## Impact of Accruals Quality on the Firm's Cash Holdings: A Cross-Sectoral Evidence from Iraq

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## Abstract

This research aims to study the concept of the quality of accounting accruals and ways of measuring them, determine the quality levels of accounting accruals across the different companies listed on the Iraqi Stock Exchange, and show their impact on cash balances. The research sample included many companies, including 69 companies from all nine sectors listed on the Iraqi Stock Exchange for the duration of (2010-2018). The problem and hypotheses of the research focused on whether the quality of accounting accruals impacted the Company's cash holding levels. The hypotheses of the study have been verified and proven. A set of conclusions has been reached, the most important of which is an essential variation in the quality levels of accounting accruals of companies listed on the Iraqi Stock Exchange, whether within the same sector or between the different sectors listed on the Iraqi Stock Exchange. The results of the research also showed that companies operating in the financial services sectors in Iraq are characterized by high-quality accruals and high levels of cash holding ratios compared to companies from other sectors with non-financial services as a result of the sensitivity of financial operations and the low personal estimates of optional accruals. The results also showed that companies listed on the Iraqi Stock Exchange tend to hold low cash balances when they have a high quality of accounting accruals compared to companies with low benefit quality that show that they maintain high levels of cash balances. Therefore, attention should be paid to educating investors and creditors on the Iraqi Stock Exchange to understand and interpret the accounting figures and information contained in the reports and financial lists of Iraqi companies and the use of financial analysts and accountants in this field.

## Keywords

Quality of Accruals, Cash Balances, Business Sectors, Information Quality.

## Introduction

The quality of accounting accruals is one of the indicators of the quality of accounting information. Accounting accruals take the largest share of economic accounting policies that companies may resort to beautify their results and financial position (Al-Fatlawi, Al Farttoosi, & Almagtome, 2021). Many company departments may use methods and accounting procedures that lead to the postponement of recognizing certain expenses. The mention of some of the revenues to subsequent and current financial periods respectively to control a desirable level of economic illness during successive economic periods. The selection and use of policies, methods, and accounting estimates may affect the quality and results of corporate financial operations (Ali, Almagtome, & Hameedi, 2019). Therefore, the quality of accounting information presented in the financial statements may have varying effects and implications for the quality of accounting information (A. Almagtome, Khaghaany, & Önce, 2020). This research was conducted to investigate whether the quality of accounting accruals impacted the retention levels of cash balances in the Company and across various business sectors in Iraq.

Dechow & Dichev, in their model, depending on the Dechow & Dichev scale (2002) as an essential indicator for measuring the quality of accounting accruals based on the estimate of errors and noise that accompany assumptions and forecasts of future cash flows when accounting benefit calculations. Quality of accruals and accounting profits decreases in the noise (Estimation noise) estimate in accruals. Therefore, accounting accruals correct timing problems in cash flows at the expense of including errors in forecasts of accounting accruals. On the other hand, this research was relied upon to measure cash balances on the ratio of cash balances and investments in short financial corridors (A. H. Almagtome, Al-Yasiri, Ali, Kadhim, & Bekheet, 2020). This research shows a significant variation in the quality levels of accounting accruals of companies listed on the Iraqi Stock Exchange. Within the same sector and Companies operating in the financial services sectors enjoyed higher cash retention ratios than companies from other sectors with non-financial services. The results also indicate that a higher-quality research sample of high accounting accruals tends to hold low cash balances.

Oluoch, Namusonge & Onyango (2015) contributes for the first time to provide a grit of the Iraqi environment on the quality levels of accounting accruals for companies listed on the Iraqi Stock Exchange and for all business sectors and to show the extent of variation in their application within different industries and a large sample of companies (69) companies for the period from 2010 to 2018. The results contribute significantly to previous studies in

four ways. First: this research provides additional empirical evidence to regulators, regulators, and researchers on the continuing controversy about the effects of accounting policies and the behavior of different departments in influencing the quality of accounting information and its implications for critical financial joints in the Company and on various business sectors. Third: This research contributes to providing necessary evidence from the Iraqi environment about the levels of cash balances held by companies listed on the Iraqi Stock Exchange and all business sectors and analysis of variation at the level of different business sectors. The results of this research contribute to providing empirical evidence from the Iraqi environment on the importance of the quality of accounting accruals in influencing the cash balances held to raise awareness among investors and creditors on the one hand and to provide important information to regulators to reduce profit management practices and provide protection to investors in the financial markets in Iraq. The rest of this research revolves around section 2, which presents a theoretical background on the most important topics related to this research and reviews previous studies' results. Section 3 develops primary research hypotheses. Section 4 describes the research sample, data collection procedures, and the most important statistical models used in the research. Finally, part 5 presents the descriptive statistics of research variables and presents and discusses the results of a multi-regression analysis.

## **Theoretical Background**

#### **1. Accruals Quality**

The quality of accruals is a tremendous and necessary indicator of the accounting information's quality and the degree and character of expectations regarding the Company's short-term share price (Manali Manali et al., 2019). Martinez emphasizes the critical role of accounting accruals in earnings exceeding cash flows. In other words, accounting accruals are components of accounting results that change the timing of cash flow recognized to enhance the monetary unit's assessment of economic performance (Martinez, 2008). The finance team's total accruals may be calculated as the difference between net profit and operating cash flow, a critical component of the economic unit is earnings (Leal et al., 2017). As a result, the monetary unit is accruals are equal to the difference between declared profits and cash flows from operations. Additionally, it protects the economic unit of high-quality accruals from information risks associated with future cash flows and earnings by decreasing information asymmetry between companies and market players (Shin& Oh, 2017).

Accounting accruals are defined as temporary adjustments that solve timing problems and mismatches in basic cash flows at the expense of assumptions and estimates (Dechow & Dichev, 2002). Dechow & Dichev considers that the high accuracy of the accounting benefit estimate indicates a good match between current accruals and past, current, or future cash flows. Therefore, inaccurate or erroneous estimates of accounting. Accruals may create some noise in the values of accounting accruals, thereby reducing their beneficial role (Al-Wattar, Almagtome, & AL-Shafeay, 2019). Many studies show that the quality of accounting accruals is the most representative and highest-rate indicator in the application to measure the quality of profits and demonstrate the reliability of those profits (Dechow et al., 2010). The quality of the benefit is also an essential measure of the reliability of profitreflecting information (Amagtome & Alnajjar, 2020). Still, the maturity estimate is linked to optional and non-optional estimates that affect the credibility of profits in financial calculations (Oluoch et al., 2015). The majority of these research place a premium on the quality of accruals (Dechow et al. 1996; (Subrahmanyan, 1996). It demonstrates that accruals improve future cash flow predictability. Creditors will find it difficult to forecast future cash flows (through which debt repayments would be indicated) using accounting information due to the low quality of low accruals.

On the other hand, we consider that accruals require an estimate of future cash flows. The quality of receivables can cast doubt on the future distribution of the Company's payments and affect information asymmetry between informed and uninformed investors. As a result, the quality of the weak accruals of borrowers should lead to higher costs of property rights.

Accounting accruals with operating cash flows achieved during the previous, current, and future periods in total (Khaghaany, Kbelah, & Almagtome, 2019). Accordingly, the quality of accounting accruals indicates the quality of the information, accounting profits, and the size of the Company's profit management practices through levels of collection and payment of accounting accruals for deferred cash flows paid or collected for periods of achievement. The high percentage of optional accounting accruals indicated that the quality of accounting accruals was initially reduced due to the high level of intervention and management's control over the assessment of these accruals. But this is not a final indication of the low quality of accounting accruals leads to a rise asymmetry of accounting information, thereby undermining the confidence of investors and creditors in the credibility of accounting information and reliability to her in making his various investment decisions.

## 2. Cash Balances

The term "cash balances" refers to funds held by the Fund or immediately accessible for investment in physical assets or payout to investors (Gill & Shah, 2012). Companies retain a certain amount of cash or cash flow according to their needs and various motives that may be prudent, speculative, or business facilitation purposes, particularly buying and selling (Isshaq & Bokpin, 2009). Cash balances are considered of interest to the Company's stakeholders, whether from within the Company or outside the Company and internally. The efficiency of managing cash balances is the most important indicator of management evaluation by maintaining sufficient balances to the extent that the risk of non-fulfillment of obligations is minimal with no uninvested cash surpluses. This contributes to reducing the return on invested capital. From the point of view of third parties, legislation in some countries is concerned with determining the minimum liquidity of companies, particularly financial institutions and banks. As current cash balances and future cash flows are the most crucial indicator on which creditors rely in assessing the economic unit's ability to meet obligations (Hidayah & Rahmawati, 2019).

Ang believes that there are two main reasons for holding cash balances: (transactions and hedging). First, businesses gain from cash retention because it enables them to decrease transaction costs by making payments with cash rather than raising external capital or selling assets (Ang, 1991). Second, Myers & Majluf points out that asymmetry of information may improve the cost of external financing. Therefore cash reserves can provide companies with appropriate investment opportunities to rely on their internal resources as a precautionary motive (Myers & Majluf, 1984). Companies may also store cash to cope with unexpected emergencies and warn of future cash deficits. Thus, to minimize the expenses associated with liquidity constraints, cash reserves safeguard limited companies from being unable to access money when lucrative possibilities present themselves or when loan repayments are due. Nonetheless, the prudential reason for maintaining cash reserves remains the primary one (Han & Qiu, 2007).

On the other side, keeping cash amounts incurs expenses since the cost of lost opportunities may increase due to the poor rate of return on liquid assets. Thus, corporate administrations weigh the benefits of higher cash levels against the expenses of keeping liquid assets to decide the higher cash levels and often reach the goal levels (Opler et al., 1999). Liquidity risks indicate that the Company will be unable to finance asset acquisitions or meet its financial obligations upon maturity without incurring unacceptably high costs or losses from fundraising and asset liquidation. It might occur as a result of the financial institution's incapacity to manage unanticipated reductions. In addition, changes in funding sources or

a failure to detect or control changes in market circumstances might impair the Company's capacity to sell assets swiftly and with the possible minor loss of value (Martnez-Sola et al., 2018).

Therefore, the importance of cash balances and management policy may vary from another LI according to the company's performance data, financial position, reputation, and approved financial and credit policies. Moreover, the importance of cash balances may emerge and be more significant in the short term, as evidenced by the Company's ability to meet its obligations on time. Still, at the same time, the impact may extend to long-term indicators such as the financial suitability of the Company to meet its long-term obligations and the Company's chances of obtaining long-term loans.

## **Hypothesis Development**

Barth et al. indicated that there is a specific role for accounting accruals in predicting future cash flows. They explained that each element of maturity reflects different information related to future cash flows and that total profits hide this information as expected. Hence, the classification of accounting accruals to its main components greatly enhances the predictability of future cash flows and the current cash flow. As a result, the maturity components of current profits have a much greater predictive capacity for future cash flows (Barth et al., 2001). Additionally, there is a link between accounting quality and information asymmetry between firms and external capital providers regarding investment efficiency, as financial reports transmit projected cash flows. As a result, it assists present and prospective investors in making sound investment decisions. It contributes to the production of high-quality financial statements, therefore reducing information asymmetry between managers and investors. Consequently, adverse selection and external finance costs are reduced, resulting in more efficient investment (Shin et al., 2017).

Reduced information asymmetry aids in the resolution of agency issues. From a different angle, they discovered that high-quality financial reporting is related to greater profitability, which indicates that businesses with superior accounting quality typically have smaller cash holdings (Koo et al., 2017). Thus, a more favorable information environment for companies with high-quality financial reporting can lower the cost of shareholder monitoring, consequently enhancing project selection and alleviating the need to maintain conservative capital levels. Additionally, financial reporting has an impact on dividend policy. This critical choice occurs regularly, involves significant sums of money, interacts with all other critical decisions, and considerably influences the company's worth (Koo et al., 2017).

Profitability issues may also result in internal and external asymmetries, necessitating the economic unit to hold higher-than-normal cash reserves. Asymmetric information results in the Organization miscalculating its cash balances, increasing the expense and difficulty of operating and investing for a money storage company, and the cost of raising external capital. Numerous applied accounting studies examine the quality of accounting accruals as a substitute for the financial reporting of the company. Additionally, it discovers that firms exploit the quality of their accruals to signal clear expectations and enhance their share prices in the near run to obtain external capital. However, the accounting is of low quality due to its financial reporting. In addition, the accounting accruals are of poor quality due to lax internal control, which might risk the Company's resources (Gao & Jia, 2016). According to some studies, the quality of more excellent accounting accruals does not need to be enhanced at large cash balances to fund projects adequately. Thus, a high-quality accruals-based company will have easy access to debt expansion (due to the low information asymmetry between the Company and investors) and at a lower cost, indicating that companies with accruals-based quality do not require high levels of cash assets to carry out their investment projects.

Simultaneously, by resolving the agency's conflicts between shareholders and managers through improved accounting, shareholders' capacity to oversee managers improves. As a result, strengthening cash management procedures, i.e., the quality of an economic unit is accounting accruals, contributes to reducing non-productive cash investments on the monetary unit is balance sheets (Verdi, 2006:3). Faulkender & Wang highlighted that corporate liquidity enables businesses to invest without relying on external financial markets. Thus, cash flow decreases the probability of experiencing financial hardship expenses when the Company's activities do not generate enough cash flow to pay off obligations (Faulkender & Wang, 2006). Therefore, there are different motives behind the other management decisions in the retention levels of cash balances. These motives may vary due to the vision of management and the nature of the objectives that Li seeks to achieve on the one hand and the nature of the financial and economic conditions that the Company may go through on the other. As a result, the most critical factor affecting the determination of cash balances is the quality of accounting accruals, which is one of the essential indicators of the quality of accounting information. The departments of different companies where the quality of accounting accruals are poor tend to maintain high cash balances as corporate administrations seek to increase the freedom to make administrative choices in such a way as to ensure that their interests and accruals are realized and remain in power for as long as possible. On the other hand, the administrations of some companies may use accounting accruals to maintain certain levels of cash balances to rely on them to

finance their various projects as a result of the high cost of relying on external sources of external financing for companies of low information quality, which are characterized by high levels of asymmetry of information, forcing them to rely on internal sources of financing.

Given the low levels of protection of shareholders in third world countries, including Iraq in particular, the Iraq study may be an essential ideal case to verify the impact of the quality of accounting accruals and their motives and justifications on the levels of cash balances in companies operating on the Iraqi Stock Exchange. Therefore, the above discussion could lead to the following hypotheses:

*H1: There are morally significant differences in the quality of accruals* for Iraqi companies within the same business sector and across different *business sectors*.

H2: There are essential differences in the cash balances held for Iraqi companies within the same business sector and across different business sectors.

H3: There is a morally significant impact on the quality of accruals on the cash balances of Iraqi companies.

## Methodology Research Methodology

## **Research Sample**

To achieve the research objectives, all 130 companies listed on the Iraqi Stock Exchange and all 130 sectors were initially targeted for nine industries and for nine years of 2010 E.L. in 2018 to obtain as many views as possible to increase the capacity and statistical significance in testing research hypotheses and producing solid scientific results. Adopted to measure the quality of accruals requires at least seven years of observations per Company. J for the Iraqi Stock Exchange.

After searching and investigating the financial reports of target companies in the search community, some companies were excluded, filtered, sorted and updated, searched pretty and impartially, as described in table 1. As a result, the final sample of the research is 69 all-sector companies listed on the Iraq Stock Exchange for 2010 to 2018. Table 2 shows the percentage of the distribution of companies and the research sample by sectors listed on the Iraqi Stock Exchange and the rate of corporate representation of the research community and by their sectors.

Standard of choice	Number of	
	companies	
All companies listed on the Iraqi Stock Exchange	130	
- Companies established later at the beginning of the financial period of	(15)	
the research sample	(13)	
- Companies that cease their activities or are integrated/transformed	(22)	
Companies whose data were not available	(24)	
Number of companies for the final sample of research	69	

## **Table 1 Research sample selection**

		Number of	Number of	Representation	Representation			
to	Sector name	companies in	companies	ratio of the	ratio of the total			
10	Sector name	the research	in the search	research	sample of			
		community	sample	community	research			
1	Banking sector	44	22	50%	32%			
2	Insurance Sector	5	5	100%	7%			
3	Investment sector	9	5	56%	7%			
4	Services sector	11	7	64%	10%			
5	Industry Sector	25	13	52%	19%			
6	Hotel and Tourism	10	9	90%	13%			
0	Sector	10			15%			
7	Agriculture Sector	7	3	43%	4%			
8	Telecommunications	2	1	50%	10/			
0	sector	2	1	30%	1%			
9	Financial transfer	17	4	24%	6%			
9	sector	1/	4	2470	0%			
Tot	tal	130	69	53%	100%			

## Table 2 Representation ratio of the sample

## **3. Models Measuring Search Variables**

## i. Measuring the Quality of Accruals

The quality of independent variable accruals is the main part of this study, which indicates the quality of the measurement of accruals by measuring the amount of benefit to cash flows. X-gauges and entries adopted and used in previous studies to measure the quality of accruals have multiplied. The idea of a model (Dechow & Dichev, 2002) is based on an estimate of errors and noise that accompany assumptions and estimates of future cash flows when calculating accounting accruals. Dechow & Dichev, 2002, derived their applicable model of benefit quality by considering residual values from the Company's declines in working capital on past, current, and future operating cash flow checks. This is why this research is based on equation (1) to calculate the quality of accounting accruals according to the model (Dechow & Dichev, 2002):

$$TCA_{it} = \alpha_1 + \beta_{1t} CFO_{it-1} + \beta_{2t} CFO_{it} + \beta_{3t} CFO_{it+1} + \beta_{4t} \Delta Sale_{it} + \beta_{5t} PPE_{it} + \varepsilon_{it}$$
(1)

TCA<sub>it</sub> represents the Company's total accruals, while CFO<sub>it-1</sub> represents cash flows from operating activities in the previous year (t-1). CFO<sub>it</sub> represents cash flows from operating activities in the current year (t). CFO<sub>it+1</sub> represents cash flow from operating activities in the coming year (t+1).  $\Delta$ Sale<sub>it</sub> represents the change in sales. PPE<sub>it</sub> represents total property, machinery, and equipment. Current TCA<sub>it</sub> total accruals for research sample companies are calculated through equation 2 as follows:

$$TCA_{it} = \Delta CA_{it} - \Delta CL_{it} - \Delta Cash_{it} + \Delta STD_{it}$$
(2)

Ca<sub>it</sub> represents  $\Delta$  the change in total assets in circulation. The  $\Delta$ CL<sub>it</sub> represents the change in total liabilities.  $\Delta$ Cash<sub>it</sub> represents the change in cash balances. Finally,  $\Delta$ STD<sub>it</sub> represents the change in short-term debt. The quality of accounting accruals is thus measured by measuring the standard deviation of residuals by equivalent regression no. (1) for research sample companies. Residual values, estimated based on the regression equation (1), represent value estimates to explain the variation in working capital in the Dechow & Dichev model, 2002.

$$AQ_{it} = \sigma(\varepsilon_{it})$$
 (3)

AQ<sub>it</sub> represents the quality measure of accounting accruals according to the model (Dechow & Dichev, 2002). While the standard deviation of the remaining textures  $\sigma(\epsilon_{it})$  Represents. The high standard deviation values of the remaining values indicate poor quality of accounting accruals. The higher those values, the lower the quality of accounting accruals.

#### ii. Measuring Cash Balances

The Company's cash balances are measured by relying on the ratio of cash balances and investments in short-term securities to total assets.

## iii. Control Variables

Several controlling variables adopted in previous studies related to cash balances have been used to reduce errors that may result from the impact of these variables on the main variables of research and provide an additional explanation for the subject matter of the study.

Variable name	Icon	Scale	source					
Market value to book value	PBVR	Market value-to-book value ratio	(Bates et al., 2009, Opler et al., 1999)					
Company size	Size	Le UgaritM for total assets	(Ma, 2012:8; Opler et al., 1999)					
Operating cash flow	CFOR	The ratio of cash flows from operations to total assets	(Mansali, Derouiche & Jemai, 2019; Hilgen, 2015)					
Networking capital WCNR		Working capital minus cash and short- term investments divided by total assets	(Shubita, 2019; Mansali, Derouiche & Jemai, 2019).					
Debt financing	DTAR	The ratio of total debt to total assets	(Limanta & Malelak, 2017)					
Imaginary change for the sector	Industry	Represents the fictitious variable of the sector. The Company takes the value (1) if the Company falls within the classifications of the financial services sector and takes (zero) if otherwise.	(Opler et al.,1999; Dittmar et al., 2003; Ferreira & Vilela, 2004; Kusnadi, 2015; Al- Najjar & Clark, 2017)					

 Table 3 Research-control variables for cash balance model

## iv. Model Measuring the Impact of Benefit Quality on the Company's Cash Balances

To measure the impact of the quality of accounting accruals on the Company's cash balances, the following regression was mainly relied upon:

$$CAHO_{it} = \frac{\beta_0 + \beta_1 AQ_{it} + \beta_2 PBVR_{it} + \beta_3 Size_{it} + \beta_4 CFOR_{it} + \beta_5 WCNR_{it}}{+ \beta_6 DTAR_{it} + \beta_7 Industry_{it} + \varepsilon_{it}}$$

CAHO represents the proportion of cash balances. AQ represents the quality of the accruals index. PBVR represents the market value to the book value. Size means the size of the Company. CFOR represents operating cash flow. WCNR represents the ratio of net working capital. DTAR represents the debt financing ratio. Finally, the industry illustrates the fictitious variable of the sector. The Company takes a value (1) if the Company falls within the financial services sector rankings and takes (zero) if otherwise.

## 4. Results

## **1.4 Descriptive Statistics**

Table 4 shows the descriptive statistics of the Company's ranking of the research sample from the most quality accruals to the lowest quality accruals (2010-2018). The results presented in Table 12 show that companies operating in the financial services sectors of the

Iraqi Stock Exchange are characterized by the high quality of their accounting accruals compared to companies from other sectors with non-financial services as a result of the sensitivity of financial operations and the low personal estimates of optional accruals. The results show that the banking sector came first regarding the high quality of accounting accruals and a total average of (0.253). Investment and economic transformation companies also came next in terms of high accruals and a standard (0.221-) and (0.064-) respectively. On the other hand, table4shows that the telecommunications and agriculture sectors ranked last in terms of the quality of accounting accruals with a total average (0.808) and (0.257), respectively. The results presented in Table 4 confirm the validity of the imposition.

*H1: that there are morally significant differences in the quality of accruals* for Iraqi companies within the same business sector and across different *business sectors*.

1	1				v	
Sequencing	Sector	Mean	Std. Dev.	Median	Min	Max
1	Banks	-0.253	1.557	0.042	-4.463	3.168
2	Investment	-0.221	0.220	-0.355	-0.355	0.735
3	Financial transfer	-0.064	0.680	0.026	-3.697	0.861
4	Insurance	0.124	0.430	0.034	-0.504	2.526
5	Hotels and tourism	0.145	0.210	0.103	-0.436	0.587
6	Services	0.149	0.434	0.048	-1.894	1.921
7	Industry	0.182	0.623	0.046	-3.067	2.526
8	Agriculture	0.257	0.603	0.065	-0.442	1.921
9	Communications	0.808	1.420	0.245	-1.499	2.526

 Table 4 Descriptive statistics on the quality of accruals classified by sectors (2010-2018)

Table (5) shows the ratios of cash balances broken down by sectors of the companies sample of the research. Telecommunications, industry, and services followed agriculture in terms of the sectors with the lowest rate of cash holding. The results presented in Table 5 confirm the validity of the imposition.

There are significant differences in the cash balances held by Iraqi companies within the same business sector and across different business sectors.

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to	Sector	Mean	Std. Dev.	Median	Min	Max
1	Investment sector	0.86	0.28	0.99	0.15	1.02
2	Financial transfer sector	0.83	0.13	0.83	0.52	1.02
3	Banking sector	0.54	0.27	0.55	0.01	1.02
4	Insurance Sector	0.48	0.24	0.45	0.06	1.02
5	Hotel and Tourism Sector	0.31	0.25	0.26	0.01	0.96
6	Services sector	0.31	0.28	0.24	0.01	1.02
7	Industry Sector	0.29	0.30	0.17	0.01	1.02
8	Telecommunications sector	0.17	0.09	0.15	0.06	0.35
9	Agriculture Sector	0.14	0.16	0.08	0.01	0.60
	Total	0.45	0.32	0.42	0.01	1.02

 Table 5 Percentage of cash balances classified by sectors (2010-2018)

## http://www.webology.org

## 2.4. Pearson's Bivariate Correlation

A person's link analysis was relied upon for all research variables to find the relationship between the quality of accounting accruals and corporate cash balances. Analysis of Pearson's link model and results helps detect whether there is a possibility of multicollinearity problems between measurement model variables. This indicates that there is a strong negative correlation with high moral significance between the quality of accounting accruals and the cash balances of the research sample companies, which confirms the validity of hypothesis.

*H3:* there is a morally significant impact relationship on the quality of accruals on the cash balances of Iraqi *companies*.

The results presented in table 6 also show no problems with the linear association (Multicollinearity) between variables.

Table 6 Pearson Correlation Matrix Link Test Results								
Variables	CAHO	AQ	PBVR	Size	CFOR	WCNR	DTAR	Industry
САНО	1.000							
AQ	-0.264	1.000						
(Sign.)	***							
PBVR	-0.165	0.082	1.000					
(Sign.)	***	**						
Size	-0.019	0.232	-0.100	1.000				
(Sign.)		***	**					
CFOR	0.029	0.009	0.036	-0.023	1.000			
(Sign.)								
WCNR	-0.052	0.104	-0.004	0.082	-0.001	1.000		
(Sign.)		*		**				
DTAR	0.061	-0.083	-0.038	-0.097	-0.124	-0.187	1.000	
(Sign.)		**		**	***	***		
Industry	0.493	-0.183	-0.447	0.321	-0.027	-0.009	-0.056	1.000
(Sign.)	***	***	***	***				

**Table 6 Pearson Correlation Matrix Link Test Results** 

## 3.4. Results of Multi-logistics Regression Analysis

This research was based mainly on the multi-logistics regression model to measure the impact of benefit quality on the Company's cash balances to test the primary hypothesis (H3). The data sets in the search sample included two types of data: Cross-sectional and time-series. That is, the kind of data is Panel data.

Table 7 shows the results > of the Hausman test of the model measuring the impact of the quality of accounting accruals on cash balances. Therefore, based on this result, the statistically appropriate regression model is random effects, and with this model, any biases that may appear in the data can be eliminated.

Table 8 shows the results of the random > effect test. The results show a substantial negative impact on the quality of AQ accounting accruals on CAHO cash balance levels held by research sample companies, a high moral allowance at the level (0.000), and a regression factor (0.031-). This finding demonstrates the validity of the imposition of *H3: that* there is a morally significant impact relationship on the quality of accruals on the cash balances of Iraqi *companies*.

	Coefficients					
Variables	fixed	random	Difference			
AQ	-0.0322	-0.0366	0.00439			
PBVR	0.00626	0.00232	0.00394			
Size	0.01417	0.01631	-0.0021			
CFOR	0.01591	0.01576	0.00015			
WCNR	0.00684	0.00621	0.00063			
DTAR	0.02068	0.01962	0.00106			
	$Prob > Chi^2 = 0.973$		$Chi^2 = 1.28$			

# Table 7 Hausman Test Results for the Accounting Benefit Quality Measurement Model on Cash Balances

 Table 8 Summary of the results of the growth of the decline to measure the impact of the quality of accounting accruals on cash balances

$CAHO_{it} = \beta_0 + \beta_1 AQ_{it} + \beta_2 PBVR_{it} + \beta_3 Size_{it} + \beta_4 CFOR_{it} + \beta_5 WCNR_{it}$									
	+ $\beta_6$ DTAR <sub>it</sub> + $\beta_7$ Industry <sub>it</sub> + $\varepsilon_{it}$								
Variables	Coef.	Std. Err.	with	P>z					
AQ	-0.031	0.008	-3.770	0.000***					
PBVR	0.007	0.004	1.860	0.063*					
Size	0.002	0.012	0.210	0.837					
CFOR	0.017	0.014	1.230	0.219					
WCNR	0.006	0.003	1.880	0.060*					
DTAR	0.020	0.004	4.520	0.000***					
Industry	0.333	0.054	6.180	0.000***					
Constant	0.224	0.126	1.780	0.074*					
	= 82.39	Wald $Chi^2$ (7)	= 621	No. of obs.					
	= 0.000	$Prob > chi^2$	= 69	No. of groups					
			= 0.27	$\mathbb{R}^2$					

The results in table 8 also show that there is a positive effect with high moral significance for the change in the ratio of debt financing DTAR and the type of industrial business in which the Company operates, at a moral level below (0.01) and with a downward factor (0.02) and (0.333) respectively. The investment, financial transfer, and Insurance have high debt (leverage) ratios and tend to maintain high cash balances. The results also show that there is a positive effect but with little moral reason for the percentage of net market value to PBVR book value and WCNR net working capital ratio at the Company's cash balance level and an honest level below (0.1) and downhill factors (0.007) and (0.006) respectively.

## Conclusion

We examined the quality of accounting accruals and accruals for businesses listed on the Iraqi Stock Exchange and across several industries in this research. The purpose of this research is to examine and quantify the cash retention rates of firms listed on the Iraqi Stock Exchange and across Iraqi business sectors. Thus, the study sought to determine how the quality of accruals influenced the percentage of cash asset retention by Iraqi businesses. According to research findings, firms with a high accounting benefit quality tend to have lower cash balances than businesses with a low accounting benefit quality, which maintains a high cash balance. This negative link between accounting accruals and cash balance retention levels exists because low-quality accounting accruals imply a decline in the quality of accounting information and reported profits. As a result, the degree of information asymmetry rises.

Furthermore, this increases the cost of external borrowing above the cost of internal financing. Thus, corporate administrations would attempt to increase cash reserves when the quality of accounting accruals is inadequate, as external capital costs are significantly higher for firms with a solid financial reputation. Thus, it supports businesses' holding of large cash reserves in preference to internal funding sources. On the contrary, research indicates that firms with a high accruals quality do not require a significant level of capital to fund their investment initiatives. On the other side, high-quality accounting accruals may suggest a weakness in controlling owners, prompting the management of these firms to keep relatively large cash holdings. Departments in firms with inadequate accounting benefit quality will press them to maintain significant cash levels for preventative objectives. They want to expand their independence and influence the Company's choices to further their interests. This rationale accords with the agency's understanding of the free cash flow theory. It implies that managers' increased access to free cash flows may increase their propensity to make decisions that benefit their authority and personal accruals at the expense of the Company's interests.

## References

- Al-Fatlawi, Q.A., Al Farttoosi, D.S., & Almagtome, A.H. (2021). Accounting Information Security and IT Governance Under COBIT 5 Framework: A Case Study.
- Ali, M.N., Almagtome, A.H., & Hameedi, K.S. (2019). Impact of accounting earnings quality on the going-concern in the Iraqi tourism firms. *African Journal of Hospitality, Tourism and Leisure*, 8(5), 1-12.
- Almagtome, A.H., Al-Yasiri, A.J., Ali, R.S., Kadhim, H.L., & Bekheet, H.N. (2020). Circular Economy Initiatives through Energy Accounting and Sustainable Energy Performance under Integrated Reporting Framework. *International Journal of Mathematical, Engineering and Management Sciences*, 5(6), 1032-1045.
- Almagtome, A., Khaghaany, M., & Önce, S. (2020). Corporate Governance Quality, Stakeholders' Pressure, and Sustainable Development: An Integrated Approach. *International Journal of Mathematical, Engineering and Management Sciences*, 5(6), 1077-1090.
- Al-Najjar, B., & Clark, E. (2017). Corporate governance and cash holdings in MENA: Evidence from internal and external governance practices. *Research in International Business and Finance, 39*, 1-29.
- Al-Wattar, Y.M.A., Almagtome, A.H., & AL-Shafeay, K.M. (2019). The role of integrating hotel sustainability reporting practices into an Accounting Information System to enhance Hotel Financial Performance: Evidence from Iraq. *African Journal of Hospitality, Tourism and Leisure*, 8(5), 1-16.
- Amagtome, A.H., & Alnajjar, F.A. (2020). Integration of Financial Reporting System and Financial Sustainability of Nonprofit Organizations: Evidence from Iraq. *International Journal of Business & Management Science*, 10(1), 27-47.
- Ang, J.S. (1991). Small Business Uniqueness and the Theory of Financial Management. *The Journal of Small Business Finance*, 1(1), 11-13.
- Barth, M.E., Cram, D.P., & Nelson, K.K. (2001). Accruals and the prediction of future cash flows. *The Accounting Review*, *76*(1), 27-58.
- Bates, T.W., Kahle, K.M., & Stulz, R.M. (2009). Why do US firms hold so much more cash than they used to? *Journal of Finance*, *64*(5), 1985-2021.
- Dechow, P.M., Ge, W., & Schrand, C. (2010). Understanding earnings quality: a review of the proxies, their determinants, and their consequences. *Journal of Accounting and Economics*, 50(2-3), 344–401.
- Dechow, P.M., Sloan, R.G., & Sweeney, A.P. (1995). Detecting earnings management. *The Accounting Review*, 70(2), 193–225.
- Dechow, P., & Dichev, I. (2002). The quality of accruals and earnings: the role of accrual estimation errors. *The Accounting Review*, 77(s-1), 35–59.
- Dittmar, A., Mahrt-Smith, J., & Servaes, H. (2003). International corporate governance and corporate cash holdings. *Journal of Financial and Quantitative Analysis*, *38*(1), 111–133.
- Faulkender, M., & Wang, R. (2006). Corporate financial policy and the value of cash. *The Journal of Finance*, 61(4), 1957-1990.

- Ferreira, M.A., & Vilela, A.S. (2004). Why Do Firms Hold Cash? Evidence from EMU Countries. *European Financial Management*, *10*(2), 295–319.
- Gao, X., & Jia, Y. (2016). Internal control over financial reporting and the safeguarding of corporate resources: evidence from the value of cash holdings. *Contemporary Accounting Research*, 33(2), 783-814.
- Gill, A., & Shah, C. (2012). Determinants of Corporate Cash Holdings: Evidence from Canada. International Journal of Economics and Finance, 4(1), 70-79.
- Han, S., & Qiu, J. (2007). Corporate Precautionary Cash Holdings. Journal of Corporate Finance 13(1), 43-57.
- Hidayah, N.E., & Rahmawati, R. (2019). The Effect of Capital Structure, Profitability, Institutional Ownership, and Liquidity on Firm Value. *Indonesian Journal of Contemporary Management Research*, 1(1), 56-64.
- Hilgen, M. (2015). The determinants of cash holdings: Evidence from German listed firms. The University of Twente, School of Management and Governance, MSc. Business Administration, Financial Management Specialisation.
- Isshaq, Z., & Bokpin, G.A. (2009). Corporate liquidity management of listed firms in Ghana. *Asia Pacific Journal of Business Administration*, 1(2), 189-198.
- Khaghaany, M., Kbelah, S., & Almagtome, A. (2019). Value relevance of sustainability reporting under an accounting information system: Evidence from the tourism industry. *African Journal of Hospitality, Tourism and Leisure, 8,* 1-12.
- Koo, D.S., Ramalingegowda, S., & Yu, Y. (2017). The effect of financial reporting quality on corporate dividend policy. *Review of Accounting Studies*, 22(2), 753-790.
- Kusnadi, Y. (2015). Cross-listings and corporate cash savings: International evidence. *Journal* of Corporate Finance, 36, 91-107.
- Leal, L.T.L., Girao, L.F.D., Lucena, W.G.L., & Martins, V.G. (2017). Persistence value relevance and accruals Quality in extreme earnings and cash flow situations. *Mackenzie Management Review*, 18(3), 203-231.
- Limanta, V.N., & Malelak, M.I. (2017). Factors Affecting Corporate Cash Holding of Financial Sector Companies (Non-Bank) Listed in Indonesian Stock Exchange Period 2010 – 2015. *International Conference on Management & Entrepreneurship*, 14(7), 1-7.
- Ma, Y. (2012). What Determines Cash Holding of A Firm? Evidence from Euro-Zone Listed Firms. Universiteit Van Tilburg, Fiance Master Thesis.
- Mansali, H., Derouiche, I., & Jemai, K. (2019). Accruals quality, financial constraints, and corporate cash holdings. *Managerial Finance*, 45(8), 1129-1145.
- Martinez, A.L. (2008). Detecting Earnings management in Brazil: estimating discretionary accruals. *Revista Contabilidade & Finanças*, 19(46), 7-17.
- Martínez-Sola, C., García-Teruel, P.J., & Martínez-Solano, P (2018). Cash holdings in SMEs: speed of adjustment, growth and financing. *Small Business Economics Journal*, *51*(4), 823-842.
- Myers, S.C., & Majluf, N.S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, 13(2), 187-221.

- Ogneva, M. (2012). Accrual Quality, Realized Returns, and Expected Returns: The Importance of Controlling for Cash Flow Shocks. *The Accounting Review*, 87(4), 1415–1444.
- Oluoch, J., Namusonge, G., & Onyango, S. (2015). Effect of accrued Quality on Equity security Market Returns: Evidence from the Noriobi securities exchange. *European scientific journal*, 11(10), 132-151.
- Opler, T., Pinkowitz, L., Stulz, R., & Williamson, R. (1999). The determinants and implications of corporate cash holdings. *Journal of Financial Economics*, 52(1), 3-46.
- Shin, H., & Oh, H. (2017). The Effect of Accruals Quality on the Association between Voluntary Disclosure and Information Asymmetry in Korea. *The Journal of Allied Business Research*, 33(1), 223-236.
- Shin, M., Kim, S., Shin, J., & Lee, J. (2017). Earnings quality effect on corporate excess cash holdings and their marginal value. *Emerging Markets Finance and Trade*, 54(4), 901-920.
- Shubita, M.F. (2019). The impact of working capital management on cash holdings of large and small firms: evidence from Jordan. *Investment Management and Financial Innovations*, 16(3), 76-86.
- Verdi, R.S. (2006). Financial reporting quality and investment efficiency. Working paper, SSRN Working Paper Series, 1-55.