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جودة تقدير المخصصات المحاسبية على مفاجآت الأرباح اللاحقة وتقلب صافي الدخل في الشركات الصناعية العراقية المدرجة للمدة 2012 إلى 2025

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المستخلص

يهدف هذا البحث إلى اختبار أثر جودة تقدير المخصصات المحاسبية على مفاجآت الأرباح اللاحقة وتقلب صافي الدخل في عينة من الشركات الصناعية العراقية المدرجة في سوق العراق للأوراق المالية خلال المدة 2012–2025. وانطلق البحث من فرضية أساسية مفادها أن جودة تقدير المخصصات المحاسبية تمثل عاملاً مؤثراً في استقرار الأرباح وفي تفسير التغيرات اللاحقة في الأداء المالي. واعتمد البحث على بيانات بانل شملت خمس شركات صناعية عراقية، وتم قياس جودة تقدير المخصصات المحاسبية من خلال نسبة المخصصات إلى إجمالي الأصول ومعدل التغير في المخصصات المحاسبية، في حين تم قياس مفاجآت الأرباح اللاحقة بالتغير اللاحق في صافي الدخل نسبة إلى إجمالي الأصول، وقياس تقلب صافي الدخل بالانحراف المعياري لصافي الدخل نسبة إلى إجمالي الأصول. واستخدم البحث الإحصاءات الوصفية واختبار الاعتماد المقطعي واختبارات جذر الوحدة، ثم تم تقدير نموذجين من نوع Panel ARDL. وأظهرت النتائج وجود أثر موجب معنوي لنسبة المخصصات إلى إجمالي الأصول على مفاجآت الأرباح اللاحقة، وأثر سالب معنوي لمعدل التغير في المخصصات المحاسبية عليها، كما بينت النتائج وجود أثر موجب معنوي لكل من نسبة المخصصات إلى إجمالي الأصول ومعدل التغير في المخصصات المحاسبية على تقلب صافي الدخل في الأجل الطويل. ويستنتج البحث أن جودة تقدير المخصصات المحاسبية تعد محدداً مهماً لجودة الأرباح واستقرار الأداء المالي ضمن الشركات الخمس المشمولة بعينة البحث، ومن ثم تفسر النتائج في حدود هذه العينة والمدة 2012–2025 دون تعميمها على جميع الشركات الصناعية العراقية.

الكلمات المفتاحية: جودة تقدير المخصصات المحاسبية، مفاجآت الأرباح اللاحقة، تقلب صافي الدخل، جودة الأرباح، الشركات الصناعية العراقية.

The Impact of Accounting Estimates Quality on Subsequent Earnings Surprises and Net Income Volatility in Listed Iraqi Industrial Companies from 2012 to 2025

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This research aims to examine the impact of the quality of accounting provision estimation on subsequent earnings surprises and net income volatility within a sample of Iraqi industrial companies listed on the Iraq

Stock Exchange during the period 2012–2025. The study is based on the premise that the quality of accounting provision estimation is a significant factor influencing earnings stability and explaining subsequent changes in financial performance. Utilizing panel data covering five Iraqi industrial companies, the study measured the quality of accounting provision estimation via the ratio of provisions to total assets and the rate of change in accounting provisions. Subsequent earnings surprises were measured by the subsequent change in net income relative to total assets, while net income volatility was measured by the standard deviation of net income relative to total assets. The methodology employed descriptive statistics, cross-sectional dependence tests, and unit root tests, followed by the estimation of two Panel ARDL models. The results revealed a significant positive impact of the provisions-to-total-assets ratio on subsequent earnings surprises and a significant negative impact of the rate of change in accounting provisions on the same variable. Furthermore, the findings indicated a significant positive impact of both the provisions-to-total-assets ratio and the rate of change in accounting provisions on net income volatility in the long run. The study concludes that the quality of accounting provision estimation is an important determinant of earnings quality and financial performance stability within the five companies included in the study sample; therefore, the findings are interpreted within the limits of this sample and the period 2012–2025.

Keywords: Quality of Accounting Provisions Estimation, Subsequent Earnings Surprises, Net Income Volatility, Earnings Quality, Iraqi Industrial Companies

First: Introduction:

In contemporary accounting literature, Interest has increased in the role of accounting estimates to explain the quality of the figures reported in financial statements, because accounting provisions are highly dependent on professional judgment and future expectations. Therefore, the quality of their estimation does not only affect the current profit figure, but also extends to the predictive ability of subsequent earnings and to the degree of stability of net income over time. In this context, the literature confirms that earnings quality is associated with the extent to which they are free from distortions resulting from inaccurate estimates or opportunistic practices, and that emerging markets are more sensitive to this issue because of differences in the quality of disclosure and governance and oversight

mechanisms. Applied literature on the Iraqi environment has also shown that earnings quality is affected by managerial, institutional, and contextual factors, which makes the study of accounting provisions an appropriate approach to understanding the characteristics of accounting profit in Iraqi listed companies. On the other hand, recent research has shown that earnings surprises are an important indicator of the expectation gap between realized earnings and expected earnings, How they are measured and interpreted is related to the reliability of previous accounting information and the quality of the basis on which expectations are built. Likewise, earnings volatility or net income volatility reflects the level of instability in financial performance and may be associated with poor financial reporting quality or excessive reliance on unstable accounting estimates, which subsequently affects the ability of investors and lenders to assess the company's operating and financial risks. Accordingly, the importance emerges of examining the effect of the quality of accounting provision estimates on subsequent earnings surprises and net income volatility in Iraqi listed industrial companies, as a topic that combines the accounting estimation dimension, the informational dimension of earnings, and the stability dimension of financial performance**.**

Second: Research Problem:

The research problem arises from the fact that accounting provisions represent an estimated accounting item that depends to a large extent on management's professional judgment and its expectations regarding potential losses or liabilities, which leads to variation in the level of estimation quality from one company to another and from one period to another. The problem becomes clearer when poor estimation quality is reflected in inflating or reducing earnings in a particular year. The effects of this later appear in the form of earnings surprises when the results of subsequent years are announced or in the form of high volatility in net income. Ultimately, this weakens the predictability of earnings and reduces their usefulness in decision-making. The literature has indicated that financial reporting quality and earnings quality in emerging markets continue to be affected by varying degrees of

standards implementation, governance, and oversight, which justifies examining this issue particularly in the Iraqi environment. Accordingly, the research problem can be formulated through the following main question: What is the effect of the quality of accounting provision estimates, measured by the ratio of provisions to total assets and the rate of change in provisions, on subsequent earnings surprises and net income volatility in Iraqi listed industrial companies during the period 2012–2025**?**

Third: Research Importance:

The theoretical importance of the research lies in linking two overlapping areas in contemporary accounting thought: the quality of accounting estimates on the one hand, and the characteristics and stability of subsequent earnings on the other, thereby contributing to enriching the literature related to earnings quality in the environment of listed industrial companies. Its practical importance also lies in providing empirical evidence from the Iraq Stock Exchange, which is an emerging market that still requires further research to examine the quality of indicators derived from financial reports and the extent to which they are reflected in the usefulness of accounting information. The research findings also benefit company management in improving estimation policies related to provisions, and benefit investors and financial analysts in assessing the sustainability and predictability of earnings, while also benefiting regulatory authorities and external auditors in strengthening disclosure and professional discipline in estimating items characterized by a high degree of personal judgment.

Fourth: Research Questions:

The research proceeds from the following main question:

What is the effect of the quality of accounting provision estimates on earnings surprises and net profit volatility in listed Iraqi industrial companies?

The following questions are derived from it:

1- What is the effect of the ratio of provisions to total assets on subsequent earnings surprises?

2- What is the effect of the rate of change in accounting provisions on subsequent earnings surprises?

3- What is the effect of the ratio of provisions to total assets on net profit volatility?

4- What is the effect of the rate of change in accounting provisions on net profit volatility?

5- Is there a long-run equilibrium relationship between the quality of accounting provision estimates and both earnings surprises and net profit volatility?

Fifth: Research Objectives:

The research aims to achieve the following:

1. Measure the effect of the ratio of provisions to total assets, as an indicator of the size of estimated items within the asset structure, on subsequent earnings surprises.
2. Measure the effect of the rate of change in accounting provisions, as an indicator of the stability of the accounting estimation policy from one year to another, on subsequent earnings surprises.
3. Test the effect of the ratio of provisions to total assets and the rate of change in accounting provisions on net income volatility as an indicator of the stability of earnings performance over time.
4. Provide applied evidence from Iraqi listed industrial companies showing the extent to which indicators of the quality of accounting provision estimates are capable of explaining subsequent earnings behavior and net income volatility during the period 2012–2025.

5. Provide indicators that may benefit company managements, auditors, investors, and regulatory authorities in assessing the quality of accounting provisions and their reflection on the reliability of reported earnings.

Sixth: Research Hypotheses:

The research hypotheses are formulated as follows:

H1: There is a statistically significant effect of the quality of accounting provision estimates on subsequent earnings surprises in the companies included in the study sample.

H1.1: There is a statistically significant effect of the ratio of provisions to total assets on subsequent earnings surprises.

H1.2: There is a statistically significant effect of the rate of change in accounting provisions on subsequent earnings surprises.

H2: There is a statistically significant effect of the quality of accounting provision estimates on net income volatility.

H2.1: There is a statistically significant effect of the ratio of provisions to total assets on net income volatility.

H2.2: There is a statistically significant effect of the rate of change in accounting provisions on net income volatility.

Seventh: Previous Literature:

Recent literature indicates that earnings quality represents the outcome of sound measurement, recognition, and disclosure, and that any deficiency in material accounting estimates is reflected in the reliability of accounting profit and its explanatory and predictive abilities. This is supported by Bazarfshan et al. on the Iraqi market, it was found that earnings quality is affected by managerial ability and the

institutional conditions surrounding the company, which confirms that accounting profit is not merely an automatic outcome of financial events, but rather a result in which managerial judgments, accounting estimates, and regulatory contexts interact (Bazarfshan et al., 2023, pp. 3086-3088). This result is consistent with what Klich, Shbita, and Waw which was presented regarding the Middle East and North Africa region. They explained that the quality of financial reporting in the region is associated with the institutional implementation environment and the quality of compliance with international standards. Furthermore, they noted that the quality of accounting information remains variable among emerging markets according to the degree of regulatory and supervisory maturity (Klich et al., 2021, pp. 572-575).

On the other hand, a group of foreign studies focused on the characteristics of future earnings and earnings surprises and their relationship with the quality of accounting information. Green and Zhao stated that current characteristics of income return forecasting established that the first interest rate of historical financial records is an important basis for increasing forecasting accuracy, and any noise or distortion in such statistics provides guidelines for forecasting models and increases forecasting errors in successive periods (Green & Zhao, 2022, pp. 121-123). Pan and Huang also provided a direct treatment of the concept of earnings surprises. Their study showed that measuring such surprises should not be separated from the quality of the information base on which expectations rely, because variation in the quality of accounting measurement leads to substantial variation in interpreting subsequent marke-t reactions and results (Pan & Huang, 2023, pp. 2-4).

Regarding earnings performance volatility, a study at using Kim, Schoenberger, Wasley, and Yang showed that earnings announcements has an important place in explaining market volatility, and the earnings information content is associated with a diploma of uncertainty and volatility around the company (kim et al., 2024, p. 252-255). The study by Lisboa, Costa and Reis additionally concluded that financial reporting quality affects financing decisions and capital structure, which shows that the impact of high-quality accounting data is not limited to internal reporting or

present profitability. 2025, p. 311-314) (Lisboa et al., 2025, pp. 311-314). In the same vein, study by Verma, Dawar, and Chowdhury showed that audit characteristics definitely affect the high -quality of earnings, which strengthens the argument that sound accounting estimates reduce the possibility of variance in apparent effects and helps maintain relative balance over the years (Verma et al., 2023, pp. 26-29).

Recent accounting research has addressed the adequacy of profitability as a result of the interaction of several factors, including account size, management performance, governance characteristics, audit quality, and the extent of compliance with accounting requirements. Rahman et al. (2021) showed that the quality of external auditing in Iraqi industrial companies is associated with earnings management practices, which confirms that the oversight environment plays an important role in controlling the quality of reported earnings. Ali and Flayyih (2021) also concluded that the adoption of International Financial Reporting Standards affects earnings quality in banks listed on the Iraq Stock Exchange, which reinforces the importance of an organized accounting framework in improving the reliability of financial figures.

Similarly, in the Iraqi environment, Bazrafshan et al. (2023) showed that managerial ability affects earnings quality, and that the institutional and economic conditions surrounding companies can influence management's behavior when preparing financial reports. Alharasis et al. (2024) also showed that the quality of financial statements in Iraq is affected by the stage of implementing international disclosure requirements, which confirms that the quality of financial reporting in emerging markets is associated with the degree of regulatory and supervisory maturity. In a similar vein, Riadh et al. (2024) identified that board characteristics are associated with earnings management, crisis probability, and social responsibility, showing that earnings cannot be separated from a first-class internal governance structure.

At the level of emerging markets and countries of the region, Almaqtari et al. (2021) showed that governance mechanisms affect the adoption of International Financial Reporting Standards in a number of Gulf countries, which reflects the importance of

the institutional system in ensuring reporting quality. Klish et al. (2021) also explained that the implementation of international standards in the Middle East and North Africa region is associated with financial reporting quality, and that the level of compliance differs among markets according to the characteristics of the regulatory and supervisory environment. Alghemary et al. (2024) concluded that ownership structure and national governance play a role in explaining earnings management practices in companies in Gulf countries (GCC), which supports the argument that corporate accounting behavior is affected by both internal and external factors.

As for the studies that focused on earnings characteristics, Attia et al. (2024) showed that board diversity affects real and accrual earnings management practices in emerging markets. Alrobai et al. (2025) also concluded that company characteristics and ownership structure are among the determinants of earnings quality in emerging markets. Green and Zhao (2022) discussed developments in earnings and return forecasting and confirmed that the quality of historical accounting data represents an important basis for improving forecasting accuracy. Pan and Huang (2023) similarly addressed the concept of earnings surprises and their measurement methods and showed that the interpretation of such surprises is associated with the quality of the information on which earnings expectations are based.

With regard to income volatility and subsequent accounting information, Kim et al. (2024) explained that earnings announcements play a role in explaining market volatility and that the informational content of earnings is associated with the degree of uncertainty surrounding the company. Alzughhaíman et al. (2023) further confirmed that financial security crises affect monetary distress and earnings management, showing that risky conditions increase the sensitivity of earnings to accounting estimates Hong et al. (2023) conclude that governance and external financing in emerging markets are associated with earnings management, showing that higher earnings suffer from the ability of the organization to manage assets and liabilities**.**

Instead of auditing and reporting quality, Verma et al. (2023) concluded that the impact of audit quality on earnings is significant, which increases the importance of professional examination of estimated items and provisions. Le (2025) also shows that

a first-class audit affects real income control and that monetary leverage and cash flows can influence the energy of this date. Additionally, Lisboa et al. (2025) conclude that economic reporting penalties affect capital size, i.e., accounting data affect major financing choices and risk assessment. Together, these studies confirm that earnings quality is related to more than one factor. However, the direct hyperlink between estimates of accounting provisions and favorable future earnings surprises in Iraqi business firms and Internet earnings volatility still needs applied testing, as the current research seeks to do. Collectively, this literature indicates that there is general agreement that earnings quality and financial reporting quality are affected by governance, auditing, managerial ability, and compliance with standards. However, a clear gap remains in linking the quality of accounting provision estimates specifically with two complementary subsequent indicators, namely subsequent earnings surprises and net income volatility, particularly in the sector of Iraqi listed industrial companies. From this point, the current study derives its distinction, as it moves from studying earnings quality as a general concept to testing the effect of one of its direct empirical determinants, namely the quality of accounting provisions, on subsequent earnings outcomes and net income instability in an Iraqi listed environment that still requires further applied evidence.

The following table shows the similarities and differences:

No.	Study	Applied Environment	Study Topic	Method or Approach Used	Key Findings	Similarities with the Current Study	Differences from the Current Study	Benefit to the Current Study
1	Rahman et al. (2021)	Iraqi industrial companies	Effect of external audit quality on earnings management	Applied analysis of industrial companies	The study showed that external audit quality contributes to reducing earnings management practices	It agrees with the current study in its interest in earnings quality in Iraqi industrial companies	It focused on external audit quality, while the current study focuses on the quality of accounting provision estimates	It contributed to reinforcing the importance of the oversight environment in improving earnings quality
2	Ali and Flayyih (2021)	Banks listed on the Iraq Stock Exchange	Effect of adopting International Financial Reporting Standards on earnings quality	Beneish model for measuring earnings quality	It concluded that the adoption of international standards affects earnings quality	It agrees with the current study in examining earnings quality within the Iraqi environment	It was applied to banks, while the current study is applied to industrial companies	It contributed to highlighting the effect of the organized accounting framework in improving the reliability of earnings
3	Bazrafshan et al. (2023)	Iraq	Effect of managerial ability on earnings quality	Applied econometric models	It showed that managerial ability affects earnings quality in Iraqi companies	It agrees with the current study in linking earnings quality with internal company factors	It focused on managerial ability, while the current study focuses on accounting provisions	It contributed to building the theoretical interpretation of the role of managerial judgment in preparing accounting figures
4	Klish et al. (2021)	Middle East and North Africa region	Effect of adopting international standards on financial	Comparative analysis among countries in the region	It showed that financial reporting quality differs according to the	It agrees with the current study in its interest in financial	It addressed reporting quality at the regional level, while the current study	It contributed to explaining the particularity of emerging

			reporting quality		regulatory environment and the level of compliance with standards	reporting quality in emerging markets	focuses on Iraqi industrial companies	markets and the effect of the institutional environment on the quality of accounting information
5	Verma et al. (2023)	India	Effect of audit characteristics on earnings quality	Applied analysis of listed companies	It concluded that audit characteristics affect earnings quality	It agrees with the current study in its interest in the determinants of earnings quality	It examined audit characteristics, while the current study examines the quality of provision estimates	It contributed to supporting the importance of professional examination of estimated items affecting earnings
6	Pan and Huang (2023)	International environment	Measurement of earnings surprises according to market reaction	Quantitative analysis of the concept of earnings surprises	It showed that measuring earnings surprises is associated with the quality of the information basis used in forecasting	It agrees with the current study in addressing earnings surprises as a subsequent indicator of information quality	It focused on measuring earnings surprises from the market perspective, while the current study measures them through the subsequent change in net income	It contributed to identifying the theoretical basis of the subsequent earnings surprises variable
7	Kim et al. (2024)	United States	Role of earnings announcements in explaining market volatility	Predictive models for measuring volatility	It showed that earnings information affects the degree of volatility and uncertainty	It agrees with the current study in linking earnings with volatility	It examined market volatility, while the current study examines net income volatility	It contributed to building the interpretation of the relationship between earnings quality and financial instability
8	Lisboa et al. (2025)	Listed companies	Effect of financial reporting quality on capital structure	Applied analysis	It showed that financial reporting quality affects financing decisions and capital structure	It agrees with the current study in confirming the effect of accounting information quality on financial decisions	It focused on capital structure, while the current study focuses on earnings surprises and net profit volatility	It contributed to expanding the applied interpretation of the importance of financial reporting quality
9	Le (2025)	Listed companies	Effect of audit quality on real earnings management	Econometric analysis with financial variables	It showed that audit quality limits earnings management and that financial leverage and cash flows affect the relationship	It agrees with the current study in its interest in earnings quality and its determinants	It focused on real earnings management, while the current study focuses on the quality of provision estimates	It contributed to proposing future control variables such as financial leverage and cash flows
10	Current study	Iraqi industrial companies listed on the Iraq Stock Exchange for the period 2012–2025	Effect of the quality of accounting provision estimates on earnings surprises and net profit volatility	Panel data and Panel ARDL model	It showed a significant effect of the two indicators of provision estimation quality on earnings surprises and net profit volatility in the long run	It intersects with previous studies in its interest in earnings quality and financial reporting quality	It is distinguished by its direct focus on accounting provisions and linking them with two dependent variables, namely earnings surprises and net profit volatility in the Iraqi industrial environment	It provides applied evidence linking the quality of accounting estimation with the stability of subsequent earnings in Iraqi industrial companies

source: Prepared by the researcher based on Rahman et al. (2021), Ali and Flayyih (2021), Klish et al. (2021), Bazrafshan et al. (2023), Verma et al. (2023), Pan and Huang (2023), Kim et al. (2024), Lisboa et al. (2025), and Le (2025).

Eighth: Research Gap and Distinctiveness of the Current Study:

The research gap addressed by the current study is primarily a knowledge gap, accompanied by a methodological gap. The knowledge gap lies in the limited direct evidence linking the quality of accounting provision estimates, as a specific accounting estimate, to two subsequent outcomes. Subsequent earnings surprises and net income volatility, particularly within Iraqi listed industrial companies. The methodological gap appears in the limited use of a panel approach that distinguishes between short-run movements and long-run equilibrium relationships when examining these variables. Accordingly, the present study attempts to address both gaps through balanced panel data and the Panel ARDL model for the five companies included in the sample.

The current study is distinguished from previous studies in several aspects. From the thematic perspective, most previous studies focused on earnings quality, earnings management, and financial reporting quality in general, whereas the current study focuses on one of the direct accounting determinants of earnings quality, represented by the quality of accounting estimate provisions. From the applied perspective, the study examines the effect of provision-estimation quality on two interrelated variables, namely subsequent earnings surprises and net income volatility, simultaneously, whereas most previous studies addressed one of these dimensions separately. The study is also applied to five Iraqi industrial companies listed on the Iraq Stock Exchange during 2012–2025. The choice of this period is not only related to data availability; it also covers important changes in the Iraqi economic and accounting environment. Iraq was exposed from 2014 to the combined effects of the security crisis and the fall in oil prices, and in 2020 to the combined shock of the COVID-19 pandemic and the collapse in oil prices, developments that affected the operating environment and increased uncertainty surrounding corporate performance (World Bank, 2016; World Bank, 2020). At the accounting level, the period also witnessed a stronger institutional orientation toward international financial reporting practices. The IFRS Foundation indicates that IFRS Accounting Standards became mandatory for Iraqi banks from 2016, while other domestic companies, including industrial companies, were permitted rather than generally required to apply IFRS and continued to operate within a mixed national and international reporting environment (IFRS Foundation, 2020). This makes the period appropriate for examining accounting estimates whose quality depends on professional judgment and disclosure. Methodologically, the study adopts panel data and the Panel ARDL model, which allows the examination of short-run and long-run relationships among the variables.

Ninth: Benefit from Previous Studies:

The current study benefited from prior research that identified research variables, formulated hypotheses, determined appropriate coefficients, and selected precise econometric techniques. Prior research helped build a theoretical framework, explain

results, and link beneficial, quantitative studies used in the accounting reflect how modern developments align with the unique characteristic of the Iraqi conditions.

Tenth: Research Methodology:

The research followed a descriptive analytical approach to clarify the theoretical basis for estimation of accounting provision, unexpected income, and net income volatility, while using an analytical econometric approach to examine the relationships in the study's model over the period 2012–2025 in Darak Ship Securities Market for, Iraq Fireily Business Manufacturing and Marketing, Iraqi Company, Carpet Furniture Company, Baghdad Soft Drinks Company, National Metal and Consumer Industries Association, and 70 of the Small Industries Association The annual panel data analysis were complete. The research also adopted an independent variable represented by the quality of accounting provision estimates, measured through two indicators: the ratio of provisions to total assets (PROVTA) and the rate of change in accounting provisions (ΔPROV). The first dependent variable was subsequent earnings surprises, measured by the subsequent change in net income relative to total assets (FES_A), while the second dependent variable was net income volatility, measured by the standard deviation of net income relative to total assets (NIV_SD). The data were extracted from the published annual financial statements and the accompanying notes of the companies included in the study sample, and were then statistically and econometrically processed using EViews 13 through descriptive statistics, the Breusch-Pagan LM cross-sectional dependence test, the ADF-Fisher and Choi Z-stat panel unit root tests. The estimation of two Panel ARDL models to measure the effect of the two indicators of provision estimation quality on both subsequent earnings surprises and net income volatility, in a manner consistent with the nature of the cross-sectional time-series data and the results of the preliminary tests.

Eleventh: Research Population and Sample:

The research population consisted of all industrial companies listed on the Iraq Stock Exchange during the study period, as economic units that disclose annual financial data that can be relied upon in measuring the research variables related to the quality of accounting provision estimates, subsequent earnings surprises, and net income volatility. The study sample was selected purposively according to the regular availability of annual financial statements, the availability of the disclosures needed to construct the study indicators during 2012–2025, continuity of listing, and the absence of gaps that prevent the construction of comparable time series. Accordingly, the sample included five companies listed on the Iraq Stock Exchange and classified within the industrial sector: Iraqi Date Processing and Marketing, operating in the processing, packaging, and marketing of dates; Iraqi For Tufted Carpets, operating in carpet and furnishing manufacturing; Baghdad Soft Drinks, operating in the production and bottling of soft drinks; Metallic Industries and Bicycles, operating in metal products, bicycles, metal furniture, and related metal products; and the Light Industries, operating in light industrial manufacturing activities. Thus, the total

number of observations amounted to 70 annual observations within a balanced panel data framework. The identification of the companies, their listed status, and their industrial classification was based on the companies' annual reports and the official listings of the Iraq Stock Exchange and related Iraqi securities-market institutions. The following table presents the research variables and the companies included in the sample.

Table 1. Research Variables, Their Codes, Measurement Methods, and Sources from the Financial Reports of the Companies Included in the Study Sample

\	Name in Arabic	Code	Brief Operational Definition	Source of Extraction
Independent variable	Quality of accounting provision estimates	PQ	A variable reflecting the level of quality of accounting judgment in estimating provisions and the extent of their consistency and appropriateness in the financial statements	Calculated based on the annual financial statements and accompanying notes
Indicator of the independent variable	Ratio of provisions to total assets	PROVTA	Total accounting provisions divided by total assets in the same year	Statement of financial position and accompanying notes
Indicator of the independent variable	Rate of change in accounting provisions	ΔPROV	The difference between provisions in the current year and provisions in the previous year divided by provisions in the previous year	Statement of financial position and accompanying notes
First dependent variable	Subsequent earnings surprises	FES	The unexpected change in earnings performance between the current year and the subsequent year	Calculated from net income data in the annual financial statements
Indicator of the first dependent variable	Subsequent change in net income relative to total assets	FES_A	Net income of the subsequent year minus net income of the current year divided by total assets of the current year	Income statement and statement of financial position
Second dependent variable	Net income volatility	NIV	The degree of instability in net income over time within a moving time window	Calculated from published annual net income data
Indicator of the second dependent variable	Standard deviation of net income relative to total assets	NIV_SD	The standard deviation of net income over a period of 3 years or 5 years divided by total assets	Income statement and statement of financial position
Study sample	Iraqi Date Processing and Marketing	ISX1	Listed industrial company operating in the processing, packaging, and marketing of dates and represented in the study sample	Company annual reports and the Iraq Stock Exchange
Study sample	Iraqi For Tufted Carpets	ISX2	Listed industrial company operating in carpet and furnishing manufacturing and represented in the study sample	Company annual reports and the Iraq Stock Exchange
Study sample	Baghdad Soft Drinks	ISX3	Listed industrial company operating in the production and bottling of soft drinks and represented in the study sample	Company annual reports and the Iraq Stock Exchange
Study sample	Metallic Industries and Bicycles	ISX4	Listed industrial company operating in metal products, bicycles, metal furniture, and related metal products and represented in the study sample	Company annual reports and the Iraq Stock Exchange
Study sample	The Light Industries	ISX5	Listed industrial company operating in light industrial manufacturing activities and represented in the study sample	Company annual reports and the Iraq Stock Exchange

Source: Prepared by the researcher based on the annual financial statements and accompanying notes of the sample companies, the official listings of the Iraq Stock Exchange, and the relevant Iraqi securities-market institutions for the period 2012–2025.

Twelfth: Theoretical and Conceptual Framework:

First Subsection: Quality of Accounting Provision Estimates

The theoretical framework of this research is based on the premise that accounting provisions represent one of the accounting measurement items most closely associated with professional judgment and managerial estimation. Therefore, the quality of their estimation constitutes an essential part of both financial reporting quality and earnings quality. The more the estimation of provisions is based on objective and consistent foundations and supported by adequate disclosure, the greater the reliability of reported earnings and the lower the likelihood of their distortion or the postponement of their effects to subsequent periods. In contrast, weak or biased estimation of provisions may lead to charging a financial period with expenses that are either less or more than necessary, which weakens the characteristics of relevance and faithful representation in the financial statements. Recent literature confirms that financial reporting quality in emerging markets is associated with the degree of compliance with standards and the quality of the oversight and governance environment, and that weakness in these elements are directly reflected in the quality of estimated accounting figures and the resulting earnings quality (Klish et al., 2021, p. 572). Recent studies have also shown that earnings quality is determined by internal factors such as managerial ability, audit quality, and governance characteristics. These factors influence how accounting estimates are constructed and employed within the reporting process, making provisions a decisive accounting instrument in explaining the subsequent behavior and stability of earnings (Bazrafshan et al., 2023, p. 3086; Verma et al., 2023, p. 26).

From this perspective, the accounting relationship between the quality of provision estimates and subsequent earnings surprises is based on the fact that any deviation in estimating provisions in the current period is reflected in subsequent periods in the form of differences between realized earnings and the earnings that users had expected based on previous information, because the accounting basis on which the expectations were built was not sufficiently stable or accurate (Green & Zhao, 2022, p.

121; Pan & Huang, 2023, p. 2). In the same context, the accounting literature explains the relationship between estimating provisions and mitigating net profit volatility: provisions are a mechanism for distributing expected losses or liabilities over appropriate periods and when this mechanism is disciplined, it contributes to achieving a higher diploma of relative equilibrium smoothing. Although it is characterized by inaccuracies, exaggerations, or delays, it transfers the effects of estimation errors between intervals and will increase the irregularity and volatility of net profits.

So, the ratio of provisions to total inventory reflects the relative weight of estimated instruments within the economic structure of the company, while the provisioning rate reveals the size of the balance in the rating policy over a 365-day period to any other. Any unjustified increase in these two indicators may suggest fragility in accounting measurement and a higher likelihood of instability in future earnings. This view is supported by literature that has linked financial reporting quality with more stable subsequent financial outcomes and greater efficiency in explaining risks and financing decisions, as it has been shown that lower-quality accounting information weakens the ability of earnings to explain future performance and increases the uncertainty surrounding the company (Lisboa et al., 2025, p. 311). Likewise, studies addressing the role of earnings announcements in explaining volatility confirm that the informational content of earnings is associated with the degree of uncertainty, and that weak accounting measurement quality in items affecting earnings increases the sensitivity of subsequent results and volatility in both performance and the market (Kim et al., 2024, p. 252). Accordingly, the accounting literature logically supports testing the effect of the two indicators of the quality of accounting provision estimates, namely the ratio of provisions to total assets and the rate of change in provisions, on both subsequent earnings surprises and net income volatility, because this relationship represents a natural extension of the relationships among accounting measurement quality, earnings quality, and the stability of financial performance in future periods.

According to the above, the quality of accounting provision estimates is based on the extent of management's ability to measure potential liabilities and losses objectively and in a manner consistent with the company's economic reality. Accounting provisions are not merely a discretionary right that operates within monetary accounting; instead, they reflect the professional judgment they required in terms of popularity and time to assess the magnitude of future risks. In addition, this assessment is completely grounded on a clear basis and verifiable information, the more robust the financial statements and the greater the ability of the revenues to align with the actual performance of the business (Lisboa et al., 2025, p. 311). However, even if estimates of benefits are based on risky or biased judgments, this results in a distortion of actual net benefits and the effects of such distortion are shifted to prior periods.

The importance of accounting provisions is also evident in their relationship to the matching principle and the penalty for accounting irregularities. A company that records provisions in time and at an appropriate price protects profit margins and provides investors, creditors, and auditors with reliable information (Klish et al., 2021, p. 572). By comparison, incorrect estimates of provisioning results in certain financial periods are imposed with fees that may be lower or higher than their actual levels, weakening earnings comparability and undermining the ability to rely on them to anticipate future overall performance. The high quality of benefit estimates therefore represents one of the important strategies for explaining the high quality of earnings because it reveals evidence of monitoring discipline in product usefully based on business evaluations ..

Second Subsection: IAS 37 and the Iraqi Accounting Environment

International Accounting Standard (IAS) 37, Provisions, Contingent Liabilities and Contingent Assets, provides the most direct conceptual basis for evaluating the soundness of accounting provision estimates. Under the Standard, a provision is recognized when the entity has a present legal or constructive obligation arising from a

past event, an outflow of resources is probable, and the amount can be estimated reliably. These conditions place professional judgment at the center of provisions accounting because management must assess both the existence of the obligation and the probability and amount of the expected settlement (IFRS Foundation, 2022, IAS 37, paras. 14–25).

IAS 37 also requires the amount recognized as a provision to represent the best estimate of the expenditure required to settle the present obligation at the reporting date. The estimate is based on management judgment, experience with similar transactions, available evidence, and the range of possible outcomes. The Standard further requires provisions to be reviewed at each reporting date and adjusted to reflect the current best estimate. Therefore, quality in this area is not limited to the numerical amount recorded; it also relates to the consistency of the estimation basis, the reasonableness of assumptions, the timely revision of estimates, and the adequacy of related disclosure. Weakness in any of these elements can shift expenses and earnings across reporting periods and reduce the predictive value of accounting information (IFRS Foundation, 2022, IAS 37, paras. 36–59).

The Iraqi environment gives this issue additional importance. The movement toward international reporting practices has not been uniform across all sectors. According to the IFRS Foundation jurisdiction profile for Iraq, IFRS Accounting Standards have been required for banks since 2016, whereas they are permitted but not generally mandatory for other domestic public companies, many of which continue to use national accounting standards. For industrial companies, this creates an accounting environment in which the quality of professional judgment, internal accounting policies, disclosure practices, and the degree of convergence with international requirements may differ from one company to another. This variation supports examining provision estimates as an applied indicator of the quality and consistency of accounting measurement rather than assuming a fully uniform reporting framework across the sample (IFRS Foundation, 2020).

Third Subsection: Measurement Indicators of Accounting Provision Estimates

In this study, the independent variable is represented by the quality of accounting provision estimates and is operationalized through two indicators. The first indicator is the ratio of provisions to total assets, which shows the relative weight of provisions within the company's financial structure. A higher or lower ratio should not be interpreted in isolation as evidence of better or poorer quality; rather, it must be understood in light of the nature of the company's obligations, risks, and accounting policy. The second indicator is the rate of change in accounting provisions, which reflects the degree of stability or change in estimates from one year to another. Large changes may be justified when underlying risks or obligations change, but repeated unexplained changes may indicate instability in estimation assumptions. This interpretation is consistent with IAS 37, which requires provisions to reflect the best estimate available at the reporting date and to be reviewed when circumstances change (IFRS Foundation, 2022, IAS 37, paras. 36–59).

Fourth Subsection: Subsequent Earnings Surprises

The first dependent variable is subsequent earnings surprises, which refer to differences that appear in subsequent earnings compared with the expectations derived from previous performance. Earnings surprises are associated with the quality of previous accounting information because investors and analysts rely on reported earnings in building their future expectations. If the provisions estimated in the current period are inaccurate, current earnings will not properly reflect economic performance, which leads to subsequent differences between expected earnings and realized earnings. Thus, the quality of provision estimates is a factor affecting the magnitude of subsequent earnings surprises because it affects the informational basis on which financial performance expectations are built. In this sense, the earnings surprise is not treated only as a change in the reported earnings figure, but as a subsequent signal of how accurately prior accounting information represented the

economic conditions on which expectations were formed (Green & Zhao, 2022, pp. 121–123; Pan & Huang, 2023, pp. 2–4).

The theoretical link with accounting provisions appears through the timing of recognition. If a current-period provision is materially understated or overstated, current earnings may carry an amount that does not fully correspond to the economic burden associated with the obligation. When the estimate is corrected, reversed, or settled in a later period, the difference becomes part of the subsequent earnings movement. Therefore, consistent and supportable provision estimates can reduce avoidable differences between expected and realized earnings, whereas unstable estimates may increase the informational uncertainty surrounding future earnings.

Fifth Subsection: Net Income Volatility

The second dependent variable is net income volatility, which expresses the degree of instability in earnings over time. Net income volatility is considered an important indicator of earnings quality because earnings that are stable and consistent with operating activity are more reliable for decision-making. Accounting provisions affect this volatility through the timing of recognizing potential losses and liabilities. When provisions are estimated regularly and consistently, they contribute to allocating the effect of risks to the appropriate periods. However, when provisions change sharply or without justification, their effect is transferred to the income statement and leads to increased volatility in net income from one year to another. This makes volatility relevant to the present study because estimated provisions directly affect the timing and size of expenses recognized in profit or loss and can therefore alter the pattern of net income across successive periods.

From an accounting-quality perspective, volatility is not necessarily undesirable when it reflects real changes in operating conditions. The concern arises when part of the volatility results from irregular recognition, delayed adjustment, or large discretionary changes in estimated provisions. For this reason, the study examines whether the indicators used for provision estimation are associated with changes in the stability of

net income over time, while interpreting the statistical relationship together with the economic and accounting context of the sample companies.

Sixth Subsection: Relationship among the Research Variables

The relationship between the quality of accounting provision estimates and subsequent earnings surprises is based on the idea that current earnings represent a major input in forecasting future earnings. If current earnings include an effect resulting from inaccurate estimation of provisions, this effect subsequently appears in the form of earnings surprises. The relationship between the quality of provision estimates and net income volatility is also based on the fact that estimated items affect both the amount and timing of recognized expenses and therefore affect the stability of final earnings. Accordingly, testing the effect of the quality of provision estimates on subsequent earnings surprises and net income volatility represents a logical extension of the study of earnings quality in Iraqi listed industrial companies. The conceptual expectation is therefore that changes in provision estimates can influence both the magnitude of later deviations in earnings and the degree of earnings stability, although the direction and timing of the effect remain an empirical question to be determined by the short-run and long-run results of the Panel ARDL models.

Thirteenth: Analytical and Practical Framework:

The research relied in its practical aspect on balanced panel data combining the cross-sectional dimension represented by five listed Iraqi industrial companies and the time dimension extending from 2012 to 2025. The use of pooled analysis does not mean neglecting the specific characteristics of each company, because the panel model allows the differences among companies to be combined with temporal changes within a single econometric framework. This approach is appropriate in addition to checking the individual effects by comparing companies one by one, because the range of years available for each activity is relatively limited, while panel methods provide more observations and increase the estimation performance.

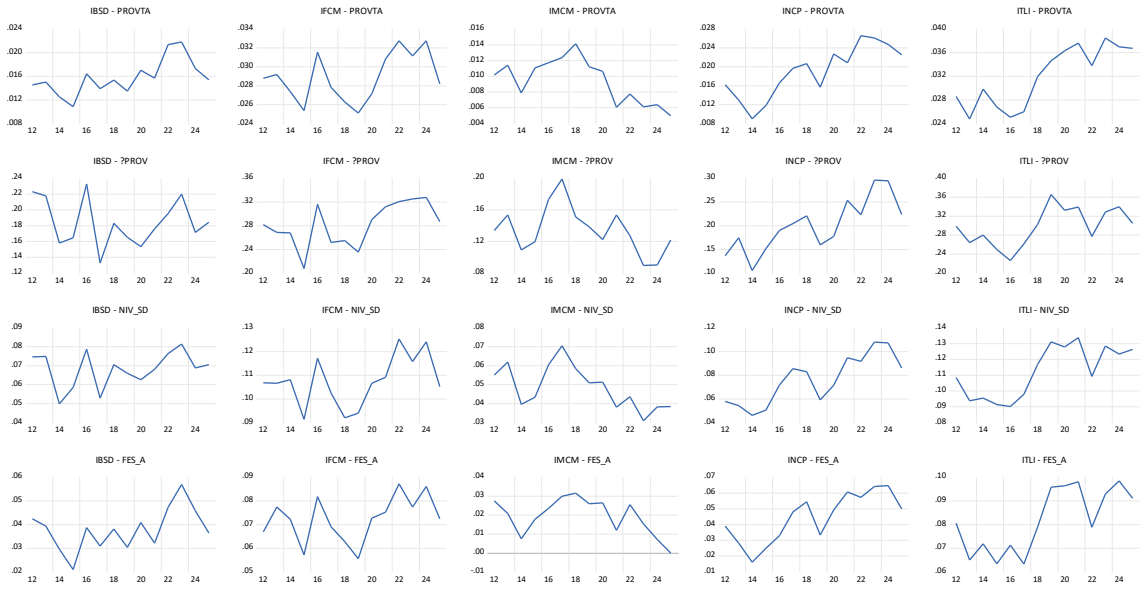
Table 2. Descriptive Statistics of the Research Variables in the Iraqi Companies Included in the Study Sample During the Period 2012–2025

	PROVTA	_PROV	NIV_SD	FES_A
Mean	0.021011	0.219854	0.082578	0.051208
Median	0.021102	0.220246	0.082175	0.049560
Maximum	0.038467	0.365642	0.133743	0.098467
Minimum	0.005000	0.089720	0.030964	-5.18E-05
Std. Dev.	0.009240	0.072908	0.027993	0.025746
Skewness	0.106204	0.093587	0.057064	0.082513
Kurtosis	1.870758	1.883596	1.891472	1.981439
Jarque-Bera	3.850886	3.737393	3.622089	3.105373
Probability	0.145811	0.154325	0.163483	0.211679
Observations	70	70	70	70

Source: Prepared by the researcher based on EViews 13.

The descriptive fact table shows that for the period 2012–2025, the research variables in Iraqi industrial firms were characterized by appropriate variation evidence and statistical regularity. The average ratio of total assets to provisions changed to approximately 0.02, indicating that provisions represent an extremely limited part of the general economic assets of the institutions, with a minimum of zero.01 and the majority of .04, which reflects the net differences between the groups. The step size of identified joint provisions changed to 2. annual movement in the revaluation of provisions, reflecting the flexibility of this accounting item and its sensitivity to operating assumption adjustments In contrast, the volatility of comprehensive net income is 0.08, indicating that profitability of companies is not always very_strong. which is expected in a trading environment affected by changes in price, calls and liquidity. Typical subsequent earnings surprises were .05, i.e. skewness values of all variables clearly confirmed substantial changes compared to what could be inferred from past performance with advance gains were additionally close to zero, ranging from 0.06 to o.oo which indicates that the distribution of the variable is, as supported by the information from the mean analysis.

Figure 1. Development Path of the Research Variables Over Time



Source: Prepared by the researcher based on EViews 13.

The figure showing how the research variables develop over time indicates that the ratio of provisions to total assets, the rate of change in accounting provisions, net income volatility, and later earnings surprises did not follow one steady pattern, but instead seemed to shift with varying fluctuations across companies and over the years. From an accounting perspective , this suggests that the way provisions are formed and later re-estimated was not fully uniform among the economic units. Some firms, for example, display higher ratios of provisions to total assets than others, and that can point toward more accounting conservatism or maybe larger perceived risks. Also , the pathway for the rate of change in accounting provisions shows distinct ups and downs, which implies this measure is shaped not only by the steadiness of accounting policy but also by management's reassessment, of possible liabilities and losses, from one year to the next. The figure further suggests that net income volatility and later earnings surprises do not track in a stable way , and that supports the theoretical claim that the quality of provision estimates could play a role in earnings instability, and in how strong the later deviations in reported financial results are.

Table 3. Results of the Cross-Sectional Dependence Test for the Research Variables Using the Breusch–Pagan LM Test

Cross-Section Dependence Test Series: PROVTA Null hypothesis: No cross-section dependence (correlation) Sample: 2012 2025 Periods included: 14 Cross-sections included: 5 Total panel observations: 70 Note: non-zero cross-section means detected in data Cross-section means were removed during computation of correlations			
Test	Statistic	d.f.	Prob.
Breusch-Pagan LM	1.815766	10	0.0694
Cross-Section Dependence Test Series: _PROV			
PROV – Test	Statistic	d.f.	Prob.
Breusch-Pagan LM	16.66110	10	0.0822
Cross-Section Dependence Test Series: FES_A			
Fes-A – Test	Statistic	d.f.	Prob.
Breusch-Pagan LM	2.66625	10	0.1060
Cross-Section Dependence Test Series: NIV_SD Null hypothesis: No cross-section dependence (correlation) Sample: 2012 2025			
Test	Statistic	d.f.	Prob.
Breusch-Pagan LM	1.114131	10	0.2652

Source: Prepared by the researcher based on EViews 13.

The effect of the cross-sectional dependence test with the Breusch–Pagan LM test indicates that there should not be a large cross-sectional dependence on the number of units retained in the test base. Consider the possibility that the ratio of provisions to total assets became 0.07, 0.08 for charges of changes in accounting provisions, zero in reserve income surprises.Eleventh, the volatility of net profit is 0.00 and.27, all of which can be greater than the 5% of significance. This method is that the movement of each variable in a given firm is not implicitly determined by using the function of the same variable within other activities, and that each organization still has a relative degree of individuality in its accounting-cost behavior. From an analytical point of view, this result is important because it shows that changes between provisions or earnings variances are not necessarily due to complete public surprises, but are more related to each employer's capabilities and own accounting policies .

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Table 4. Results of the Unit Root Test for the Research Variables in Panel Data Using the ADF–Fisher and Choi Z-stat Tests

Null Hypothesis: Unit root (individual unit root process) Series: _PROV Sample: 2012 2025 Exogenous variables: Individual effects Automatic selection of maximum lags Automatic lag length selection based on SIC: 0 to 1 Total number of observations: 64 Cross-sections included: 5		
Method	Statistic	Prob.**
ADF - Fisher Chi-square	21.5766	0.0174
ADF - Choi Z-stat	-2.36870	0.0089
Null Hypothesis: Unit root (individual unit root process) Series: PROVTA		
Method	Statistic	Prob.**
ADF - Fisher Chi-square	8.07770	0.6212
ADF - Choi Z-stat	0.00477	0.5019
Null Hypothesis: Unit root (individual unit root process) Series: D(PROVTA)		
Method	Statistic	Prob.**
ADF - Fisher Chi-square	49.8339	0.0000
ADF - Choi Z-stat	-5.48541	0.0000
Null Hypothesis: Unit root (individual unit root process) Series: FES_A		
Method	Statistic	Prob.**
ADF - Fisher Chi-square	16.5129	0.0359
ADF - Choi Z-stat	-1.63448	0.0111
Null Hypothesis: Unit root (individual unit root process) Series: NIV_SD		
Method	Statistic	Prob.**
ADF - Fisher Chi-square	25.2869	0.0048
ADF - Choi Z-stat	-2.72261	0.0032

Source: Prepared by the researcher based on EViews 13.

The unit root test results show that the rate of change in accounting provisions was stationary at levels, as the probability of the ADF–Fisher test was approximately 0.02 and that of the Choi Z-stat test was approximately 0.01. Subsequent earnings surprises and net income volatility were also stationary at level, with probabilities below 0.05, indicating that these variables do not suffer from a unit root problem and can be used directly in estimation. In contrast, the ratio of provisions to total assets was not stationary at level, as the probabilities were 0.62 and 0.50 in the two tests respectively, but it became stationary after taking the first difference, where the probability fell to 0.00 in both tests. Therefore, the study variables represented a mixture of integration of order zero and integration of order one, making the use of the autoregressive distributed lag model for cross-sectional time-series data econometrically appropriate. From an accounting perspective, this reflects that some indicators, such as the ratio of provisions to total assets, have a long-term cumulative tendency associated with the company's financial policy, whereas earnings surprises, net income volatility, and the rate of change in provisions reflect to a cyclical or annual movements more closely related to current operational responses.

Table 5. Results of Model 1 Estimation

Dependent Variable: D(FES_A)
Method: ARDL
Sample: 2014 2025
Included observations: 60
Maximum dependent lags: 2 (Automatic selection)
Model selection method: Akaike info criterion (AIC)
Dynamic regressors (2 lags, automatic): _PROV PROVTA
Fixed regressors: C
Number of models evalulated: 4
Selected Model: ARDL(2, 2, 2)
Note: final equation sample is larger than selection sample

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
Long Run Equation				
_PROV	-0.035684	0.006430	-5.549246	0.0000
PROVTA	3.073960	0.058818	52.26206	0.0000
Short Run Equation				
COINTEQ01	-1.174952	0.407563	-2.882871	0.0069
D(FES_A(-1))	0.376757	0.220863	1.705836	0.0974
D(_PROV)	0.054673	0.021683	2.521447	0.0167
D(_PROV(-1))	0.008377	0.014366	0.583123	0.5638
D(PROVTA)	-1.077964	1.314001	-0.820368	0.4179
D(PROVTA(-1))	-0.962575	0.820487	-1.173176	0.2491
C	-0.007424	0.002731	-2.718065	0.0104

Root MSE	0.002792	Mean dependent var	0.000319
S.D. dependent var	0.011202	S.E. of regression	0.004066
Akaike info criterion	-6.874083	Sum squared resid	0.000546
Schwarz criterion	-5.685593	Log likelihood	277.5929
Hannan-Quinn criter.	-6.402001		

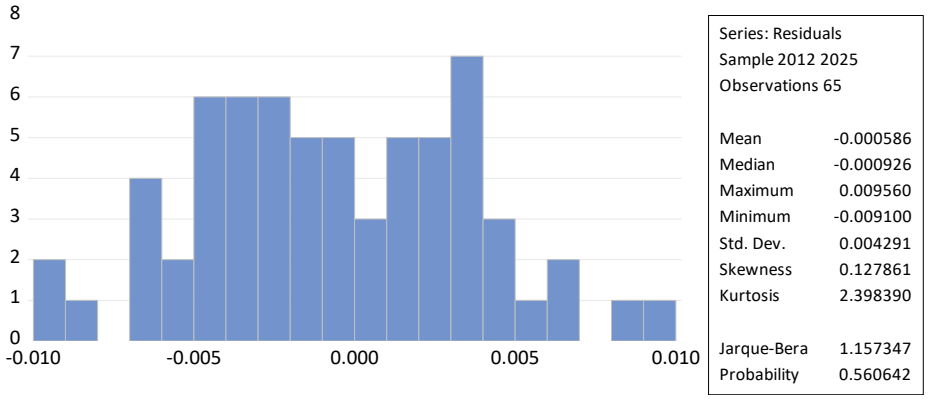
Source: Prepared by the researcher based on EViews 13.

The autoregressive distributed lag model for subsequent earnings surprises shows that the quality of accounting provision estimates has a substantial effect on this variable in the long run. The results showed that the rate of change in accounting provisions has a negative and significant effect, with an impact coefficient of -0.04 at a significance level of 0.00, meaning that large or unstable increases in the re-estimation of provisions are associated with lower subsequent earnings surprises. From an accounting perspective, this suggests that high volatility in provisions may reflect the sensitivity of estimates, reducing predictability of future earnings. In the estimation, the ratio of total content and provisions was modified to be positioned to have a strong and significant effect on subsequent earning surprise, with a coefficient of 3.07 at a significance level of 0.00. From an accounting point of view, it can be suggested that businesses that maintain a good level of provision in relation to their assets may be more conservative in including charges, which sooner or later will be considered in the relative development of actual earnings compared to expected earnings . Accordingly,

the long-run results support H1a concerning the effect of the ratio of provisions to total assets and support H1b concerning the effect of the rate of change in accounting provisions. On this basis, the first main hypothesis (H1) is supported in the long run for the five companies included in the study sample.

The error correction coefficient was also negative and significant at -1.17 with a probability of 0.01, confirming the existence of a long-run equilibrium relationship and the high ability of the model to correct short-run deviations very rapidly. In the short run, the current change in the rate of change in accounting provisions was found to have a positive effect on subsequent earnings surprises, with a coefficient of 0.05 and a probability of 0.02, while the current or lagged differences in the ratio of provisions to total assets showed no significant short-run effect. This result suggests that the accounting effect of provisions on earnings surprises becomes clearer when it accumulates in the long run compared with temporary annual changes. The decline in the root mean squared error to approximately 0.00 and the Akaike criterion value of -6.87 also indicate that the model fits the data well. At the short-run level, H1b is supported only for the current change in the rate of change in provisions, whereas H1a is not supported for the current and lagged changes in the provisions-to-total-assets ratio. Therefore, the short-run evidence provides partial, rather than complete, support for H1.

Figure 2. Normality Test of the Residuals of Model 1



Source: Prepared by the researcher based on EViews 13.

Regarding the normal distribution of the residuals of the original model, the figure shows that the residuals of the following earnings surprise model follow a pattern close to a normal distribution. The Jarque–Bera test value was about 1.16 with a probability of 0.56, it is statistically insignificant. The mean is approximately 0.00, and the standard deviation was around zero.00, even when the skewness turned to slightly higher quality at 0.13 and the kurtosis at 2.40, values that do not indicate

excess variance within the shape of the distribution. From an econometric perspective, this result enhances the reliability of the estimates derived from the first model and supports reliance on the effect coefficients in interpreting the relationship between the quality of accounting provision estimates and subsequent earnings surprises.

Table 6. Results of Model 2 Estimation

Dependent Variable: D(NIV_SD)
Method: ARDL
Sample: 2014 2025
Included observations: 60
Maximum dependent lags: 2 (Automatic selection)
Model selection method: Akaike info criterion (AIC)
Dynamic regressors (2 lags, automatic): PROVTA _PROV
Fixed regressors: C
Number of models evalulated: 4
Selected Model: ARDL(2, 1, 1)
Note: final equation sample is larger than selection sample

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
Long Run Equation				
PROVTA	1.737213	0.200770	8.652746	0.0000
_PROV	0.176643	0.022894	7.715627	0.0000
Short Run Equation				
COINTEQ01	-1.161324	0.140022	-8.293895	0.0000
D(NIV_SD(-1))	0.092487	0.058188	1.589464	0.1193
D(PROVTA)	-0.450263	0.213873	-2.105282	0.0411
D(_PROV)	-0.014144	0.038584	-0.366586	0.7157
C	0.008431	0.001503	5.608939	0.0000

Root MSE	0.002898	Mean dependent var	0.000587
S.D. dependent var	0.013361	S.E. of regression	0.003697
Akaike info criterion	-6.776696	Sum squared resid	0.000588
Schwarz criterion	-5.909419	Log likelihood	264.1844
Hannan-Quinn criter.	-6.432203		

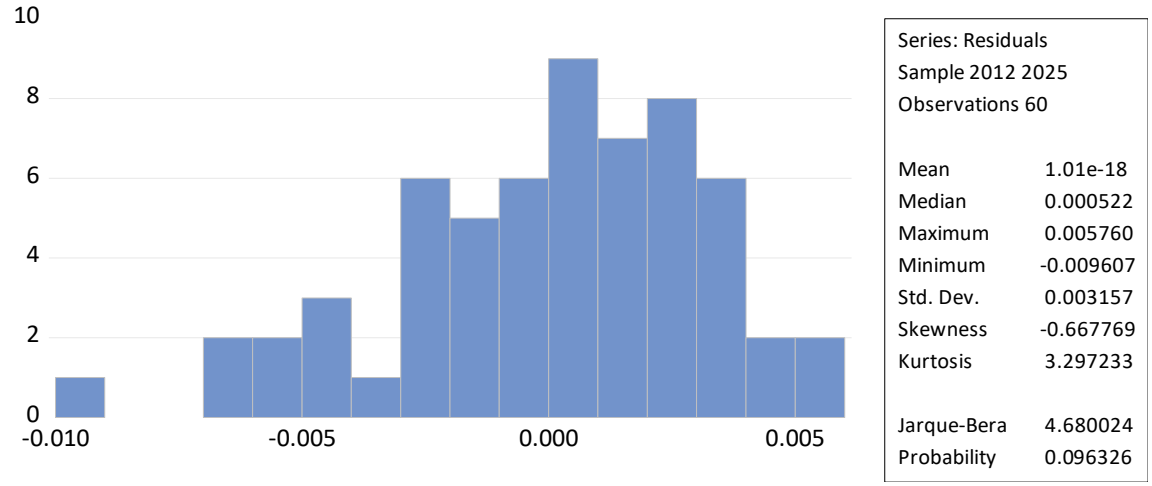
Source: Prepared by the researcher based on EViews 13.

The results of the autoregressive distributed lag model for net income volatility reveal a positive and significant effect of the quality of accounting provision estimates on this variable in the long run. The coefficient of the ratio of provisions to total assets was 1.74 at a significance level of 0.00, while the coefficient of the rate of change in accounting provisions was 0.18 at a significance level of 0.00. This means that an increase in the size of provisions within the asset structure and an increase in annual changes in their estimation are both associated with higher net income volatility. From an accounting perspective, this indicates that heavy reliance on estimated items, or instability in their estimation from one year to another, causes the effect of accounting judgments to be transferred to final earnings in a manner that increases their instability over time. Accordingly, the long-run results support H2a and H2b, and therefore

support the second main hypothesis (H2) in the long run for the companies included in the sample.

In the short run, the current change in the ratio of provisions to total assets was found to have a negative and significant effect on net income volatility, with a coefficient of -0.45 and a probability of 0.04. From an accounting perspective, this result can be interpreted as indicating that an immediate increase in provision formation may play a conservative role that temporarily reduces the apparent volatility in net income before its cumulative effect in the long run turns into a factor that increases instability. In contrast, the acceleration of accounting provisions did not show a significant short-run effect, as its probability was 0.72. The error correction coefficient was also negative and significant, with a value of -1.16 and a probability of 0.00, confirming the existence of a long-run equilibrium among the variables with a high speed of return to this equilibrium after any short-run shock. Likewise, the low root mean squared error and the Akaike criterion value of -6.78 indicate a good fit of the model and its ability to represent the accounting relationship between provisions and net income volatility in an acceptable manner. At the short-run level, H2a is supported for the current change in the provisions-to-total-assets ratio, while H2b is not supported because the current change in accounting provisions is statistically insignificant. Hence, the short-run evidence for H2 is partial.

Figure 3. Normality Test of the Residuals of Model 2



Source: Prepared by the researcher based on EViews 13.

The figure concerning the normal distribution of the residuals of the second model shows that the residuals of the net income volatility model are reasonably close to the normal distribution. The Jarque–Bera test value was approximately 4.68 with a probability of 0.10, which is greater than 0.05, meaning that the hypothesis of normal distribution is not rejected. The mean of the residuals was also very close to zero, and the standard deviation was approximately 0.00, while skewness recorded a moderate

negative value of -0.67 and kurtosis was 3.30. These indicators support a moderate trend near the left, though not currently to an extent that it weakens the validity of the publication. From an analytical angle, this end result supports and suggests that the support of the second edition depends on explaining the favorable effect of accounting supply estimates on the volatility of Internet revenues demonstrating that the random errors are distributed in an acceptable manner, thereby strengthening the soundness of the conclusions derived from the econometric results.

Fourteenth: Conclusions:

1- The theoretical analysis shows that accounting provisions are among the accounting estimates most dependent on professional judgment. IAS 37 links their recognition and measurement to a present obligation, probable outflow, reliable estimation, and the best estimate available at the reporting date. Therefore, consistency in estimation, review, and disclosure is an important part of the reliability of earnings information.

2- In Model 1, the ratio of provisions to total assets had a positive and significant long-run effect on subsequent earnings surprises, while the rate of change in accounting provisions had a negative and significant effect. Accordingly, H1a, H1b, and the first main hypothesis (H1) are supported in the long run, while the short-run evidence is only partial.

3- In Model 2, both the ratio of provisions to total assets and the rate of change in accounting provisions had positive and significant long-run effects on net income volatility. Accordingly, H2a, H2b, and the second main hypothesis (H2) are supported in the long run, while the short-run evidence is partial because the current rate of change in provisions was not significant.

4- The negative and significant error-correction coefficient in both models confirms a long-run equilibrium relationship and indicates that the accounting effects associated with provision estimates may accumulate over more than one reporting period rather than appearing fully within a single year.

5- The empirical findings are limited to the five industrial companies in the study sample and to the period 2012–2025. Therefore, the results describe the relationships observed within this sample and should not be generalized to all Iraqi industrial companies without testing them on a broader sample and across additional sectors.

Fifteenth: Recommendations:

1- The research recommends strengthening the professional and procedural controls governing the estimation of accounting provisions in the companies included in the sample by establishing clear and written internal foundations based on objective and verifiable indicators when calculating provisions, thereby reducing excessive reliance on uncontrolled personal judgment.

2- The research recommends increasing accounting disclosure about the components of provisions, the bases for their formation, and the reasons for their changes from one year to another, so that investors, analysts, and auditors can better assess earnings quality and the causes of subsequent earnings changes and net income instability.

3- The research recommends that audit committees and external auditors give greater attention to provisions, particularly when provision estimates record large or repeated changes, because this item depends substantially on professional judgment and can affect the credibility and comparability of reported earnings.

4- The research recommends expanding future studies by using larger samples and introducing control variables such as company size, financial leverage, audit quality, and governance, as well as conducting comparisons among industrial, banking, and service sectors to improve the scope of inference beyond the five companies examined in the present study.

Sixteenth: Proposals for Future Research:

The study proposes that future research expand the examination of the effect of the quality of accounting provision estimates on other indicators of financial reporting quality, such as earnings persistence, accounting conservatism, earnings management, and accrual quality. Control variables such as company size, financial leverage, audit quality, and corporate governance may be introduced. Comparative studies among the industrial, banking, and service sectors are also recommended, together with the use of more advanced econometric models such as dynamic models, threshold models, and nonlinear models.

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