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The Effect Of Conditional And Unconditional Accounting Conservatism On Investment Efficiency And Debt Financing In Companies Listed On The Iraqi Stock Exchange

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Abstract
This paper aims to examine the impact of both conditional and unconditional accounting conservatism on investment efficiency and financing behavior among firms listed on the Iraqi Stock Exchange over the period 2015–2021. A total of 203 firm-year observations from 29 companies were analyzed to test four research hypotheses. The empirical results show that conditional accounting conservatism does not have a statistically significant effect on investment efficiency or financing decisions. In contrast, unconditional accounting conservatism is found to significantly improve investment efficiency, suggesting that higher levels of conservative reporting practices can lead to more efficient capital allocation.
Keywords: *Conditional conservatism, Unconditional conservatism, Investment efficiency, Debt financing*

1. INTRODUCTION

Today, the increasing progress of technology and environmental changes have led to an increase in the acceleration of the economy and the strengthening of the increasing competition of institutions, which in turn limits the achievement of profits and increases the likelihood of bankruptcy. Also, relying on the financial reports of companies, owners, investors, business partners, and creditors are interested in assessing the success and the probability of bankruptcy of a company. In the financial decisions of investors and creditors, the financial statements of an institution play a fundamental role. Financial statements constitute the main part of the financial reporting process (Kordestani et al., 2018). According to the objectives of financial reporting and accounting principles, the information forming financial reporting must have meaningful characteristics. In reporting principles, characteristics are referred to as qualitative characteristics. One of the key qualitative characteristics of financial reporting is accounting conservatism, which emphasizes the timely recognition of losses and liabilities over gains and assets. While not directly related to bankruptcy, conservatism aims to prevent overstatement of financial health, which may help firms avoid financial distress due to insufficient cash flow. Therefore, considering the relationship between conservatism and bankruptcy risk, it is necessary to apply conservatism after increasing available liquidity and putting it into exchange by companies under financial pressure (Chung et al., 2020).

Over the past few decades, conservatism has been used by accountants as one of the limiting accounting principles. Despite many criticisms, it has always maintained its place among accounting principles. According to the principle of conservatism, a specific method is selected and applied from among the different methods with the least incremental effect on the company's net profit and total assets. In other words, the company should not overstate its revenues and assets and understate its expenses and liabilities (Giovelli et al., 2019). Investors, as the main suppliers of corporate resources, demand complete and accurate information from companies. In capital markets, it is assumed that all available information is quickly absorbed by individuals and its effects are reflected in the price of securities. In general, the judgments and decisions of individuals are embodied in the prices of securities. Accounting information is represented in financial statements. Investors use accounting information consistently and uniformly without adjusting for changes in accounting methods or paying attention to how it is calculated. One of the most important accounting documents is the income statement. Investors pay most of their attention to net profit as the last information item. Profit, as the final result of the accounting process, is considered

and emphasized by users of accounting information and is always calculated under the influence of the accounting procedures selected by management (Hirshleifer et al., 2011). The choice of accounting procedures allows management to decide when to recognize and measure expenses and income. Management can stabilize the company's profit growth by applying accounting conservatism procedures (Ruch and Taylor, 2015). This increases shareholders' expectations in future years. Conservatism in accounting means the difference between the selected and accepted policies of good and bad news. Good news means positive stock returns or events that lead to increased profits. Also, bad news is equivalent to zero or negative stock returns, leading to reduced profits. Thus, conservatism is defined as the practice of reducing profits and understating assets in response to bad news and subsequently not increasing profits and overstating assets in response to good news (Khan et al., 2019).

According to agency theory, when managers have good information about the existence of profitable investment opportunities, they may not pursue them. This behavior is due to ethical problems arising from management's ownership of the company's cash, prejudice, inappropriate project selection, and lack of available funds (caused by expensive external financing) (Garcia Lara et al., 2010). Conservatism seems to reduce the possibility of poor selection and improve the company's investment policies by facilitating access to external funds and reducing costs (Garcia Lara et al., 2010). The supervisory role of conservatism helps the board of directors and other governance components to avoid value-destroying strategies such as managerial empires (Garcia Lara et al., 2010).

Conservatism limits the manipulation of accounting statements by management by reinforcing other information sources and generating timely warning signals to the corporate governance mechanism. Therefore, it facilitates the process of monitoring managers' investment decisions. According to Ball (2001), managers are always concerned about the income impact of their investment decisions during their tenure and cannot pass them on to the next generation of managers. This limits investment in projects with negative net worth, leading to early abandonment of weak projects and implementation of investment deterrent strategies in leading projects. In addition, conservatism facilitates the attraction of lower-cost external financing and reduces investment problems. Accounting conservatism allows for access to less risky debt and, consequently, reduces the negative effects of a large amount of debt on investment performance. Conservatism often reduces the cost of capital. Typically, a reduction in the cost of debt and a reduction in the cost of capital make it easier to invest.

Investment means the conversion of financial funds into one or more types of assets that will be held for a specified period in the future. The term investment can encompass a wide range of activities, including investing in warrants, bonds, common stocks, or mutual funds. Professionals use other assets such as warrants, call options, convertible bonds, and tangible assets such as gold and precious metals to make investments. According to another definition, investment is sacrificing a certain value now in the hope of obtaining value in the future (of unknown size or quality). In other words, the investor sacrifices a certain value to obtain a specific value in the future. Investment also means postponing current costs to obtain more benefits in the future. The investor forgoes current values in the hope of greater benefits in the future. Investment can be realized in an induced, external, independent, and direct manner. For example, household investment in corporate securities is considered a type of direct investment (Mashayekh et al., 2019). Investment can be realized in different fields, for example, in the industrial sector, the agricultural sector, housing, or the stock exchange. All of them are generally associated with some kind of risk. As a result, investors should pay attention to it when investing. Investment can be considered one of the fundamental pillars of the economy of any country. Undoubtedly, increasing production, as one of the first steps in the development process, requires increasing investment. For this reason, economic theories consider the underdevelopment of some countries to be due to a lack of production due to a lack of investment. In addition to the macroeconomic consequences of investment, this category is also considered a desirable phenomenon from the perspective of investors. The reason is that, in addition to maintaining the purchasing power of money against inflation, this also allows the time value of money and the reward for delaying consumption to be taken into account. For this reason, investment is considered an essential prerequisite for progress from both the supply and demand aspects of capital. Due to the expansion and development of the capital market, and especially the stock exchange in our country, a significant portion of investors' assets is in the form of shares of companies listed on the stock exchange. The nature of business and investment activities is such that earning returns requires risk. Risk plays a key role in financial markets. Therefore, recognizing, measuring, and predicting risk is essential (Lim, 2019).

To provide the necessary funds for capital expenditures and operations, companies seek financing from various sources. Corporate finance theory is based on the assumption that the goal of management is to maximize the market value of a company and, consequently, shareholder wealth. Therefore, decisions related to financial and capital structure, as well as determining and selecting the best financing method, are one of the tasks of financial managers (Jensen et al., 2018). Financing can be achieved through debt or issuing shares. Some theories have addressed why companies choose certain financing methods and how such choices affect the company's past and future performance. However, many studies have been conducted on different financing methods and their effects on returns, stock prices, and other variables in companies. Due to tax advantages, the presence of debt in the financial structure of companies increases accounting profit and increases the rate of return per share. Also, due to the presence of interest costs and the possibility of non-fulfillment of obligations at maturity, it increases financial risk and, as a result, reduces the stock market price and stock returns. Given the importance of the issues introduced in the field of finance and investment, this study evaluates the effect of conditional and unconditional accounting conservatism on investment efficiency and debt financing in companies listed on the Iraqi Stock Exchange.

2. LITERATURE REVIEW

2.1 Investment efficiency

Investment decisions determine a company's position in the market. The reason is that they ensure sustainable development and, at the same time, ensure shareholder value. Managers must make risky decisions to run a business. Good managers invest the company's economic resources efficiently. Various factors affect investment decisions, such as economic conditions, monetary and fiscal policies, capital markets, and company operations. In simple terms, investment means not using resources at present and applying them economically in the hope of obtaining new resources in the future (with a value greater than current resources). One of the important criteria for solving economic problems in countries is the development and expansion of investment-related activities. However, in addition to developing and improving this important criterion, countries should take steps to increase investment efficiency. This goal is achieved when the company invests in projects with a positive net present value. Some capital market imperfections, such as information asymmetry and agency costs, may lead to overinvestment or underinvestment. In general, projects with positive net present value should not be underinvested, and projects with negative net present value should not be falsely endorsed (Peterson, 2009).

To achieve this objective, companies are required to invest their capital in desirable and profitable activities. Thus, when investing, companies must pay attention to their selected projects due to resource constraints. Companies may overinvest by investing in projects with negative net present value. They may also underinvest by eliminating positive investments (Bierman & Schmidt, 2012). Therefore, managers should invest optimally in projects to create value for the company. They should accept projects with positive net worth and reject projects with negative net worth. Since all projects with positive net worth are financed in a single market, this process increases the value of the company.

Investment efficiency is a function of the risk, return, and total cost of investment management, subject to the forward-looking constraints of investors (Ahmed et al., 2020). These constraints include financial and non-financial elements such as the time available to the investor to manage the investment arrangements, to be accountable as a fiduciary, or to meet legal requirements. Therefore, investment efficiency should be considered a combination of financial and non-financial efficiency.

2.2 Financing

Financing is very crucial for any company. Compliance with the principles of financing plays a very important role in maintaining and preserving the financial unit of the company. Financing methods and tools are explained and applied to the needs, financial capacity, economic conditions, and the diversity of people's behavior in investing and facing risk. Debt financing means securing the required financial resources based on borrowing from investors outside the company. This method can help create a tax shield, maintain the percentage of shareholder ownership, and preserve residual profits. While reducing the free cash flow of companies and increasing credit risk, the debt financing method requires sufficient collateral.

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credit risk, the debt financing method requires sufficient collateral. Debt financing can have a positive effect on assets and investment. While reducing companies' free cash flow and increasing credit risk, debt financing requires sufficient collateral (Hu et al., 2019).

2.3 Conservatism in accounting

Accepted accounting principles insist on adhering to accounting conventions to ensure that companies report their financial information as accurately as possible. The principle of conservatism requires accountants to be cautious and choose solutions with the least impact on the company's profits under conditions of uncertainty. The principle of conservatism in accounting is not to manipulate monetary amounts or the timing of reporting financial figures. This method in accounting guides accountants when uncertainty arises and estimates and evaluations are needed, and in cases under the potential for bias, it provides guidance on the approaches used (Chang et al., 2020).

The principle of conservatism establishes rules to be applied when deciding between two financial reporting options. When an accountant is faced with an accounting challenge and has two solutions to choose from, the principle of conservatism states that the solution that results in the lower number should be chosen (Francis et al., 2015). This conservative approach represents a company's financial position in the worst possible case. Assets and revenues are intentionally understated at potentially lower figures. On the other hand, liabilities and expenses are overstated. If there is uncertainty about the likelihood of a loss, accountants are encouraged to record it and amplify its potential impact. Conversely, if there is a possibility of a profit for the company, they are advised to ignore it until it has occurred or been realized (Mohammadi et al., 2013).

Accounting conservatism is a sub-discipline of accounting that requires a high degree of verification before a legal claim for any profit can be made. This is because it requires the identification of all possible losses discovered and involves the highest costs. Revenue is recorded when it is verified, as the criteria for accurate revenue recognition are one of the most common types of accounting conservatism. An example of accounting conservatism is the assessment of the creditworthiness of doubtful accounts, which can provide a more accurate picture of receivables that can be collected given an economic outlook (Lara et al., 2016).

2.4 The impact of conservatism on investment efficiency

Over the past few decades, research on conservatism has flourished. Studies have shown that conservatism has a significant impact on various accounting practices (Watts, 2019; Ryan, 2006). Previous literature has provided various definitions of conservatism. Therefore, there is no fixed definition of conservatism. The most well-known definition of conservatism in accounting is provided by Blis (1924). He defined conservatism as "the anticipation of no profit, but the anticipation of all losses." Furthermore, Watts (2019) defined conservatism as "the requirement for asymmetric confirmation of profit and loss." Therefore, the difference in the confirmation rate between profit and loss affects the level of conservatism. The greater this difference, the higher the level of conservatism. In this regard, accounting conservatism involves asymmetric confirmation and accelerates the identification of all potential losses.

Although accounting conservatism has a long and rich history spanning several decades, the issue of accounting conservatism's impact on users of financial statements has recently been raised. The IASB and FASB argued that conservatism biases financial information. Researchers have generally opposed the elimination of conservatism. Some researchers have argued that conservatism is an essential feature of financial reporting. Accounting conservatism helps reduce information asymmetry and improve the efficiency of debt contracts. Therefore, eliminating conservatism from the conceptual framework may reduce information quality and harm financial reporting (Ahmed et al., 2011; Watts, 2019). On the other hand, opponents of accounting conservatism argue that conservatism leads to the acceleration of the recognition of potential losses. At the same time, it can delay the recognition of potential revenues. This leads managers to manage earnings and increase information asymmetry about the firm's fixed outlook.

Accounting conservatism can be classified into two classes: conditional and unconditional. Conditional conservatism (CC) is defined as "the immediate recognition of negative news and the delay in the recognition of positive news" (Basu, 1997). Unconditional conservatism (UC) is defined as "reported accounting practices that tend to reduce cost." The distinction between conditional and unconditional conservatism is crucial. Unconditional conservatism causes accounting stagnation and subsequently reduces the applications, timing, and information content of conditional conservatism (Hosseini, 2020). On the other hand, unconditional conservatism has a nearly constant impact on the income statement

(Hosseini, 2020). However, both types of conservatism on the balance sheet result in a decrease in the book value of net assets relative to market value.

The key objective of financial reporting is to provide useful, timely, and verifiable information to help investors make sound investment decisions. Investment efficiency refers to how well corporate managers use financial resources to generate profits for the company or to avoid problems of overinvestment or underinvestment. However, managers sometimes manipulate financial reporting and tend to make inefficient investments to maximize their profits. Information asymmetry, imperfect contracts, and inefficient markets are other factors that lead managers to make inefficient investment decisions. Inefficient investment decisions may lead to problems of overinvestment or underinvestment, which in turn have a detrimental effect on the value of companies. The main source of problems of overinvestment is the separation between ownership and management, which in turn leads to conflicts of interest. Empire building by management and turnover risk are two other factors that cause overinvestment problems (Jensen and Meckling, 1976). Empire building arises from managers' preferences to invest in projects with negative net worth to increase their profits without regard to the interests of shareholders. The underinvestment problem arises from the rejection of a project with positive net worth, which reduces the value of the firm (Jensen and Meckling, 1976). Debt spillover and risk aversion are the main factors of the underinvestment problem. Debt spillover occurs when there is a high level of risky debt that burdens the firm's balance sheet and may lead managers to reject investment opportunities with positive net worth. Another reason for the underinvestment problem is risk aversion. When a company has high-risk liabilities and high growth opportunities, managers choose conservative investment strategies to mitigate the risk of losing control of the company. Accounting conservatism can lead to improvements in the investment efficiency of companies and serve the interests of investors and other users of financial statements.

Based on the above, the first and second hypotheses of the research are formulated as follows:

Conditional conservatism and investment efficiency

Conditional conservatism, as the timely recognition of losses and the delay in the recognition of profits, plays an important role in reducing information asymmetry and agency costs. This principle causes managers to recognize losses more quickly and report only certain profits when reporting financial statements (Laox and Ray, 2020). Conditional conservatism reduces information asymmetry between managers and investors. This reduction in information asymmetry increases investors' trust in companies' financial information and helps them make more informed investment decisions (Lara et al., 2016). Since conditional conservatism provides more accurate information about companies' financial situation, companies can allocate their financial resources to projects with the highest returns. This leads to improved investment efficiency and increased company value (Razzaq et al., 2016). Conditional conservatism can prevent inefficient investments. By identifying losses more quickly, companies avoid investing in projects with a potential for loss and thus direct their investments towards profitable projects (Latif et al., 2020).

Several studies, such as Xu et al (2012), have proven that companies that use conditional conservatism principles in their financial reporting generally have higher investment efficiency and provide higher returns to their shareholders. These principles lead managers to make their financial and investment decisions more carefully and accurately. This leads to improved financial performance and increased company value.

Unconditional conservatism and investment efficiency

Unconditional conservatism, which means relying on conservative accounting standards regardless of current economic events, can have a significant impact on companies' investment efficiency (Abd-Elnaby & Aref, 2019). By reducing the overstatement of assets and revenues, this type of conservatism increases the financial transparency of companies. This transparency provides investors with more accurate information about the company's financial situation and provides the conditions for making better investment decisions (Zarinpour et al., 2024). By reducing the likelihood of reporting inaccurate and exaggerated information, unconditional conservatism can reduce the risks associated with financial decisions. This leads to lower agency costs and increased investment efficiency. Unconditional conservatism also prevents investment in projects with negative net present value (NPV). This is because it forces managers to report losses and costs more accurately. This helps direct resources towards more profitable projects (Alves, 2019).

Xu et al. (2012) proved that firms that rely on unconditional conservatism principles generally have higher investment efficiency and exhibit better financial performance. This approach leads to greater trust among investors and improved financial and investment decisions.

2.5 The impact of conservatism and debt financing

Foreign investors mainly extract information about a firm's financial performance from the financial statements published by the firm. Therefore, financial reporting affects the level of information asymmetry between managers and investors about a firm's fundamentals and has significant economic consequences. Also, Biddle et al. (2009) showed that firms with higher financial reporting quality have higher investment efficiency. The researchers argue that their results are more consistent with financial reporting and reduce information asymmetry between firms and external capital providers.

Conservatism increases the usefulness of financial statements. This is because it creates stronger verification conditions for the recognition of unrealized gains than unrealized losses (Basu, 1997). Current theories suggest that conservatism reduces information asymmetry between firm managers and external investors by reducing adverse selection costs or moral hazard, leading to large informational benefits. For example, conservatism improves the efficiency of debt and compensation contracts, moderates the effects of managers' opportunistic behavior (Gao, 2017), enhances information quality (Zhang, 2022), signals management's private information, and reduces bankruptcy and operating cash flow downside risks (Biddle et al., 2012). Despite our understanding of the role of conservatism in reducing information asymmetry between firms and external investors, one issue has not been addressed in the existing literature, as follows: Does conservatism reduce information asymmetry between firms and shareholders? In other words, does conservatism affect the debt financing of firms?

In simple terms, accounting conservatism can affect the importance and reliability of information. By applying conservative policies in identifying and assessing risks, companies can prevent losses and damages caused by incorrect decisions. Also, by providing accurate and reliable financial information, investors can make the best decisions for their investments and benefit from correct and reliable information to evaluate the company's performance. This can improve the reliability of information. In general, accounting conservatism can improve the reliability of information and its importance and contribute to the interests of investors and other users of financial statements. The conservative approach can increase the information reported in the securities markets. Increasing the volume of information can be useful for investors and other users of financial statements to make more accurate decisions. In other words, users need information that is effective in their economic decisions, free from errors and biases. They should also honestly represent what they claim to represent or what is expected of them. In addition, a conservative approach can affect the financial flexibility of companies. By applying conservative policies in identifying and assessing risks, companies can prevent losses from incorrect decisions, and this can improve the financial flexibility of companies. Also, the tendency to hold cash is considered a manifestation of the financial flexibility of companies. By providing accurate and reliable financial information, investors can make the best decisions for their investments and use accurate and reliable information to evaluate the company's performance. This can improve the financial flexibility of companies (Zhang et al, 2020). In this regard, one of the reasons for the effect of conservatism on debt financing is to strengthen investor confidence and increase accurate and reliable financial information. By providing accurate and reliable financial information, investors can make the best decisions for their investments and use accurate and reliable information to evaluate the company's performance. This investor trust can strengthen the company's debt financing. Also, by applying conservative policies in identifying and assessing risks, companies can prevent losses and damages from incorrect decisions. This can lead to improvements in the debt financing of companies. Considering what has been said, the first and second hypotheses of the research are formulated as follows.

Conditional conservatism and debt financing

Contingent conservatism is an accounting principle that allows companies to recognize potential losses sooner, while delaying the recognition of gains until they are realized. This approach makes financial reporting more transparent and reduces information risk for investors and creditors. Debt financing, on the other hand, means raising funds through loans and issuing debt securities. Contingent conservatism plays an important role in this context because creditors have more confidence in conservative financial information. This can reduce the cost of debt financing and improve companies' access to financing, as the likelihood of earnings management and optimistic reporting is reduced (Qiang et al, 2024).

Unconditional conservatism and debt financing

Unconditional conservatism refers to an accounting approach in which assets and revenues are generally understated and liabilities and expenses are overstated, without this recognition being contingent on the occurrence of a specific event. This type of conservatism results in a reduction in reported profits over time and can affect companies' financial decisions. In the context of debt financing, unconditional conservatism may make financial statements less attractive to creditors because it can understate the company's profitability. However, some lenders may view this approach as a sign of financial prudence and risk management, which can be effective in negotiating lower-cost loans (Abdolkarimi et al, 2024).

3. RESEARCH METHODOLOGY

This study is applied in terms of purpose, descriptive-survey in terms of data collection method, and cross-sectional in terms of time horizon. Data were collected using both library research and field methods. In the library research stage, theoretical foundations and previous studies were reviewed to build a conceptual framework. In the field stage, data were gathered using a structured, specialized questionnaire administered to the target population. To analyze the relationships between variables and test the hypotheses, structural equation modeling (SEM) based on correlation analysis was employed using appropriate statistical software.

In partial least squares structural equation modeling (PLS-SEM), which is a variance-based approach, large sample sizes are not strictly required—this is considered one of the key advantages of this method. The adequacy of the sample size depends partly on the complexity of the model, including the number of constructs and paths. According to the guideline proposed by Mohsenin and Esfidani (2014), an appropriate sample size can be estimated as at least ten times the maximum number of structural paths pointing at any latent construct in the model. Based on this rule and the structure of the current study's model, the minimum required sample size was estimated to be 29, and a total of 203 valid questionnaires were collected using a stratified random sampling method from the statistical population.

As mentioned in the literature review and theoretical principles section, behavioral components affect the personal decisions of investors in financial and capital markets, especially stock markets. This study examines the effect of conditional and unconditional accounting conservatism on investment efficiency and debt financing in Iraqi Stock Exchange companies, as stated in the research model and hypotheses.

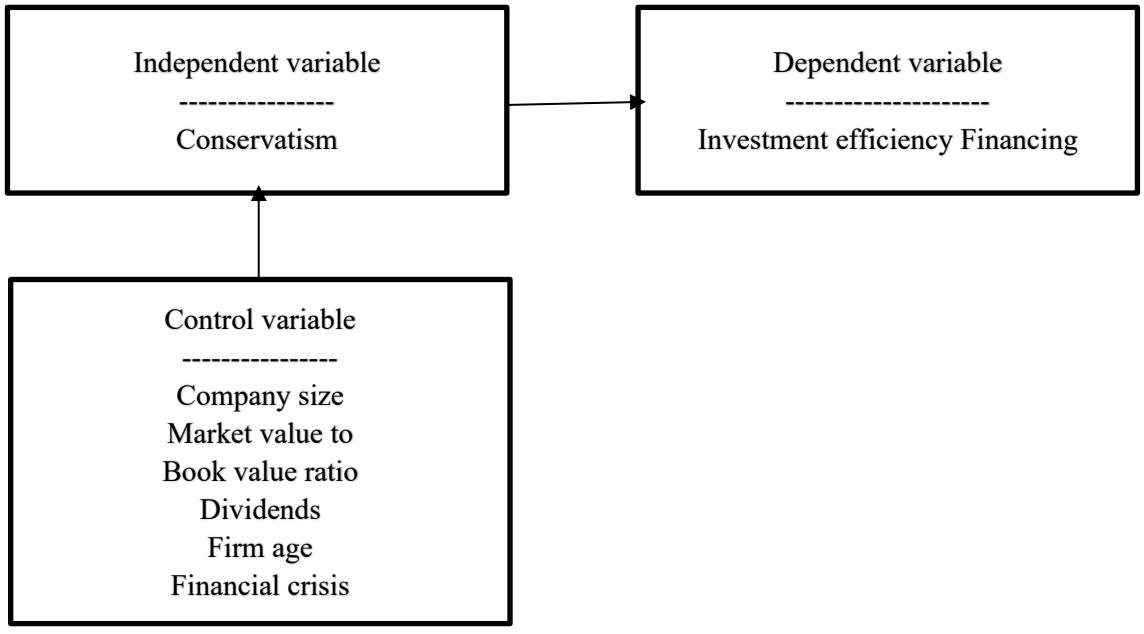

Figure 1: Conceptual research model

3.1 Research regression models

Model 1:

$$\mathbf{InvesEf}_{i,t} = \beta_0 + \beta_1 \mathbf{Conservatism}_{i.t} + \beta_2 \mathrm{Size}_{i.t} + \beta_3 \mathrm{M/B}_{i.t} + \beta_4 \mathrm{Div}_{i,t} + \beta_5 \mathrm{Age}_{i,t} + \beta_6 \mathrm{Crisis}_{i.t} + \beta_7 \mathrm{SPAU}_{i.t} + \varepsilon_{i,t}$$

Model 2:

$$\mathbf{InvesEf}_{i,t} = \beta_0 + \beta_1 \mathbf{UnConservatism}_{i.t} + \beta_2 \mathrm{Size}_{i.t} + \beta_3 \mathrm{M/B}_{i.t} + \beta_4 \mathrm{Div}_{i,t} + \beta_5 \mathrm{Age}_{i,t} + \beta_6 \mathrm{Crisis}_{i.t} + \beta_7 \mathrm{SPAU}_{i.t} + \varepsilon_{i,t}$$

Model 3:

$$\mathrm{DEBT}_{i,t} = \beta_0 + \beta_1 \mathrm{Conservatism}_{i.t} + \beta_2 \mathrm{Size}_{i.t} + \beta_3 \mathrm{M/B}_{i.t} + \beta_4 \mathrm{Div}_{i,t} + \beta_5 \mathrm{Age}_{i,t} + \beta_6 \mathrm{Crisis}_{i.t} + \beta_7 \mathrm{SPAU}_{i.t} + \varepsilon_{i,t}$$

Model 4:

$$\mathrm{DEBT}_{i,t} = \beta_0 + \beta_1 \mathbf{UnConservatism}_{i.t} + \beta_2 \mathrm{Size}_{i.t} + \beta_3 \mathrm{M/B}_{i.t} + \beta_4 \mathrm{Div}_{i,t} + \beta_5 \mathrm{Age}_{i,t} + \beta_6 \mathrm{Crisis}_{i.t} + \beta_7 \mathrm{SPAU}_{i.t} + \varepsilon_{i,t}$$

3.2 Operational definitions of variables

Dependent Variable:

INVES EF: Investment efficiency: Conceptually, investment efficiency refers to all projects with a positive net present value. To measure investment efficiency, a multivariate regression model with several control variables is used to measure the optimal level of investment (Biddle et al, 2009).

$$\mathrm{INV}_{it} = \beta_0 + \beta_1 \mathrm{Grow}_{it} + \beta_2 \mathrm{NEG}_{i,t-1} \times \mathrm{Grow}_{i,t-1} + \varepsilon$$

INVit represents the investment of firm i in year t. This variable equals the ratio of net investment activities (taken from the cash flow statement) to total assets (taken from the balance sheet).

Growit represents the growth in sales of company i in year t-1. This variable equals sales revenue in year t-1 minus sales revenue in year t-2 divided by sales revenue in year t-2 (taken from the income statement). If the investment next year is greater than the growth in sales revenue, the residual of the model is positive. This means that the investment is over-invested. When the investment next year is less than the growth in sales revenue, the residual of the model is negative. This means that the investment is underinvested. Therefore, to calculate the efficiency of investment, the product of the absolute value of the aforementioned value minus one is used. Therefore, the larger the resulting value, the greater the efficiency of investment.

NEG represents the decrease in sales of company i in year t-1. If the company's sales revenue (taken from the income statement) has decreased in year t-1 compared to year t-2, this variable is equal to 1, otherwise, it is equal to zero.

Financing: In this study, the financing variable is measured using the debt ratio, calculated as the ratio of total liabilities to total assets. This metric reflects the proportion of a company's assets financed through debt and is a widely accepted indicator of financial structure.

The following three methods are used to calculate the financing variable.

Symbol	Variable	Measurement method
Debt	Debt ratio	Total debt / total assets

Independent variable:

Conditional conservatism

To measure conditional conservatism, the Ball and Shivakumar model is used in this study as follows.

Equation (1)

$$\mathrm{Acci}_{it} = \alpha_0 + \alpha_1 \mathrm{DCFO}_{it} + \alpha_2 \mathrm{CFO}_{it} + \alpha_3 \mathrm{CFO}_{it} \times \mathrm{DCFO}_{it} + \varepsilon_{it}$$

Where

- ACC is equal to total accruals
- DCFO is a dummy variable with a value of 1 if the change in operating cash flows compared to the previous year is negative and is equal to zero, otherwise.
- CFO represents operating cash flows.

This model is considered a measure for measuring conditional conservatism and emphasizes the measurement of conservatism based on the relationship between accruals and operating cash flows. It also uses operating cash flows to determine good and bad news. In this model, a3 is considered a measure of conditional conservatism.

Unconditional conservatism

The MTB measure is used to measure unconditional conservatism. Ahmad and Doelman (2007) used the book-to-market ratio multiplied by (1) as a measure of conservatism. Since conservatism leads to an understatement of the book value of equity relative to its market value, firms that rely on more conservative accounting have lower book-to-market ratios. In other words, the relationship between book-

to-market ratio and conservatism is inversely related. Multiplying it by (1) gives a direct measure of unconditional conservatism.

Control variables:

Crisis: Financial distress or risk of bankruptcy, measured by the Altman model.

$$\text{EM Score} = Z'' = 1.2X_1 + 1.4X_2 + 3.3X_3; + 0.6X_4 + 0.99X_4$$

Where X_1 is the ratio of working capital to total assets, X_2 is the ratio of retained earnings to total assets, X_3 is the ratio of earnings before interest and taxes to total assets, X_4 is the ratio of the market value of equity to the book value of total liabilities, and finally X_5 is the ratio of sales to total assets.

Probability of bankruptcy based on Z-value
$z < 1.8$ Financial distress
$1.8 < z < 2.99$ Weak (distress range)
$2.99 < z$ Healthy

For companies in the financial distress range, the dummy variable is considered equal to 1.

- SPAU: Auditor's industry expertness: If the auditor has expertise in the relevant industry, the value of this variable is equal to 1 and otherwise 0.
- Size: Company size: This variable is calculated through the natural logarithm of the company's assets.
- M/B: Market to book value ratio: This variable is the result of dividing the market value by the book value of the shares.
- Div: Dividend: Companies' dividends in different years as recorded in the financial statements.
- Age: Company age: This variable is equal to the difference between the year the company was founded and the year the research was conducted.

4. Data Analysis

The desired conclusion of this research is the result of a careful analysis of the information collected based on the research questions. Therefore, data analysis as part of the scientific research method process is one of the fundamental foundations of any study and research. The purpose of analysis is to transform data into an understandable and interpretable form. In this section, the data required to test the research hypotheses are collected and categorized, and analyzed using statistical methods appropriate to the research method and type of variables. To answer the formulated problem or to decide whether to confirm or reject the research hypotheses, various analysis methods are used.

4.1 Descriptive statistics

The methods specific to collecting and processing information are called descriptive statistics. This type of statistics deals only with describing the population or sample, and its key purpose is to calculate the parameters of the population or sample of the research (Azar and Momeni, 2010). In the descriptive statistics section, data analysis is performed using central and dispersion indices. In the study period from 2015 to 2021, 29 companies were surveyed each year. In general, 203=29×7 years of companies (observations) were studied for each variable. The results of the table indicate that all the information required in this study was fully extracted, and there are no missing observations. The minimum and maximum values of the research variables can help the researcher identify outliers in data analysis. Certainly, the measurement criteria of each variable are effective in determining descriptive criteria. This should be considered by all researchers. The descriptive statistics of the variables used in the models related to hypothesis testing are presented in Table 1.

Table 1: Descriptive statistics of the quantitative variables studied

Name	Symbol	Scale	Mean	Median	Min	Max	Standard deviation	Skewness	Kurtosis
Investment efficiency	INVES EF	Model Residual	0/140 -	0/100 -	0/751 -	/000 -0	0/143	-1/765	3/222
Financing – Debt	Debt	Ratio	0/455	0/183	0/001	/657 7	0/959	4/865	27/171

Financing – Leverage	LEV	Ratio	2/110	1/014	1/127 -2	/546 234	16/460	14/075	19/746 9
Financing – Dividends	Div	Ratio	0/059	0/007	0	/204 2	0/178	9/265	10/182 6
Unconditional conservatism	UnConservatism	Ratio	1/264 -	0/348 -	3/117 -1	/458 3	4/146	-4/983	26/841
Conditional conservatism	Conservatism	Coefficient	0/773 -	0/704 -0	1/895 -	/438 0	0/714	0/083	-0/774
Company size	Size	Logarithm	2/509 2	2/390 2	1/347 9	/049 27	1/480	0/860	1/150
Market-to-book value	M/B	Ratio	6/601 2	2/276	3/779 -5	/615 920 3	65/987 2	13/742	19/832 2
Firm life	Age	Logarithm	3/464	3/401	2/639	/317 4	0/314	0/967	1/114

Source: Research findin

Table 2: Descriptive statistics of qualitative research variables

Percentage frequency of zero observations	Zero observations	The percentage frequency of one observation	One observations	Scale	Variable symbol	Variable name	Variable type
66/487	137	32/512	66	Virtual	Crisis	Financial crisis	Control
31/527	64	68/472	139	Virtual	SPAU	Auditor Industry expertness	

The minimum and maximum variables indicate the maximum and minimum data available in the information collected from the companies. In descriptive statistics, the index measuring the deviation from the symmetry of the determining parameters is the skewness coefficient. Negative skewness means an asymmetric distribution (negative skewness). Positive skewness in other research variables means an asymmetric distribution (positive skewness). The index measuring the dispersion of the population compared to the normal distribution is called the coefficient of kurtosis. Negative kurtosis indicates that the research variables are shorter than the normal distribution. Therefore, the distribution is higher than the normal distribution. Positive kurtosis in other research variables indicates that the research variables are higher than the normal distribution of the population. Therefore, the distribution is lower than the normal distribution.

4.2 Hypothesis Testing

To test the research hypotheses, the introduced regression models are used. Considering the estimation of research models based on evidence collected from the capital market in the companies under study to test the research hypotheses, the significance of the coefficients at the five percent error level is used. The tables in this section contain the estimation of regression models. A multivariate regression model is used to test the research hypotheses. These regression models are stated at the top of each table. After confirming the type of model in terms of fixed or random effects and according to the tests performed, the desired regression model is estimated with the selected approach. Considering the estimation of the model based on evidence collected from the capital market in the companies under study to test the research hypotheses, the significance of the coefficients at the five percent error level is used.

In these tables, the first and second columns are the symbols of the variables and the estimated coefficients (β), respectively. The third column is the standard deviation, and the fourth column is the Student's t-statistic. Finally, the last column is the p-value or, in other words, the probability value of each coefficient. Considering the significance level (five percent error level), we can comment on the significance of each of the estimated coefficients. If each of the coefficients is significant, considering the sign of the coefficient, we can identify the type of relationship between the relevant variable and the dependent variable. The positive and negative signs of the coefficients indicate a direct and inverse relationship, respectively. The symbol C at the beginning of the table is the constant value of the equation. In regression models, only the coefficient related to it (β0) is represented. Based on the estimation of the above model, the results of testing the research hypotheses are described below.

4.2.1 Testing the first group of hypotheses

After confirming the model based on the tests performed, the regression models of the first group were estimated. Table 3 presents the regression estimate of the desired model. Based on the models to test the hypothesis in the model, the coefficient in question in the relationship between the independent variable and the dependent variable must be significant at the five percent error level. If the above coefficient is significant, we can comment on the significance of the hypothesis. To prove the hypothesis in these models, the significance of the β1 coefficient at the five percent error level is used.

Model 1:

$$\mathbf{InvesEf}_{i,t} = \beta_0 + \beta_1 \mathbf{Conservatism}_{i.t} + \beta_2 \mathrm{Size}_{i.t} + \beta_3 \mathrm{M/B}_{i.t} + \beta_4 \mathrm{Div}_{i,t} + \beta_5 \mathrm{Age}_{i,t} + \beta_6 \mathrm{Crisis}_{i.t} + \beta_7 \mathrm{SPAU}_{i.t} + \varepsilon_{i,t}$$

Model 2:

$$\mathbf{InvesEf}_{i,t} = \beta_0 + \beta_1 \mathbf{UnConservatism}_{i.t} + \beta_2 \mathrm{Size}_{i.t} + \beta_3 \mathrm{M/B}_{i.t} + \beta_4 \mathrm{Div}_{i,t} + \beta_5 \mathrm{Age}_{i,t} + \beta_6 \mathrm{Crisis}_{i.t} + \beta_7 \mathrm{SPAU}_{i.t} + \varepsilon_{i,t}$$

Table 3: Estimation of regression models for testing the first group of hypotheses

Variable name	Dependent variable Symbol	Investment efficiency (INVESEF)			
		Model 1		Model 2	
		Coefficient	Probability	Coefficient	Probability
Fixed value	C	-6/397	0/003	-6/316	0/003
Conditional conservatism	Conservatism	6/257	0/639	-	-
Unconditional conservatism	UnConservatism	-	-	5/823	0/024
Company size	Size	1/438	0/055	3/611	0/075
Market-to-book value	M/B	-4/821	0/001	-4/862	0/000
Financing-Dividends	Div	8/715	0/875	1/024	0/851
Firm life	Age	4/861	0/165	5/028	0/156
Financial crisis	Crisis	1/132	0/624	2/840	0/259
Auditor Industry Expertness	SPAU	1/617	0/439	1/680	0/414
F-statistics and probability		The generalized model lacks fitness indicators.			
Determined and adjusted coefficient					

4.2.2 Testing the second group of hypotheses

Before conducting the regression analysis, several diagnostic tests were performed to verify the classical assumptions of the model. The Kolmogorov–Smirnov test was used to assess the normality of the data. Multicollinearity among independent variables was evaluated using VIF and Tolerance values. Autocorrelation of residuals was checked using the Durbin–Watson test. Additionally, the Breusch–Pagan test was conducted to assess heteroscedasticity. The results indicated that the assumptions required for regression analysis were satisfactorily met.

After confirming the fixed effects model based on the tests performed, the second regression model was estimated. Table 4 presents the regression estimate of the desired model. Based on the model developed to test the second hypothesis in the second model, the desired coefficient in the relationship between the

independent variable and the dependent variable should be significant at the five percent error level. If the above coefficient is significant, it is possible to comment on the significance of the second hypothesis of the research. The test of the second hypothesis of the research was stated to answer the second research question. The second research model is used to test the second hypothesis. To prove the second hypothesis in this model, the significance of the β1 coefficient at the five percent error level is used.

Table 4: Estimation of regression models for testing the second group of hypotheses

Variable name	Dependent variable / Symbol	Investment efficiency (INVESEF)			
		Model 1		Model 2	
		Coefficient	Probability	Coefficient	Probability
Fixed value	C	2/366	0/292	0/275	0/280
Conditional conservatism	Conservatism	1/464	0/746	-	-
Unconditional conservatism	UnConservatism	-	-	2/540	0/025
Company size	Size	-1/832	0/034	-1/435	0/029
Market-to-book value	M/B	-3/952	0/937	-7/435	0/881
Financing-Dividends	Div	7/733	0/970	-8/070	0/968
Firm life	Age	6/372	0/068	6/306	0/049
Financial crisis	Crisis	2/497	0/041	3/987	0/003
Auditor Industry Expertness	SPAU	-9/500	0/174	-9/432	0/175
F-statistics and probability		The generalized model lacks fitness indicators.			
Determined and adjusted coefficient					

4.2.3 Testing the third group of research hypotheses

After confirming the model based on the tests performed, the regression models were estimated. Table 5 presents the regression estimate of the desired model. Based on the model developed to test the third hypothesis in the third model, the desired coefficient should be significant in the relationship between the independent variable, the moderating variable, and the dependent variable at the five percent error level. If the above coefficient is significant, it is possible to comment on the significance of the research hypotheses.

Table 5: Estimation of regression models for testing the third group of hypotheses

Variable name	Dependent variable / Symbol	Investment efficiency (INVESEF)			
		Model 1		Model 2	
		Coefficient	Probability	Coefficient	Probability
Fixed value	C	-8/557	0/713	-8/479	0/713
Conditional conservatism	Conservatism	0/364	0/826	-	-
Unconditional conservatism	UnConservatism	-	-	0/167	0/566
Company size	Size	0/71	0/379	0/692	0/393
Market-to-book value	M/B	0/0001	0/934	0/0001	0/947
Financing-Dividends	Div	-1/235	0/852	-1/236	0/851
Firm life	Age	2/156	0/566	-2/108	0/573
Financial crisis	Crisis	3/465	0/179	3/864	0/148
Auditor Industry Expertness	SPAU	1/917	0/455	1/926	0/453
F-statistics and probability		The generalized model lacks fitness indicators.			
Determined and adjusted coefficient					

4.2.4 Testing the fourth group of research hypotheses

After confirming the model based on the tests performed, the regression models were estimated. Table 6 presents the regression estimates of the model in question. Based on the model developed to test the hypotheses, the coefficient of interest in the relationship between the independent variable, the

moderating variable, and the dependent variable should be significant at the five percent error level. If the above coefficient is significant, we can comment on the significance of the research hypotheses.
In the following models, to prevent autocorrelation with the dependent variable, the DIV variable has been removed from the control variables.
Table 6: Estimation of regression models for testing the fourth group of hypotheses

Variable name	Dependent variable Symbol	Investment efficiency (INVESEF)			
		Model 1		Model 2	
		Coefficient	Probability	Coefficient	Probability
Fixed value	C	1/363	0/700	2/187	0/538
Conditional conservatism	Conservatism	-2/981	0/058	-	-
Unconditional conservatism	UnConservatism	-	-	-1/227	0/722
Company size	Size	2/263	0/855	1/912	0/878
MaMarket to book value	M/B	-6/914	0/699	-5/566	0/758
Firm life	Age	-4/302	0/445	-5/774	0/305
Financial crisis	Crisis	-6/299	0/861	-1/153	0/748
Auditor Industry Expertness	SPAU	1/609	0/949	1/115	0/965
F-statistics and probability		The generalized model lacks fitness indicators.			
Determined and adjusted coefficient					

4.3 RESULTS AND DISCUSSION

Based on the previous analysis, this section presents the results of hypothesis testing, followed by a general conclusion.

4.3.1 Results of Hypothesis 1

Hypothesis 1: There is a significant relationship between conditional conservatism and investment efficiency.

The results indicate that there is no statistically significant relationship between conditional conservatism and investment efficiency in Iraqi firms. This implies that employing conditional conservatism in financial reporting does not necessarily enhance investment efficiency. As such, investors should not rely solely on this accounting principle when evaluating investment opportunities. Instead, they should consider a broader set of indicators, including macroeconomic conditions, financial policies, and company-specific factors such as return on investment, risk management, and long-term strategic plans.

These findings contrast with studies by Al-Najjar & Al-Najjar (2019), Cheng & Tsai (2020), and Demarjian et al. (2012), which suggest a negative relationship between conditional conservatism and investment efficiency. A possible explanation for the lack of significance in the Iraqi context could be due to weaker market mechanisms or variations in the implementation of accounting standards.

4.3.2 Results of Hypothesis 2

Hypothesis 2: Unconditional conservatism has a significant effect on investment efficiency.

The findings show a positive and significant relationship between unconditional conservatism and investment efficiency. Firms that adopt unconditional conservatism tend to reduce information asymmetry by reporting more reliable and less exaggerated earnings. This transparency enhances investor confidence, increases share value, and ultimately improves investment returns. Additionally, conservative accounting reduces perceived investment risk, encouraging higher levels of capital inflow.

These results are consistent with the findings of Bao and Zhang (2015), Dittmar and Zhang (2015), and Kothari et al. (2009), which confirm that unconditional conservatism fosters investment efficiency by improving financial reporting quality and investor trust.

4.3.3 Results of Hypothesis 3

Hypothesis 3: Conditional conservatism has a significant effect on debt financing.

This hypothesis was not supported by the data, as no significant relationship was found between conditional conservatism and debt financing. This suggests that in Iraq, the use of conditional conservatism in financial reporting does not influence companies' access to debt.

This outcome is in contrast to prior studies (e.g., Kim and Soderstrom, 2016; Li and Zhang, 2018; Loughran & Teoh, 1995), which have documented a positive relationship between conditional conservatism and firms' ability to raise debt. One possible reason for this inconsistency could be the differing perceptions and roles of financial institutions in the Iraqi context, where financial statement conservatism might not be a primary factor in credit decisions.

4.3.4 Results of Hypothesis 4

Hypothesis 4: There is a significant relationship between unconditional conservatism and debt financing.

The results support a positive and significant relationship between unconditional conservatism and debt financing. Firms that apply unconditional conservatism tend to experience lower capital costs and increased creditworthiness, as creditors view such firms as less risky. As a result, these firms may gain easier access to debt financing.

However, this finding contradicts some earlier studies (e.g., Demarjian et al., 2012; Gao and Zhang, 2017) that reported a negative association between unconditional conservatism and debt financing. These contradictory findings could stem from differences in financial systems, investor expectations, or the specific economic and regulatory environments in which the firms operate.

4.4 Managerial Implications

Based on the results, several practical recommendations can be made:

- Companies should reassess their accounting practices and consider aligning them more closely with unconditional conservatism to enhance investment efficiency and financing opportunities.
- Training programs for managers and financial staff on the benefits of unconditional conservatism can support better decision-making and increase financial transparency.
- Given the observed advantages of unconditional conservatism in financing, firms might adopt this principle as a strategy to lower financing costs and improve their capital structure.

4.5 Recommendations for Future Research

To extend the findings of this study, future researchers may consider the following:

1. Exploring the moderating effects of firm characteristics (e.g., size, industry, financial stability) on the relationship between accounting conservatism and investment efficiency.
2. Analyzing economic condition effects**,** such as during periods of recession or economic growth, to determine whether conservatism plays a different role under varying macroeconomic circumstances.
3. Examining managerial decision-making to better understand how accounting conservatism influences investment and financing strategies at the managerial level.

Such future studies can provide deeper insights for policymakers, investors, and corporate decision-makers into how conservatism affects firm performance and resource allocation.

4.6 Research Limitations

As with any empirical research, this study faced several limitations:

- Uncontrolled external variables such as shifts in government policy, management turnover, and budgeting inefficiencies may have influenced the results.
- The selected time frame may coincide with specific economic cycles or political events, potentially affecting the generalizability of the findings. Events like financial crises, speculative bubbles, or regulatory shifts can introduce distortions in stock prices and corporate behavior, thus limiting the stability of the results over time.

Future research should address these limitations by incorporating longer time horizons, broader samples, and controlling for more contextual variables.

REFERENCES

1. Abd-Elnaby, H., & Aref, O. (2019). The effect of accounting conservatism on investment efficiency and debt financing: evidence from Egyptian listed companies. International Journal of Accounting and Financial Reporting, 9(2), 116-144.
2. Abdolkarimi, M., Najafi Moghadam, A. and Darabi, R., (2024). Analyzing the relationship between financial leverage and conditional and unconditional conservatism with emphasis on structural equations. Journal of Management Accounting and Auditing Knowledge, 14(53), pp.79-93.
3. Ahmed, A. S., & Duellman, S. (2007), Evidence on the role of accounting conservatism in corporate governance, Journal of Accounting and Economics, 43, pp. 411–437.
4. Ahmed, A.S., Duellman, S.,(2011). Evidence on the role of accounting conservatism in monitoring managers' investment decisions. Accounting and Finance 51, 609-633.
5. Ahmed, B., Akbar, M., Sabahat, T., Ali, S., Hussain, A., Akbar, A., & Hongming, X. (2020). Does the firm life cycle impact corporate investment efficiency? Sustainability, 13(1), 197.

6. Al-Najjar, A. A., & Al-Najjar, M. A. (2019). The impact of accounting conservatism on investment efficiency: Evidence from Jordan. International Journal of Accounting & Information Systems, 20(3), 269-288
7. Alves, S. (2019). Accounting Conservatism and Debt Financing. Australian Academy of Accounting and Finance Review, 5(2), 48-68.
8. Ball, R. (2001). Infrastructure requirements for an economically efficient system of public financial reporting and disclosure. Brookings-Wharton papers on financial services, 2001(1), 127-169.
9. Bao, S., & Zhang, Y. (2015). The impact of accounting conservatism on investment efficiency: Evidence from China. The Accounting Review, 90(4), 1263-1292
10. Basu. S (1997), the conservatism principle and the asymmetric timeliness of earnings, Journal of Accounting and Economics, 24, pp 3-37.
11. Biddle, G. C., Hilary, G., & Verdi, R. S. (2009). How does financial reporting quality relate to investment efficiency? Journal of accounting and economics, 48(2-3), 112-131.
12. Bierman Jr, H., & Smidt, S. (2012). The capital budgeting decision: economic analysis of investment projects. Routledge.
13. Chang, et al. (2020). Evaluation of the impact of financial leverage and conditional conservatism on investment inefficiency. Journal of Financial Research.
14. Cheng, C.-F., & Tsai, H.-C. (2020). The impact of accounting conservatism on investment efficiency: Evidence from Taiwan. Journal of Business Finance & Accounting, 47(3-4), 399-426
15. Demerjian, J., Lev, B., & McVay, S. (2012). The financial reporting consequences of earnings management: Evidence from a natural experiment. Journal of Accounting and Economics, 53(2-3), 267-294
16. Dittmar, A., & Zhang, J. (2015). Accounting conservatism and investment efficiency: Evidence from a natural experiment. Journal of Accounting and Economics, 59(2-3), 233-257
17. Francis, B., Hasan, I., Park, J. C., & Wu, Q. (2015). Gender differences in financial reporting decision making: Evidence from accounting conservatism. Contemporary Accounting Research, 32(3), 1285-1318.
18. Gao, S., & Zhang, J. (2017). Accounting conservatism and debt financing: Evidence from China. Review of Accounting Studies, 22(4), 1223-1253
19. Garcia Lara J. M., Garcia Osma, B. and Penalva F.,(2007), Board of Directors' Characteristics and Conditional Accounting Conservatism: Spanish Evidence, European Accounting Review, 16 (4), pp 727–755.
20. Givoly, D. and Hayn, C (2019)," Accounting Conservatism Time-Series Properties of Earnings, Cash Flows and Accruals: Has Financial Reporting Become More Conservative", Journal of Accounting and Economics,29(3), pp.287-320.
21. Hirshleifer D, Lim SS, Teoh SH. (2011). Limited investor attention and stock market misreactions to accounting information. The Review of Asset Pricing Studies. Dec 1;1(1):35-73.
22. Hosseini, A., Rezaei, M., & Smith, J. (2020). The impact of firm size on investment efficiency. *Journal of Financial Research.
23. Hu Y, Xu M. China's anti-corruption campaign, political connections and private firms' debt financing. China Finance Review International. 2019 Nov 1;9(4):521-53.
24. Ruch, G.W., Taylor, G. (2015). Accounting conservatism: A review of the literature. Journal of Accounting Literature. Feb 28;34(1):17-38.
25. Jensen, M. and Meckling, W.H. (2018), Theory of the firm: accounting conservatism, agency costs and ownership structure, Journal of Financial Economics, 3,
26. Kim, Y., & Soderstrom, N. S. (2016). Accounting conservatism and debt financing. The Accounting Review, 91(3), 1019-1052
27. Kordestani, Gholamreza; Amirbeigi Langroodi, Habib; Summer (2018), Conservatism in Financial Reporting: Investigating the Relationship between Earnings Time Asymmetry and MTB as Two Criteria for Assessing Conservatism, Accounting and Auditing Reviews, No. 52, pp. 106-89
28. Kothari, S. P., Shu, S., & Wysocki, P. D. (2009). Earnings quality and stock returns. Journal of Accounting and Economics, 48(1), 24-83
29. Lara, J. M. G., Osma, B. G., & Penalva, F. (2016). Accounting conservatism and firm investment efficiency. Journal of accounting and economics, 61(1), 221-238.
30. Latif, K., Chaudhary, G. M., & Waqas, A. (2020). Relationship Between Accounting Conservatism and Investment Efficiency with the Moderating Role of IFRS Adoption in Pakistan. Journal of Accounting and Finance in Emerging Economies, 6(4), 1139-1150.
31. Laux, V., & Ray, K. (2020). Effects of accounting conservatism on investment efficiency and innovation. Journal of Accounting and Economics, 70(1), 101319.
32. Li, F., & Zhang, J. (2018). Accounting conservatism and debt financing: Evidence from China. Journal of Business Finance & Accounting, 45(1-2), 127-154
33. Lim, Roslinda, (2019), The Relationship Between Corporate Governance and Accounting Conservatism, The University of New South Wales.
34. Loughran, T., & Teoh, S. H. (1995). Information asymmetry, corporate disclosure, and the cost of capital. Journal of Financial Economics, 38(2), 213-243.
35. Mashaykh, Shahnaz; Esmaeili, Maryam; (2019), Investigating the Relationship between Investment Efficiency and Some Aspects of Governance Principles in Companies Listed on the Tehran Stock Exchange, Accounting and Auditing Reviews, No. 45, pp. 25-44
36. Mohammadi, M. H. K., Heyrani, F., & Golestani, N. (2013). Impact of conservatism on the accounting information quality and decision making of the shareholders and the firms listed on the Tehran stock exchange. International Journal of Academic Research in Accounting, Finance and Management Sciences, 3(3), 186-197.
37. Mohsenin, S. and Esfidani, M.R., (2014). Structural equations based on the partial least squares approach-using Smart-PLS software. Tehran: Mehraban Nashr.

38. MyersPetersen, M., 2019. Estimating standard errors in finance panel data sets: comparing approaches. Review of Financial Studies 22, 435–480.
39. Qiang, X. and Wang, J., (2024). The Effect of the Current Expected Credit Loss Model on Conditional Conservatism of Banks and Its Spillover Effect on Borrower Conservatism. The Accounting Review, 99(6), pp.389-420.
40. Razak, et al. (2016). The impact of accounting conservatism on investment efficiency. Journal of Accounting and Economics.
41. Watts, R. (2019). "Conservatism in accounting-part II: Evidence and research opportunities." Simon Business School Working Paper No. FR –
42. Xu, X., Wang, X., & Han, N. (2012). Accounting conservatism, ultimate ownership, and investment efficiency. China Finance Review International, 2(1), 53-77.
43. Zarinpour, M., Mansourfar, G., & Zarei, A. (2024). Corporate social responsibility in the relationship between accounting conservatism and investment efficiency. Interdisciplinary Journal of Management Studies (Formerly known as Iranian Journal of Management Studies), 17(2), 507-520.
44. Zhang, H., Zhang, Z. and Steklova, E., (2020). Do companies need financial flexibility for sustainable development?. Sustainability, 12(5), p.1811.
45. Zhang, L. (2022). "Independent directors, investment opportunities and earning conservatism." Unpublished PhD. Dissertation. The School of Business of The George Washington University.
46. Zhou, J. and G. Lobo (2006). Did conservatism in financial reporting increase after the Sarbanes-Oxley Act? Initial evidence. Accounting horizons, 20(1), pp.57-73.