sub-hypothesis (1) can also be proven in **"The relationship between accounting estimates for the current period and future cash flows has improved in the period after the mandatory application of international financial accounting and reporting standards for Iraqi banks in the research sample."**

In more detail, we note from the results presented in Table (34) that the current cash flows from operating activities for the period after the application of the standards (POST×CFO) have a positive impact on the levels of future cash flows ($CFO_{it+1}$) of the banks of the research sample and with a high significance at the level of (0.006) and a regression coefficient of (0.379). We also note that the change in working capital adjusted for the period of mandatory application of standards (POST×ΔMWC) has a positive effect on the levels of future cash flows (CFO it+1) of the banks of the research sample and insignificant terms at the level of (0.05) and with a regression coefficient of (0.362) unlike the ten years, the change in the adjusted working capital (ΔMWC) was not significant. We also note that there is a negative impact of the capital expenditure variable (POST×CAPEX) on future cash flow levels ($CFO_{it+1}$). ) with a significant significance at the level of (0.068) and a regression coefficient of (-0.634).

Concerning the three most important and main interactive variables in the regression equation (2), the results in Table (34) show that there is a positive effect relationship between the transactions of these three variables for accounting estimates, which include the change in accounts receivable (POST×ΔAR), the extinction of fixed assets (POST×DEP) and other accounting estimates (POST×MISC). This indicates a stronger possibility of accounting estimates by forecasting cash flows in periods when IFRS has been applied.

As we note from the results presented above that the change in receivables accounts for a period after the application of the standards (POST×ΔAR) has a positive impact on the levels of future cash flows ($CFO_{it+1}$) of the banks of the research sample and with a very significant high significance at the level of (0.000) and a regression coefficient of (2.166). The importance of this result is due to the nature of the activity practiced by the banks of the research sample, which includes a large part of their balance sheet allocated within the accounts receivable to them. Therefore, the sub-hypothesis can be proved. (2) **In "The relationship between the accounting estimates represented by accounts receivable for the current period and future cash flows have improved in the period after the mandatory application of international financial accounting and reporting standards for Iraqi banks in the research sample."**

We also note from the results that the extinction of fixed assets for a period after the application of (POST×DEP) standards has a positive effect on the levels of future cash flows ($CFO_{it+1}$) of the banks of the research sample and with a significant significance that is not high but significant at the level of (0.073) and a regression coefficient of (2.166). Therefore, sub-hypothesis (3) can be proved in **" The relationship between the accounting estimates represented by the extinction of fixed assets for the current period and future cash flows improved in the period after the mandatory application of international financial accounting and reporting standards for Iraqi banks in the research sample.**

Finally, the results show that the other accounting estimates (POST×MISC) have a positive effect on future cash flows with a high significance at the level of (0.019) and a regression coefficient (0.206). This result of the regression confirms that the predictive and explanatory power of other accounting estimates has increased significantly after the application of IAS in forecasting future cash flows from operating activities. Therefore, IAS/IFRS gave a higher ability for managers in banks to make decisions wiser and more correctly in light of future expectations related to cash flows from their operating activities.

Therefore, sub-hypothesis (4) can be proven in **"The relationship between miscellaneous accounting estimates (except for accounts receivable and the extinction of fixed assets) for the current period and future cash flows improved in the period after the mandatory application of international financial accounting and reporting standards for Iraqi banks in the research sample".**

## 5. CONCLUSIONS AND DISCUSSION

International accounting and financial reporting standards have become the language of cross-border business as a result of the opening of global markets and the increase and expansion of global business. As a result, the need for their application by companies has increased, as has the adoption of their application by countries on their companies. The implementation of international accounting and financial reporting standards has significant effects on the economies of various nations, as it serves to open markets, achieve economic development, and attract foreign investment at a reduced cost of capital. Numerous prior studies concur that the mandatory adoption of the application of international accounting and financial reporting standards is vastly superior to the voluntary adoption of standards in terms of application quality and compliance with international accounting and financial reporting standards. Numerous stakeholders, led by investors, have come to believe that the application of international accounting and financial reporting standards by an economic unit is an important indicator of the quality of its financial reports; this would increase their confidence in the credibility of accounting information, which they will factor into their decisions. Even though the international accounting and financial reporting standards represent an integrated set of accounting standards and their financial statements may appear similar from country to country, some differences may arise in the application of these standards due to various social, economic, and legal conditions, and the Accounting Standards Board seeks to minimize these differences. To reduce these differences and enhance the international compatibility of legislation and accounting standards to meet the requirements of users. The increasing reliance on accounting estimates in financial reports leads to an increase in their complexity, as well as an increase in the likelihood of manipulation and the proportion of investors, creditors, and other external parties who question the accuracy of the figures and estimates contained therein. An increase in the level of ambiguity in financial reports and a decrease in confidence in the quality and credibility of the information contained therein, especially in light of the flexibility of accounting standards, which may be abused in a manner contrary to the rules and principles contained within the standards of accounting and international financial reporting, maybe the most significant additional challenge posed by uncertainties in estimation processes. Increasing the disclosure of accounting estimates, cash flows, methods and methods of measuring them in the financial statements and their details in the notes and clarifications on the financial statements will help reduce the ambiguity of financial reports and increase the predictive ability of accounting information regarding future cash flows and activity trends for the company. Managers can manipulate profits by manipulating the recognition of revenues or expenses using accounting estimates that are more subject to subjective judgment. During the research period as a whole and for the period before and after the mandatory application of international accounting and financial reporting standards, the levels of current and future cash flows and accounting estimates for the sample of Iraqi banks varied clearly and significantly, which may be attributed to the lack of stability in its activity and the difference as a result of the application of (IAS) standards /IFR. The results indicate that there are large differences between the current and future cash flows from the operational activities of several Iraqi banks, the research sample, and unevenly during the ten years within the research period, which indicates the weakness of the predictive power of the accounting information of some banks in predicting future cash flows to them, which may erode investors' confidence in The credibility of the presented accounting numbers if these numbers are not accurate. The results indicate that accounting estimates for the period preceding the implementation of international accounting and financial reporting standards were significantly higher than accounting estimates for the five years following the mandatory implementation of international accounting standards for Iraqi banks, the sample for this study. Importantly, the results indicate that the discrepancy in the accounting estimates of the Iraqi banks, the research sample, may be largely attributable to the discrepancy in the accounting estimates of accounts receivable, to a greater extent than to the discrepancy in the depreciation of fixed assets, and this result may be normal given the nature of banks' work and assets. Due to the consistency of cash flows during the periods of mandatory application of international accounting standards, the results of this study indicate the existence of a strong positive relationship between the mandatory application of international accounting and financial reporting standards and the future cash flows of Iraqi banks, which comprised the research sample. We also conclude from the results that the predictive ability of the current cash flows from operational activities and the change in working capital has increased in a positive and significant manner in predicting future cash flows for a period after the mandatory application of accounting and financial reporting standards for the research sample of Iraqi banks. In predicting future financial flows from the operational activities of Iraqi banks, the research sample, the predictive and explanatory power of accounting estimates has increased substantially after the application of international accounting standards. Consequently, this may enable bank managers to make more prudent and accurate decisions in light of anticipated future cash flows resulting from their operational activities. The results also indicated that the relationship between accounting estimates represented by the change in accounts receivable accounts for the current period and future cash flows improved in the period following the mandatory application of international financial accounting and reporting standards to the sample of Iraqi banks. The results indicate that the relationship between accounting estimates representing the depreciation of fixed assets for the current period and future cash flows has improved in the period following the mandatory application of international financial accounting and reporting standards to the research sample of Iraqi banks, but in a less significant manner than in other types of accounting estimates. In predicting future cash flows from operational activities of Iraqi banks, the research sample, the predictive power of other accounting estimates increased substantially after the application of international accounting and financial reporting standards.

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