

**The Effect of the Relationship Between Accounting
Conservatism and Cost of Debts on Cash Holding:
Evidence from Egyptian Listed Companies**

Dina Abdelalim Crema

Faculty of Commerce & Business Administration - Future
University in Egypt

Abstract:

The purpose of this study is to see how the relationship between accounting conservatism and cost of debts affects cash holding. The paper also looks at the moderating impacts of firm size and leverage on this connection. It is based on a sample of data from the index (EGX100) for the 44 most active non-financial companies in the Egyptian stock market from 2018 to 2020. To put hypotheses to the test for data analysis, Fixed Effect Regression Models were utilized. The ratio of total interest paid on long-term loans is used to evaluate the cost of debts, whereas the cash holding is calculated as a ratio of cash and cash equivalent divided by total assets, for measuring accounting conservatism (Givoly & Hayn, 2000) indicator is adopted. Many Egyptian listed firms are not conservative, according to the findings, and there is a statistically significant positive association between accounting conservatism and cash holding. Furthermore, the association between accounting conservatism and cost of debts has a statistically significant negative influence

on cash holding, and leverage as a control variable has a significant effect in this relationship, although firm size has no effect. Accounting conservatism standard setters should concentrate on implementing accounting conservatism procedures in all Egyptian listed companies should report their financial accounts conservatively to benefit from low financial responsibilities or any burdens, such as the cost of debts, that have arisen as a result of investors and creditors' trust in conservative financial statements and firm management. This study adds to the body of knowledge about the relationship between accounting conservatism and cash holding, which has an impact on corporate performance in Egyptian listed companies.

Keywords: Accounting conservatism, debt costs, cash holdings, company size, leverage

1 - Introduction

Accounting conservatism has a long and illustrious history in accounting research and studies. Several works of literature have defined conservatism in various ways. Conservatism is an accounting strategy that leads to a reduction in revenues and assets while increasing costs and obligations. The dedication of management in providing accurate and transparent information to users, which represents the adoption of corporate governance, determines the level of conservatism in the firm's financial reporting (Wati et al., 2020). As a result, accounting conservatism forces businesses to verify losses more quickly than

gains. Accounting conservatism is related to debt contracting, litigation, cost, minimizing information asymmetry, tax avoidance, and management projections (Affes & Sardouk,2016). Accounting conservatism is a propensity that encourages accountants to disclose lower expectations for asset and gain values while reporting greater estimations for liabilities and losses when faced with uncertainties in economic transactions. (Wang et al.,2009) As a result, investors will be able to make more efficient investments. (Garcia-Lara et al., 2016).

Accounting conservatism is essential and cannot be eliminated from accounting standards, according to many studies (Zhong & Li, 2017). Accounting concerned organizations have differing perspectives on the Accounting conservatism principle, which has been evaluated by regulators in terms of its benefits and drawbacks. For example, the Financial Accounting Standard Board (2010) believes that conservatism can lead to biased financial statements and contradicts neutrality, so FASB has removed conservatism from the conceptual framework. The British Accounting Standards Board, on the other hand, emphasizes the advantages and benefits of conservatism accounting methods, which result in accurate financial statements (Artiach & Clarkson, 2013). Studies disagreed in evaluating the relationship between conservatism and cost of equity and cost of debts, much as accounting organizations' perspectives vary in deciding the value of conservatism. Many studies have shown

that conservatism has a good influence on contractual commitments and lowers capital costs, which has a beneficial impact on firm value. Cui et al., 2021). (Atriach & Clarkson, 2013; Krismaiajl, 2021; Cui et al., 2021). Accounting conservatism decreases the information asymmetry between internal and external users, and it is always required in debt convents to reduce the creditor's legal expenses (Li,2020). In general, the necessity of conservatism in financial reporting stems from a variety of firm stakeholders, including equity investors who want to keep an eye on opportunistic management and make informed decisions about the company. Lenders, on the other hand, require conservatism accounting reporting in order to examine their finances and make the best selections possible regarding their debt decisions. (Ibrahim et al., 2019).

Other studies, on the other hand, reveal that there is no link between increased conservatism in reporting statements and the cost of capital; additionally, these studies establish a link between conservatism and resource misallocation and a decrease in firm value (FASB, 2010; Gigler et al., 2009; Francis et al., 2004).

This research looks into the relationship between conservatism and debt costs, as well as how it affects cash holdings. Previous research has found that the relationship between accounting conservatism and debt costs is significant, with companies that are more conservative facing lower debt costs because they

provide information about expected risk on a regular basis (Hille ,2011; Zhang ,2008).

The cash holding strategy protects the company against cash shortages and the hazards that come with them. Cash is the liquid asset that fuels a company's regular operations. (2019, Ibrahim). It's cash that's been set aside for safety, transactions, and speculation. (Baker and Powell, 2005). The importance of having cash on hand is to meet financial obligations, such as debt repayment.

A question emerges about the impact of the relationship between conservatism and debt costs on cash holdings. Because there is a paucity of an empirical study on this topic, conservative companies, according to (Ball and Shivakumar, 2005), drive managers to only invest in high positive current value projects, and because the number of these projects is limited, conservative companies are likely to have a higher level of cash holding than unconservative organizations. Furthermore, the conservative firms' board of directors' influence over managers results in their focusing primarily on initiatives with high predicted returns, resulting in a significant level of cash holdings. (Al-Amri et al., 2015). On the other hand, (Soliman,2019) mentions the link between conservatism and cash holding in his research. Conservatism, he discovered, has a negative impact on cash holding. (Shehata and Rashed, 2021) found a negative association between conservatism and cash holding in their

study. Conservatism is projected to reduce non-payment risks to creditors, lowering debt costs and, as a result, lowering the need to keep cash in the company. (Lafond& Roychowdhury, 2008) Ascertain that conservatism reduces knowledge asymmetry and agency difficulties, both of which have a detrimental impact on cash holding policy.

As information asymmetry grows, the agency problem grows as well, making reliance on external funding more difficult, resulting in higher cost of debts and higher cash holdings. (Rahmani et al., 2015; Chung et al., 2015). Companies that are experiencing financial difficulties are likely to keep cash on hand. (Denis&Sibilkov,2010).

The influence of the link between conservatism and debt costs on cash holding is investigated in this study.

1.1 Importance of the research

Many studies have looked at the relationship between accounting conservatism and cost of capital, but none have looked at the relationship between conservatism and cost of debts, or the effect of this relationship on cash holding. Furthermore, no equivalent research has been carried out in Egypt.

1.2 Objectives of the research

The purpose of this study is to see how the relationship between accounting conservatism and cost of debts affects cash holding. As a result, the research aims to address the following questions:

- Is there a link between accounting conservatism and cash holdings in Egyptian listed companies?

-How does the relationship between conservatism and cost of debts affect the cash held by a number of Egyptian listed companies?

The amount of accounting conservatism is measured using (Givoly& Hayn's, 2000). It uses 132 observations from 44 Egyptian listed companies from 2018 to 2020.

2 – Literature Review and Hypothesis Development

2.1 Conservatism

Several works of literature have attempted to describe conservatism in various ways. Accounting conservatism is defined by the asymmetry in the verification requirements for gains and losses (watts, 2003). "We define accounting conservatism as the on average underestimate of the book value of net assets relative to their market value," said Beaver and Rayan (2005). According to (Ruch & Taylor, 2015) and (Beaver & Rayan, 2005), conservatism is a policy that generates a downward bias in net asset value relative to economic net asset value. (Hille, 2011) discovered that there is an asymmetry between the verification of positive and negative profit streams in conservatism. Profits are being stated with greater caution. Losses, on the other hand, are exaggerated. According to (Garcia Lara, et al., 2016), conservatism may provide a direct benefit to investors, which is evident in the form of efficient investments. It

also leads to a better understanding of the ethical hazard problem and the reduction of concerns connected to information asymmetries. Accounting conservatism contributes to beneficial economic effects, and Improves the quality of the financial reporting as well, according to a variety of studies. (Ugwunta & Ugwuany, 2019; Rashidi, 2021; Ramalingegowda&Yu, 2018).

The impact of accounting conservatism on financial performance indicators such as ROA, MV, and EPS is discussed by (Sanaa, 2016).The study was conducted on a variety of insurance businesses in Jordan between 2007 and 2014. The findings revealed that conservatism has a considerable positive effect on performance metrics, highlighting the necessity of adhering to the conservatism concept. (Ademola & Moses, 2017) focus on their analysis of the relationship between conservatism and shareholder value in 20 Nigerian companies, and find that the two variables have a substantial positive relationship. Furthermore, the findings highlight the importance of conservatism in reducing agency difficulties and information asymmetry.

(Ramalingegowda & Yu,2018) The results of their study of the relationship between accounting conservatism and capital structure adjustments on a large number of American listed companies from 1972 to 2011 revealed that conservative financial reports adjusted capital structure faster, and that conservatism's positive effect on adjustment is dependent on

lower external funding. The fact that accounting rules do not cover all elements of accounting may be contributing to the increased interest in accounting conservatism. Because the opinions of directors are important in various sectors. (Surachi et al., 2020) Over the years 2014–2018, studied the association between corporate board of directors' qualities and accounting conservatism of listed businesses on Thailand's stock exchange. The results of the study revealed a link between board quality and accounting conservatism. In addition, it has been discovered that increasing the number of board meetings leads to more conservative financial reporting.

2.2 Conditional and unconditional conservatism

There are two types of accounting conservatism: conditional and unconditional conservatism. Conditional conservatism is defined by (Beaver & Ryan, 2005) as the writing down of assets in adverse circumstances but not the writing up of assets in good circumstances. This is known as news dependent conservatism. According to (Ball et al., 2006), conditional conservatism necessitates a lower degree of verification for bad news than for good news. As a result, bad news is recognized sooner than positive news (Armstrong et al., 2010). In their study, (Garcia Lara et al., 2020) state that conditional conservatism leads to the realization of current economic losses that will manifest in future times. While unconditional conservatism (Beaver & Ryan, 2005) is an underestimation of book value. It is news independent

conservatism, which is dependent on managers' ability to make conservative decisions such as R&D costs, accelerated depreciation, and revenue recognition delays. Because unconditional is verified at the moment of asset and liability existence, and vice versa, the unconditioned predates the conditional. (Garcia lara et al., 2009; Beaver & Ryan, 2005). According to (Bryan et al., 2021), unconditional conservatism is based on knowledge available at the start of an asset's existence. It doesn't happen as a result of a specific economic event.

2.3 Conservatism and the company performance

2.3.1 Conservatism and Uncertainty

Accounting conservatism manifests itself in the form of caution or pessimism in financial statement reporting as a result of future uncertainty. According to (Thomas & Aryusmar, 2020), in financial reports, prudence leads numbers to be recorded lower or higher than the actual values. Conservatism, according to (Solichah & Fachrurrozie, 2019), is a precautionary idea that aids in coping with uncertainty in financial statement preparation, as evidenced by not identifying profit as soon as feasible, but validating losses and costs as soon as possible. In their study, (Zubaidah&Nusrizal, 2019) indicate that conservatism, based on FASB statement of concept No.2, is a cautious reaction in the face of inherent uncertainty to ensure that uncertainty and risk have already been deemed appropriate by the competitive market. (Hejranijamil,2020) discovered that companies who

adopted a prospector approach used more conservative procedures in their financial reports in his study, which was done on 183 listed companies in Tehran for six years from 2013 to 2018.

2.3.2 *Conservatism and Information Asymmetry*

(Isniawati et al., 2018) examine how analyst coverage moderates the relationship between information asymmetry and accounting conservatism. Net assets are used to measure accounting conservatism, the bid-ask spread is used to measure information asymmetry, and analyst coverage is determined using a proxy for analyst following. The research is based on manufacturing companies that were listed on the Indonesia stock exchange between 2010 and 2014. The findings revealed a positive relationship between information asymmetry and accounting conservatism, with the extent of analyst coverage having an impact on this relationship. In contrast to the previous study, (Ahmed, 2015) examines the influence of accounting conservatism on information asymmetry among Egyptian non-financial listed companies from 2007 to 2014. The market-to-book ratio was used to represent accounting conservatism, while the bid-ask spread was used to evaluate information asymmetry. The findings showed that accounting conservatism has a detrimental impact on information asymmetry, although there was no statistical significance. During the Covid-19 pandemic, (Cui et al., 2021) investigate the association between

conservatism and stock returns. The findings revealed that conservative corporations have lower stock return losses. and that conservatism aids in the regulation of information asymmetry throughout the COVID-19 period. (Rashidi, 2021) also looks at information asymmetry pricing, which is the relationship between information asymmetry and expected return, based on environmental uncertainty and accounting conservatism. His observations were 1309 in Iranian enterprises between 2008 and 2018. The findings point to a negative relationship between accounting conservatism and price information asymmetry. The findings revealed a link between environmental uncertainty and pricing asymmetry due to information asymmetry.

2.3.3 *Conservatism and Corporate Governance*

(Hajawiyah et al., 2020) investigate the impact of effective corporate governance on accounting conservatism, using leverage as a moderating variable. For the years 2014-2016, the study looked at 135 manufacturing companies that were listed on the Indonesian stock exchange. It was discovered that institutional ownership and independent commissioners have a good impact on accounting conservatism. Managerial ownership, on the other hand, has a major detrimental impact on accounting conservatism. Leverage reduces the impact of managerial ownership and independent commissioners on accounting conservatism, but it has no influence on the impact of institutional ownership. (Sharma & Kaur, 2021) set out to

investigate the impact of corporate governance on accounting conservatism adoption. The research was carried out on a sample of companies, and the findings revealed that the relationship between accounting conservatism and corporate governance indicates a significant impact of corporate governance variables such as board of directors and audit committee characteristics on accounting conservatism.

(Almutairi & Quttainah, 2019) investigate whether Islamic banks are more conservative in reporting financial statements than conventional banks, and how corporate governance in Islamic banks influences accounting conservatism. According to the findings, Islamic banks are more prone to use accounting conservatism, as seen by loss avoidance and anomalous loan loss reserves., Islamic banks are 95 percent more likely than their counterparts to be more conservative in their practices. Many board features, such as size, independence, and reputation, are also major factors of accounting conservatism in Islamic banks. Effective corporate governance procedures can have an impact on accounting conservatism in companies. However, changes in the association between corporate governance elements and a firm's tendency to report conservatively were triggered by legal shock (Sarbanes-Oxley legislation) and economic shock (2008 financial crisis) (Kiechnick&Shii, 2020).

2.4 The relationship between accounting conservatism and cost of debts

To regulate opportunistic management and make judgments about the company, investors want conservative reporting. Creditors, on the other hand, want conservative accounting reporting in order to analyze their funds and make decisions (Ibrahim et al., 2019). (Goh et al., 2017) investigate whether conditional conservatism reduces information asymmetry for investors and creditors in different ways. The findings show that when companies raise external financing, the use of equity (versus debt) increases with the level of conservatism, and that the decrease in cost of equity associated with conservatism is greater for equity issuers than for debt issuers. When it comes to cost of debts, however, there is no evidence of a difference. (Zhang, 2008) looked into the benefits of accounting conservatism for both borrowers and lenders. It found that borrowers benefit from accounting conservatism by paying lower interest rates, while lenders profit by reducing down size risk. Conservatism offers borrowers with periodic information about expected risk, resulting in lower debt costs of capital. (Krismiajl, 2021) uses data from 2015 to 2016 to explore the relationship between conservatism and the cost of equity capital in 142 Indonesian manufacturing enterprises.

The accrual technique is used to assess conservatism, whereas the price/earnings growth model is used to assess equity capital cost.

The study found that conservatism reduced the agency theory, which states that accounting conservatism reduces information asymmetry between management and shareholders. As a result, the equity capital cost is reduced.

(cui et al., 2021) look at whether companies with more conditionally conservative procedures had superior stock returns than other companies during the Covid-19 stock market disaster. The findings show that conditional conservatism increases company value by eliminating information asymmetry, cutting the cost of capital (including cost of debts), and enhancing investment efficiency through increased contracting. (Ibrahim et al., 2019) investigate the association between accounting conservatism and debt cost in the context of an African enterprise. The moderating effects of a company's ownership structure in this relationship are investigated in this research. From 2007 to 2018, they studied 224 enterprises in eight African nations, using (Givoly & Hayn, 2000) to measure conservatism and 1-year ahead interests paid for total interest to measure cost of debts. According to the data, conservatism and the cost of debt have a negative association.

A company with a low cost of debt has a high accounting conservatism in reporting losses rather than earnings. Although a substantial body of research has consistently demonstrated that conservatism has a negative impact on the cost of capital, including the cost of debts, there is literature that contradicts this.

(Gigler et al., 2009) look into the impact of accounting conservatism on debt contracting efficiency. Under conditional and unconditional accounting conservatism, the analysis uses the statistical and informational aspects of accounting reports. Accounting conservatism, according to the findings, affects the efficiency of debt contracting.

(Francis et al., 2004) come to the conclusion that conservatism has no effect on the cost of capital, including the cost of debts.

(Li, 2015) investigates the impact of conservatism in lowering the cost of equity and debt capital in an international context. The cross-sectional variance of the aforementioned relationship is investigated in this research. Conservatism only lowers debt costs in nations where accounting-based covenants are commonly employed, according to the study.

2.5 The relationship between accounting conservatism and cash holdings

Companies keep cash on hand to reinvest in assets, fund operations, and pay investors and creditors. Companies should, however, maintain cash at the appropriate level, taking into account the marginal cost and benefits of cash holding (Afza & Adnan, 2007). As a result, it is defined as a company's cash held for precaution, transaction, and speculation (Baker and Powell, 2005). Cash holding benefits companies in case of a financial problem since it supports external funding by covering essential costs, including debt costs (Afza & Adnan, 2007). (Nguyen et al.,

2021) investigated the impact of cash holding on the financial stability of firms affected by the COVID-19 pandemic, with 285 Vietnamese companies participating in the study. The findings suggest that cash holding has a positive impact on financial stability during pandemic crises, and that cash holding is especially important for companies that are more sensitive to pandemics. The benefit of cash holding stems from the danger that surrounds organizations that rely on external funding and, as a result, must cover debt costs. As a result, these companies should use a risk management plan to determine cash holding. (Salem & Hussainey, 2021) examine the impact of risk disclosure on cash holding in Tunisian non-financial listed companies from 2008 to 2013. Risk disclosure has a negative impact on cash holdings, according to the data. On the other hand, maximizing cash holding policies may result in management and investor agency problems. As a result, estimating the optimal level of cash holding is challenging because it is not a constant value but rather fluctuates over time. In their study, (Arfan et al., 2017) found that Indonesian companies, as a developing company model, keep various quantities of cash ranging from 0.009 percent to 43.6 percent of their total assets. Also, in developed countries, (Bates et al., 2009) demonstrate that cash holdings grew in US firms from 1980 to 2006. There is also an upward trend in Australia, Canada, France, and Germany. Companies in Japan, on the other

hand, do not tend to follow a cash holding policy. Varied underlying reasons affecting the company's management policy can be shown in the evidence of different cash policies implemented by different companies.

(Soliman, 2019) looks on the relationship between conservatism and cash holding. Company characteristics have a moderating effect. Between 2013 and 2018, a study was undertaken on 125 Egyptian enterprises representing eleven different sectors. The findings suggest that conservatism has a negative impact on cash holding, with only the company size having a positive moderating impact. The findings also revealed that companies adopting EAS in 2016 had the ability to regulate cash utilizing a conservative policy. (Shehata & Rashed, 2021) investigate the association between accounting conservatism and cash holding, with information asymmetry as the mediator effect for Egyptian listed firms throughout the period 2013-2018. The findings revealed that, contrary to prior research, there is no relationship between conservatism and information asymmetry, and that there is no information asymmetry mediation effect within the association between conservatism and cash holding. Finally, conservatism has a negative impact on cash holdings. In contrast to the above findings, additional research has found a substantial positive relationship between conservatism and cash holding (Al-Amri et al., 2015; El Malah, 2019).

According to the findings of the aforementioned studies, there is an empirical gap in the relationship between conservatism and debt costs, as well as conservatism and cash holding. Furthermore, the majority of the aforementioned studies are carried out in countries with efficient capital market. As a result, there is an empirical gap in developing countries on the relationship between accounting conservatism and a company's cost of debts, as well as the impact on cash holdings. Such research has not been carried out in African companies, particularly in Egypt, where there is no efficient and effective capital market. The effect of the relationship between accounting conservatism and cost of debts on cash holding in Egyptian listed companies will need to be investigated.

The study assumes that the relationship between accounting conservatism and cost of debts affects cash holding. Therefore, the following hypotheses are proposed:

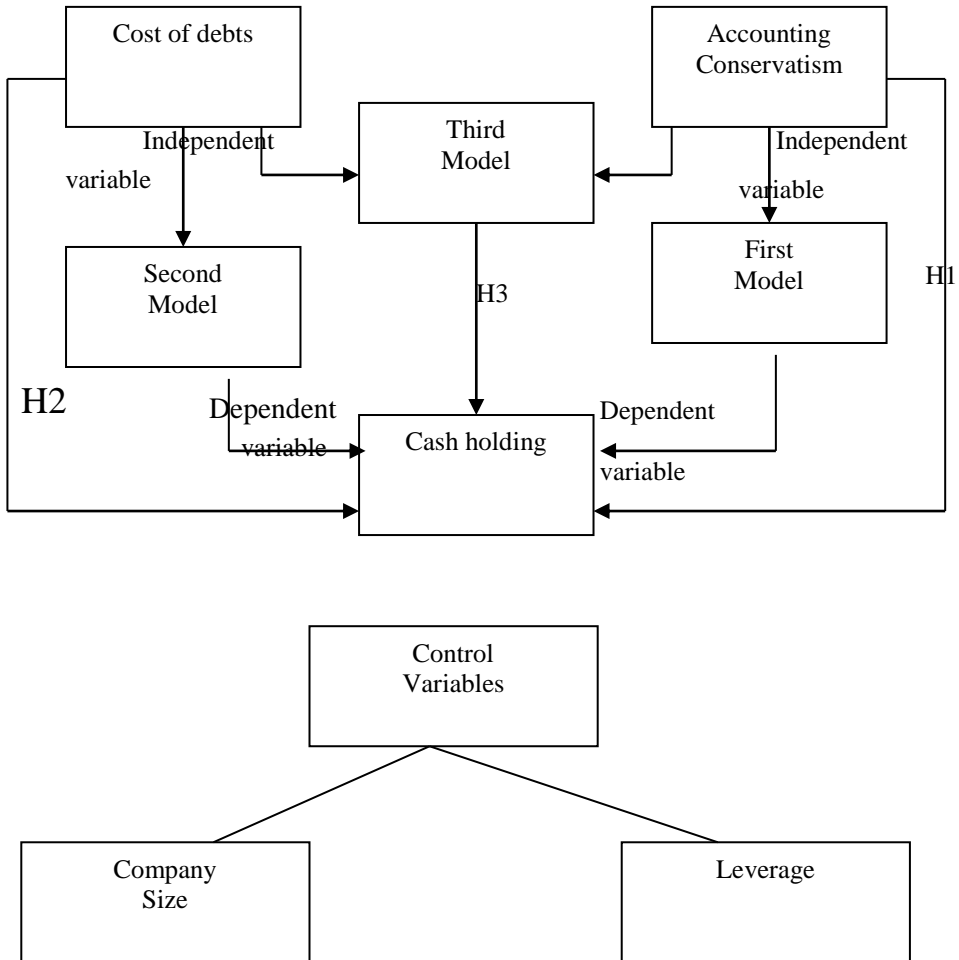
H1: Accounting conservatism has a significant relationship with cash holding in Egyptian listed companies.

H2: The cost of debts has a significant relationship with cash holdings in Egyptian listed companies.

H3: the relationship between accounting conservatism and cost of debts affects cash holding in Egyptian listed companies.

The following conceptual framework has been designed.

Figure (1) The Conceptual Framework



2.6 Methodology

A) Data and sample

The Mixed Effect Model is used to investigate the effect of the relationship between accounting conservatism and cost of debts on cash holding. Using Panel Data, the study adopts a descriptive and correlational research approach. The study uses the disclosure book (EGX 100) which offered data on the 44 most active companies in the Egyptian stock market. The data covers the period from 2018 to 2020, which was the most recent data available at the time of the research.

After removing financial institutions and companies with missing data, the study's sample was determined. As a result, 44 companies were selected for analysis. The sample composition is shown in the table below (1).

Table 1
Sample and Composition

Sector	No of firms
- Food and Beverage	7
- Industrial goods, Services and automobiles	10
- Construction and materials	14
- Chemicals	1
- Health care and pharmaceuticals	3
- Basic resources	6
- Travel and leisure	3
Total	44

B) Measurement and variable specifications

-Accounting conservatism:

Several empirical measures of accounting conservatism have been identified in numerous literature reviews. The research makes use of (Givoly & Hayn 2000). According to the model, overall cash flows over the company's lifetime should equal total net income. Companies that place a high priority on conservatism are thought to be more conservative in reporting negative news than good news. Financial statements are used to obtain all essential data (income statement and cash flow). To avoid a negative outcome value, the conservatism value should be multiplied by negative one.

- Cost of debt:

Several literature studies show that debt cost can be measured in a variety of ways (Gigler, et al., 2009; Li, 2015). Based on the nature and availability of data in the financial statements, the study uses the proxy of total interest paid divided by total long-term loan as a measure of the cost of debts.

- Cash holding:

Measurements of cash holding have been mentioned in a number of earlier research (Soliman, 2019; Amri et al., 2015; Salem & Hussainey, 2021). the study uses the ratio of cash and cash equivalents to total assets.

- Control variables:

The moderating effect of company size and the leverage ratio are included as control variables in this analysis, based on previous research. (Suda & Takada, 2011; Artiach & Clarkson, 2013). The list of variables and their measures is shown in the table below.

Table 2
List of variables and their corresponding measures

Variables	Measurements
Accounting Conservatism	Total accruals = net income + depreciation – net cash flow from operation divided by total assets multiplied by -1
Cost of debts	Total interest paid divided by long term loan
Cash holding	ratio of cash and cash equivalent divided by total assets
Company size	log total assets
Leverage	Total liabilities divided by total assets

C) Model Specification

This study develops the following model and applies the Fixed Effect model in order to test hypotheses:

$$Y_{it} = \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \beta_5 (X_{1it} * X_{2it}) + U_{it}$$

Where X_{1it} : Conservatism

X_{2it} : Cost of debts

X_{3it} : Company size.

X_{4it} : Leverage

Y_{it} : Cash holding

D) Empirical results and discussion

1) Statistical analysis

Table (3) shows the variables' summary statistics, including mean, standard deviation, maximum, and minimum values.

Table (3)
Descriptive Analysis

Variable	Obs	Mean	Std. Dev.	Min	Max
Cash holding	127	.0613964	.0659141	7.95e-06	.338881
Conservatism	127	-.0438004	.3199321	-.6981051	.4268562
Cost of debts	127	7.01e+07	1.42e+08	0	.7.30e+08
Company _size	127	9.382807	.6513408	7.332801	10.73984
Leverage	127	.6011967	.4302777	.0355979	3.037768

Accounting conservatism has a mean of $-.0438004$ and a standard deviation of 0.3199321 . The negative sign of the value implies that many Egyptian listed companies are not conservative on average. The cost of debts has a significant dispersion, with a standard deviation of $1.42e+08$, implying that the cost of debts among Egyptian listed companies in the sample has different characteristics, ranging from zero to $7.30e+08$.

The mean of cash holding is 0.0613964 , indicating that Egyptian listed companies are more likely to hold cash.

2) Correlation between variables

Pearson's correlation is used to determine the linear relationship between variables, as seen in table (4).

Table (4)
Pearson's Correlation among Variables

	Cash holding	Conservatism	Cost of debts	Compansize	Leverage
Cash holding	1.0000	.0613964			
Conservatism	0.1130	1.0000			
Cost of debts	0.0306	0.0104	1.0000	0	
Company _size	0.0151	- 0.0336	0.3475	1.0000	
Leverage	-0.0694	-0.4428	0.1602	0.1438	1.0000

The results show that the only negative relationship was between leverage and cash holding ($R = - 0.0694$), as well as between leverage and conservatism ($R = - 0.4428$). There was also a negative relationship between conservatism and company size ($R = - 0.0336$). The other relationship between variables, on the other hand, were all positive.

3) Hausman Test

The Hausman test was used to determine whether the Fixed effect model or the Random effect model should be fitted. As the Fixed effect model assumes that variation is fixed within groups (companies), and the Random effect model assumes that variation is random within groups, the test results are shown in table (5).

Table (5)
Hausman Test Results

	(b) Fixed	(B) random	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
Conservatism	.1086771	.1020201	.006657	.0096551
Cost of debts	1.07e-11	1.31e-11	-2.39e-12	9.60e-12
Company_size	-.050433	-.0149337	-.0354993	.0267545
Leverage	.0566985	.0471459	.0095526	.0126828

b = consistent under Ho and Ha; obtained from xtreg

B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

$$\begin{aligned} \text{chi2}(3) &= (b-B)'[(V_b-V_B)^{-1}] (b-B) \\ &= 11.16 \\ \text{Prob}>\text{chi2} &= 0.0109 \end{aligned}$$

Because the hypothesis of utilizing the random effect model was rejected by the Hausman test because the P value was less than 0.05 (0.0109), the Fixed effect model will be used.

4) Empirical Findings

The model's results are shown in Table (6).

Table (6)
Empirical results for the Fixed Effect Model

Fixed-effects (within) regression	No of observations = 127
Group variable: title	Number of groups = 44
R-sq: within = 0.3484	Observations per group: min = 2
between = 0.0117	average = 2.9
overall = 0.0023	max = 3
corr(u _i , X _b) = -0.4486	F(5,78) = 8.34
	Prob > F = 0.0000

Cash holding	Coef.	Std. Err.	T	P> t	[95% Conf. Interval]
company_ size	-.0433546	.0277947	-1.56	0.123	[-.0986896 .0119804]
Leverage	.0524427	.0175347	2.99	0.004	[.0175338 .0873516]
Cost of debts	1.41e-11	3.34e-11	0.42	0.675	[-5.24e-11 8.05e-11]
conservatism	.1415388	.0322215	4.39	0.000	[.0773908 .2056869]
c.costofdebts#c.conservatism	-6.33e-10	2.28e-10	-2.77	0.007	[-1.09e-09 -1.78e-10]
_cons	.4400562	2662019	1.65	0.102	[-.0899111 .9700236]
F test that all u _i =0: F(43, 78) = 11.89 Prob > F = 0.0000					

By applying the Fixed Effect model the results were as the following

- It demonstrates that 34.8% of variation in the dependent variable(Y) is caused by the variations of the covariates (Xs).
- The P value for the model is less than 0.05, indicating that the model is statistically significant.
- The model shows that there is a significant positive relationship

between accounting conservatism and cash holding, as P value is less than 0.05. The coefficient of conservatism is 0.01415388, which means that as conservatism rises by one unit, the cash holding increases by 0.01415388. This result is consistent with the findings of (AlAmri, 2015; ElMalah, 2019), however it contradicts the findings of (Soliman, 2019; Shehata & Rashed, 2021). The positive relationship suggests that conservative companies lead managers to invest only in high positive current value projects, and because the number of such projects is limited, conservative companies are likely to hold more cash than unconservative companies. So, the result supports hypothesis H1. That there is a significant relationship between accounting conservatism and cash holding.

- The Fixed Model results demonstrate that there is no relationship between cost of debts and cash holding because the P value is 0.675, which is more than 0.05. This result refuses hypothesis H2 that there is a significant relationship between cost of debts and cash holding.

- However, when the effect of the relationship between accounting conservatism and cost of debts on cash holding is examined, the result reveals that the effect of the relationship between accounting conservatism and cost of debts is negatively significant on cash holding, As the relationship increases, the cash holding decreases. This finding supports hypothesis H3 that the relationship between accounting conservatism and cost of debts has a significant effect on cash holding, implying that the

more the relationship between accounting conservatism and cost of debts, the less cash holding is required.

Furthermore, leverage has a positive effect on the relationship, although the company size has no effect on the relationship as a control variable.

Conclusion and Implications

This research examines the relationship between accounting conservatism and cost of debts on cash holding, as well as the moderating effects of company size and leverage on the Egyptian listed companies. According to the research, many Egyptian listed companies are not conservative. Accounting conservatism and cash holding have a significant positive relation.

which means that conservative companies encourage managers to invest only in projects with a high positive current value, and because the number of such projects is limited, conservative companies are likely to have a higher level of cash holding than unconservative companies. This outcome is in line with previous research findings (AlAmri, 2015; ElMalah, 2019). The cost of debts does not have a statistically significant relationship with cash holding.

The relationship between accounting conservatism and the cost of debts has a statistically significant negative impact on cash holding. As the relationship between accounting conservatism and the cost of debts increases, the amount of cash hold falls. This indicates that a company with a high level of conservatism

in recognizing losses as opposed to earnings has a low cost of debts or other financial obligations (Ibrahim et al.,2019). This reduces the company's motivation to have cash on hand. It is recommended that accounting conservatism standard setters to concentrate on implementing accounting conservatism procedures in all Egyptian listed companies. Companies should report their financial statements conservatively in order to benefit from low cost of debts or any other obligations that have arisen as a result of investors and creditors' trust in conservative financial statements and company management. This research adds to the body of knowledge on the relationship between accounting conservatism and cash holding, which has an impact on corporate performance in Egyptian listed companies. It is also suggested that all decision makers, such as auditors, to express their opinions on the acceptable level of conservative financial statements, which is also reflected positively on company performance. The findings of this article are based on data provided by the index from the only 44 most active listed companies in the Egyptian Stock Exchange (EGX100). The data spans the years 2018 to 2020, and the sample was chosen after excluding financial institutions, therefore the study didn't cover all companies. So, in order to generalize the findings, more study should be conducted on different companies and financial institutions with varying levels of accounting conservatism.

References

- Ademola, O., & Moses, O. (2017), "Accounting Conservatism and its Benefits to Shareholders in Developing Capital Market: Evidence from Nigeria", *Journal of Accounting and Finance*, 17(1): 89-96.
- Affes, H., & Sardouk, H. (2016), " Accounting Conservatism and Corporate Performance: The Moderating Effect of the Board of Directors", *Journal of Business & Finance Affair*, 5(2): 1-6.
- Afza, T., & Adnan, S. (2007), " Determinants of Corporate Cash Holding: A Case Study of Pakistan", *Proceedings of Singapore Economic Review Conference*, August 1-4, Singapore: 164-165.
- Ahmed, A. (2015), " The Impact of Accounting Conservatism on Information Asymmetry: Evidence From Egypt", *Journal of Commercial & Environmental Studies*, 6(1): 711- 734.
- AlAmri, K., Busaidi, M., & Akguc, S. (2015) "Conservatism and Corporate Cash Holding: A Risk prospective", *Investment Management & Financial Innovations*, 12(1): 101-113.
- Almutairi, A., & Quttainah, M. (2019), " Corporate Governance & Accounting Conservatism in Islamic Banks", *Thunderbird International Business Review*, 61(23), available at: www.researchgate.net.
- Arfan, M., et al., (2017), " Determinants of Cash Holding of Listed Manufacturing Companies in the Indonesian Stock Exchange", *Business & Economics Review*, 26(2): 1-12.
- Armstrong, C., Guay, R., & Weber, J. (2010) " The Role of Information & Financial Reporting in Corporate Governance & Debt Contracting", *Journal of Accounting & Economics*, 50 (1):179-234.
- Artiach, T. & Clarkson, P. (2013) " Conservatism Disclosure & Cost of Equity Capital", *Australian Journal of Management*, available at: www.ssrn.com.

-
- Baker, H., & Powell, G. (2005), " Understanding Financial Management: A Practical Guide, Oxford Blackwell publishing Ltd.
 - Ball, R., & Shivakumar, L. (2005), " The Role of Accruals Asymmetrically Timely Gain & Loss Recognition", Journal of Accounting Research, 44(2): 207 -242.
 - Ball, R., Robin, A., & Sadka, G. (2006), " Are Timeliness and Conservatism due to Debt or Equity Markets? An International Test of Contacting and value Relevance Theories", Manuscript University of Chicago.
 - Bates, T., Kahle, M., & Stulz, M. (2009), "Why Does Firms Hold So Much More Cash Than They Used to ?", The Journal of Finance, 64(5): 1985- 2021.
 - Beaver, W., & Ryan, S. (2005), " Conditional & unconditional Conservatism: Concepts & Modeling", Review of Accounting Studies, 10(1): 269-309.
 - Bryan, T., Mcknight, M., & Houmes, R., (2021), " Accounting Conservatism or Earnings Management: A Study of the Allowance for Doubtful Accounts", Corporate Ownership and control, 18(3) :175-190.
 - Chung,K.,Kimb,J.,Kimb,Y.,&Zhang ,H.(2015),”Information Asymmetry and Corporate Cash Holding “,Journal of Business, Finance &Accounting,42(9):1341-1377.
 - Cui, L., Ken, P., Kim, S., &Li, S. (2021), Accounting Conservatism and Firm Performance during Covid -19 Pandemic “, Accounting &Finance, available at: www.ncbi.nlm.nih.gov.
 - Denis, D., &Sibilkov,V.” Financial Constraints ,Investment and the Value of Cash Holdings”, The Review of Financial Studies ,23(1):247-269.

-
- ElMalah,S.(2019)”Analyzing Relationship between Accounting Conservatism and Cash Holding and its Impact on Earning Quality “, Accounting Researches & Studies Journal ,6(1);127-178.
 - FASB, Financial Accounting Standard Board. (2010), "Conceptual Framework for Financial Reporting. Statement of Financial Accounting, Concept No. 8. Norwalk. CT: FASB.
 - Francis, J., Lafond, R., Olsson, P., & Schipper, K. (2004),”Costs of Equity and Earnings Attributes", The Accounting Review, 79 (4): 967 – 1010
 - Gracia Lara, J, Garcia, osma, B., & Penalva, F. (2009), " Accounting Conservatism and Corporate Governance", Review of Accounting studies, 14(1): 161 – 201
 - Garcia Lara, J., Garcia osma, B., & Penalva, F. (2016), " Accounting Conservatism and Firm Investment Efficiency", Journal, of Accounting & Economics, 61(1): 221- 238.
 - Gracia Lara, J., Garcia osma, B., & Penalva, F. (2020),” Conditional Conservatism and the limits to Earning Management", Journal of Accounting & Public Policy, 39(4), available at: www.researchgate.net
 - Gigler, F., Kanodia, C., Sapa, H., & Venugopalan, R. (2009), " Accounting Conservatism and the Efficiency of Debt Contracts", Journal of Accounting Research, 47 (3), 767-797.
 - Givoly, D., & Hayn, C. (2000), " The Changing Time Series Properties of Earnings Cash Flows, and Accruals: Has Financial Reporting Become More Conservative?", Journal of Accounting & Economics, 29(3): 287-320.
 - Goh, B., Lim, C., Gerald, L., & Tong,Y.(2017),”Conditional Conservatism and Debt Versus Equity Financing", Contemporary Accounting Research, 34(1): 216-251
 - Hajawiyah, A., wahyudin, A., Sakinah,K., & pahala, I. (2020), " The Effect of Good Corporate Governance Mechanisms on Accounting

-
- Conservatism with Leverage as Moderating Variable", *Cogent Business and Management*, 7(1), available at :www.tandfonline.com.
- Hejranijamil, M. (2020), "Accounting Conservatism & Uncertainty in Business Environment Using Firm Financial Data of Listed Companies in the Tehran Stock Exchange", available at: www.emerald.com.
 - Hille, J. (2011), "Accounting Conservatism: The Association between Bond holder – Share holder Conflicts over Dividend policy and Accounting Conservatism", available at: www.Books.google.com.eg.
 - Ibrahim, A., Wang, M., & Hailu, D. (2019), " Accounting Conservatism and Cost of Debt of African Firms Based on Ownership Structure", *Global Journal of management & Business Research*, 19(7): 273-295.
 - Isnawti, A., Rahumawati, R., & Gunardi, A. (2018), " Information Asymmetry and Accounting Conservatism: Does Analyst Coverage Moderating the Results?", *Journal of International Studies*, 11(3): 71-92.
 - Kieschnick, R. & Shi, W. (2020), " Non Stationarity in the Relationship between Corporate Governance and Accounting Conservatism", *Journal of Business, finance & Accounting*, Available at www.onlinelibrarywiley.com
 - Krismiajl, R. (2021), " Accounting Conservatism & Cost of Capital: Evidence from Indonesia," *CECCAR Business review* 2(2): 64-72.
 - Lafond, R., & Roychowdhury, S. (2008), "Managerial Ownership and Accounting Conservatism", *Journal of Accounting Research*, 46(1): 101-135.
 - Li, H. (2020), " Business Strategy Accounting conservatism & Performance ", *Accounting & Finances Research*, 9(3): 23-34

-
- Li, X. (2015), " Accounting Conservatism & The Cost of Capital International Analysis", journal of Business, Finance & Accounting, 42 (5):555-582.
 - Naguen,C.etal.,(2021),”Cash Holding and Financial Stability during a Crisis : A Case Study of Vietnamese Firms in Covid -19 Pandemic “,available at :www.landfonline.com.
 - Rahmani, A., Rostami, V.&Ghorbani,B.(2015),”The Effect of Cash Flow Sensitivity to Institutional Ownership on the Level of the Companies Cash Holding in Iran “, European Online Journal of Natural & Social Sciences ,4(1):1805-1862.
 - Ramalingegowda, S., & Yu, Y. (2018), "The Role of Accounting Conservatism in Capital Structure Adjustments", Journal of Accounting, Auditing and finance, available at: www.doi.org/10.1177/0148558/18814119.
 - Rashidi, M. (2021), " The Pricing of Information Asymmetry Based on Environmental Uncertainty & Accounting Conservatism”, International Journal of Productivity & Performance Management, available at, www.researchgate.com.
 - Ruch, G., & Taylor, G. (2015), " Accounting Conservatism. A Review of the Literature", Journal of Accounting Literature, 34(1): 17-38.
 - Salem, I., & Hussainey, K. (2021), " Risk Disclosure and Corporate Cash Holdings", Journal of Risk & Financial management, 14(7),available at:www.researchgate.net.
 - Sanaa,M. (2016),” The Effect of Account Conservatism on Financial performance Indicators in the Jordanian Insurance Companies”, Journal of Internet Banking & Commerce, 21(1), 1-16
 - Sharma, M., & Kaur, R. (2021), "Accounting Conservatism & Corporate Governance: Evidence from India", Journal of Global Responsible, available at www.emerald.com

-
- Shehata, W., & Rashed, A. (2021), " Accounting Conservatism, Information Asymmetry & Cash Holdings", *Journal of Accounting, Business and Management*, 28(1): 63-72
 - Soliman, W. (2019), " The Moderating Effect of Firm Characteristics on the Association between Accounting Conservatism and Cash Holdings," *International journal of Accounting and Financial Reporting*, 9(4):385-402
 - Solichah, N., & Fachrurrozie, F. (2019), "Effect of Managerial Ownership, Leverage, Firm Size and Profitability on Accounting Conservatism", *Accounting Analysis journal*, 8(3):151-157.
 - Suda, K., & Takada, T. (2011), " Accounting Conservatism in Japan: Time Series Analysis of the Asymmetric Time lines of Earnings", Working Paper, available at: www.ssrn.com.
 - Surachi, A., Somsoda, J., & wonglakorn, S. (2020), " Corporate Board Attributes & Accounting Conservatism: Evidence from Thai Firms", *International Journal of Innovation, Creativity and change*, 12(1): 297-308
 - Thomas, G., & Aryusmar, L., (2020), " The Effect of Effective Tax Rates, Leverage, Litigation Costs, Company size, Institutional Ownership, Public Ownership and the Effectiveness of Audit Committees in Accounting Conservatism at Public Companies “, *Journal of Talent Development & Excellence*,61(2):85-91.
 - Ugwunta, D., & Ugwuang, B. (2019), "Accounting Conservatism and Performance of Nigerian Consumer Goods Firms: An Examination of the Role of Accruals", *International Journal of Financial Research*, 10(1):1-9
 - Wang, R., Hogartigh, O., & Zijl, T. (2009), "Measures of Accounting Conservatism, A Construct Validity Perspective", *Journal of Accounting Literature*, 28(1): 165-203.

- Wati, L., Pirzada, K., & Momon, R. (2020), "Determinants of Accounting Conservatism in Politically Connected Firms", *Journal of Security & Sustainability issues*, 10(1): 189-201.
- Watts,R. (2003), " Conservatism in Accounting Part 1: Explanations and Implications", *Accounting Horizons*, 17(3): 207-221.
- Zhang,J.(2008),"The Contracting Benefits of Accounting Conservatism to Lenders and Borrowers “,*Journal of Accounting &Economics*,45(1):27-54.
- Zhong, Y., &Li,W.(2017),"Accounting Conservatism :A Literature Review”, *Australian Accounting Review*,27(2);195-213.
- Zubaidah, Z., &Nusrizal,N.(2019),"The Effect of Auditing Tenure, Investment Opportunity Set and Accounting Conservatism Towards Earning Quality with Managerial Ownership as Moderating variable “,*Australian Accounting Review* ,27(2):195-207.