Accounting Conservatism and Company's Profitability: The Moderating Effect of Ownership Concentration

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ABSTRACT

This study aims to investigate the effect of accounting conservatism on a company's profitability and whether ownership concentration moderates the effect of accounting conservatism on a company's profitability in Jordan. The study took a sample of 84 industrial and service companies listed in Amman Stock Exchange (ASE) between 2006 and 2016. Adopting a quantitative research design, a cross-sectional analysis is performed to test the hypotheses of the study.

The study employs both an accrual-based approach and a market-to-book ratio (M/B) approach to examine the effect of accounting conservatism on a company's profitability. Ownership concentration is measured by taking the percentage of common stocks maintained by shareholders who possess at least 5% of the total amount of a firm's common shares. The companies' profitability is measured by the return on equity (ROE).

The results revealed that accrual-based conservatism has a significant negative effect on the company's profitability. According to the M/B ratio approach of conservatism, firms with higher levels of accounting conservatism and M/B ratio appear to have better profitability. Additionally, the results disclosed that ownership concentration has no moderating impact on the effect of accounting conservatism on the company's profitability.

The study provides some recommendations for firms with a view to adopt different conservative practices which may enhance accounting information quality and the overall profitability.

Keywords: Accounting Conservatism, Ownership Concentration, Company's Profitability, Jordanian Industrial and Service Companies.

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التحفظ المحاسبي وربحية الشركة: الأثر المعدل لتركز الملكية

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ملخص

تهدف هذه الدراسة إلى اختبار تأثير التحفظ المحاسبي على ربحية الشركة، وتحديد ما إذا كان تركز الملكية في الشركات يلعب دوراً معدلاً في تأثير التحفظ المحاسبي على ربحية الشركات في الأردن. تكونت عينة من 84 شركة صناعية وخدمية مدرجة في سوق عمان المالي للفترة 2006-2016. تم جمع البيانات اللازمة للدراسة من خلال القوائم المالية للشركات عينة الدراسة، وتم اختبار الفرضيات باستخدام تحليل الانحدار المتعدد .

ولتحقيق أهداف الدراسة، تم قياس التحفظ المحاسبي باستخدام المدخل الذي يستند إلى المستحقات، ومدخل القيمة السوقية إلى القيمة الدفترية لحقوق الملكية. وتم قياس تركز الملكية عن طريق أخذ نسبة الأسهم العادية التي يملكها المساهمون الذين يملكون ما لا يقل عن 5٪ من إجمالي عدد أسهم الشركة، أما ربحية الشركات فتم قياسها من خلال العائد على حقوق المساهمين.

أظهرت نتائج الدراسة أن التحفظ المحاسبي المبني على المستحقات له تأثير سلبي ذو دلالة إحصائية على ربحية الشركة. أما بخصوص مدخل القيمة السوقية إلى القيمة الدفترية لحقوق الملكية، فأظهرت النتائج أن الشركات التي تتمتع بمستويات أعلى من التحفظ المحاسبي وبنسبة عالية من القيمة السوقية إلى القيمة الدفترية لحقوق الملكية تتمتع بربحية أفضل. بالإضافة إلى ذلك، فقد أظهرت النتائج أن تركز الملكية ليس له دور معدل في تأثير التحفظ المحاسبي على ربحية الشركة.

بناءً على النتائج، قدمت الدراسة بعض التوصيات للشركات من أجل تبني ممارسات مختلفة من التحفظ المحاسبي من شأنها تعزيز جودة المعلومات المحاسبية وربحية الشركة. علاوة على ذلك، توصي الدراسة الشركات بإيلاء تأثير تركز الملكية المزيد من الاهتمام؛ لأنه يعتبر إحدى آليات الحوكمة في الشركات.

الكلمات الدالة: التحفظ المحاسبي، تركز الملكية، ربحية الشركة، الشركات الصناعية والخدمية الأردنية.

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INTRODUCTION

Accounting conservatism is a continuing issue in accounting, regarding whether it is a preferable attribute of financial reporting or not (Chan et al., 2009). Conservatism is traditionally defined as 'anticipate no profits, but anticipate all losses' (Bliss, 1924). By the continued disclosure of lower carrying values of equity and net assets over their market values (Feltham and Ohlson, 1995; Beaver and Ryan, 2005), this is well-known as 'unconditional conservatism'. From another point of view, conservatism has been described by Basu (1997) as the asymmetrical recognition of earnings to economic profits, 'good news' and setbacks, 'bad news'.

Over the years, the impact of accounting information quality on a company's profitability has been the main subject of many theoretical and empirical studies (Affes and Sardouk, 2016). Previous studies have documented the significance of accounting conservatism as a vital element of financial reporting quality, as it boosts the reliability of financial figures and reduces information asymmetry by providing efficient monitoring of managers and contracts (Mohammed et al., 2017). It mitigates agency problems between firms and various shareholders by forcing managers to produce more conservative numbers which will protect shareholders' interests and promote the firm's value (Alkurdi et al., 2017).

The benefits of accounting conservatism are fundamentally derived from its monitoring role, since it enforces the timely recognition of economic losses, reduces asymmetry of information (Lafond and Roychowdhury, 2008), mitigates agency costs (Lara et al., 2016) and lowers the cost of capital (Haw et al., 2014).

Ownership is concentrated when a small chunk of shareholders possess a large number of the firm's shares and control the rights to vote (Kiatapiwat, 2010). Given the significance of the regulatory authority of ownership concentration, it would be appealing to study the impact of ownership concentration on the relation between the quality of accounting information represented by accounting conservatism and the firm's profitability.

Accordingly, this study is primarily aiming at studying the effect of accounting conservatism on a company's profitability using ROE in industrial and service companies listed in ASE over the period 2006-2016. Furthermore, the study intends to examine the moderating role of ownership concentration.

The Study Problem

Accounting conservatism played an important role in developed countries, but the role it plays in developing, emerging countries is still ambiguous (Ren et al., 2011). Due to globalization and rapidly changing environments, the competitive quality of financial reporting is highly needed. Firms with better profitability are associated with a better quality of accounting information (Bukenya, 2014).

The management decisions of choosing the proper accounting policies and strategies influence the firm's profitability. Thus, the current study aims to study the effect of accounting conservatism on company's profitability and to examine the moderating effect of ownership concentration through answering the following questions:

1. Does accounting conservatism have a significant effect on the company's profitability among industrial and service companies listed in Amman Stock Exchange? This question generates the following sub-questions:

- Does accounting conservatism, measured by the accrual-based approach, have a significant effect on the company's profitability among industrial and service companies listed in Amman Stock Exchange?

- Does accounting conservatism, measured by the market-to-book ratio, have a significant effect on the company's profitability among industrial and service companies listed in Amman Stock Exchange?

2. Does ownership concentration moderate the effect of ownership concentration on the company's profitability among industrial and service companies listed in Amman Stock Exchange?

This study focuses on showing how adopting new practices of accounting, such as utilizing different conservative practices, may improve the quality of the financial results, specifically the overall profitability of companies.

The Importance of the Study

The significance of this study results from the belief that the conventional environment of organizations is constantly evolving due to technological advancements and globalization. Accordingly, markets are quickly developing, leading organizations to appoint new standards and adopt new practices (Nafei et al., 2012). The adoption of new practices may improve the quality of the accounting results considered as an indication of profitability. Accounting conservatism has turned into one of the leading topics of discussion in the academic circles, demonstrating how firms can be creative, proactive and willing to take risks, where the resulting profitability is the essence of the processes.

High-quality financial information lowers the possibility of losing partners' confidence and mitigates agency conflicts between firms and shareholders. Furthermore, the study attempts to show the importance of one of the corporate governance techniques which is "ownership concentration", by entering it as a moderator effect between the conservatism and companies' profitability, since firms are controlled and directed mainly by it.

The Objectives of the Study

The study aims to:

- Examine the effect of accounting conservatism, measured by accrual-based approach, in company's profitability among industrial and service companies listed in Amman Stock Exchange.
- Examine the effect of accounting conservatism, measured by the market-to-book ratio, on the company's profitability among industrial and service companies listed in Amman Stock Exchange.
- Examine the moderating effect of ownership concentration on the effect of accounting conservatism on the company's profitability among industrial and service companies listed in Amman Stock Exchange.

Literature Review
Accounting Conservatism

Accounting conservatism is one of the most common topics in accounting. It has been noted that accounting conservatism has no unified definition. Traditionally, accounting conservatism has been described by the known rule of 'anticipate no profits, but anticipate all losses' (Bliss, 1924). However, Watts and Zimmerman (1986) have stated that conservatism is reporting the least possible value for assets and the greatest value for liabilities among possible alternatives. Beaver and Ryan (2005) have considered accounting conservatism as the average undervaluation of the net assets book value relative to their market value. Accordingly, accounting conservatism provides the anticipation that, in the long run, the recorded net assets will be less than the market value (Feltham and Ohlson, 1995).

Basu (1997) explained that accounting is conservative when the profit response to poor news

represented in negative economic performance is quicker than its response to great news represented in positive economic performance, as good news demands a greater degree of verification by accountants.

In conclusion, accounting conservatism is understating the book value – unconditional conservatism – and the timely recognition of losses and gains – conditional conservatism (Xie et al., 2012). To sum up, the Financial Accounting Standards Board (FASB) stated that conservatism is an action of prudence to guarantee that financial risks and uncertainties, latent in different work situations, are effectively considered.

Accounting conservatism is characterized as a set of rules and agreements that encourage companies' disclosure to be more prompt and complete by forcing managers to be timelier in their disclosure of bad news (Guay, 2008), reducing the management's ability to manipulate accounting figures, thus reducing the possibility of information asymmetry and the deadweight losses generated from it (La Fond and Watts, 2008).

Conservative financial reporting plays a significant role in resolving agency conflicts between managers, shareholders and capital providers relying on the timeliness with which the 'bad news' is disclosed by providing prompt, valuable, credible and transparent information to be used to evaluate the financial performance of firms (Armstrong et al., 2016). Ball and Shivakumar (2005) have demonstrated that conservatism is a significant feature of earning quality, as it enhances the quality of financial reports by making them more informative and useful. Firms could obtain higher outputs, maximize their profits and score a competitive position in the market through biased reporting or by using conservative reporting policies, because companies are affected by disclosures, mainly through announcing relevant

information (Guo, 2012).

Watts (2003) presented several explanations regarding the existence of accounting conservatism and the need for it. He stated that conservative accounting can constrain a manager's opportunistic behavior to hide unfavorable figures in contracts in order to influence investors' decisions to contribute the highest possible funding (contracting explanation). Conservatism lowers the firm's expected litigation costs by understating the net assets and reducing earnings to avoid the high risk resulting from litigation and the use of asymmetrical recognition of the profits and losses of conservative reporting allows profitable companies to decrease or defer the imposed taxes by delaying or accelerating expenses and gains recognition (tax explanation).

By the year 2010, the International Accounting Standards Board (IASB) reconsidered their conceptual framework and refused the concept of conservatism, emphasizing that conservatism contradicts neutrality, one of the major features of faithful representation (Vishnani and Misra, 2016).

For the goal of the current study, unconditional measures of conservatism are utilized: the accrual-based measure and the market-to-book ratio used by (Feltham and Ohlson, 1995; Givoly and Hayn (2000); Ahmed and Duellman, 2007).

The Accrual-based Measure

Accruals are the net income before extra-ordinary items less the operating cash flow plus the depreciation expense divided by the average total assets over a three-year period concentrated on year t, multiplied by -1.

Accruals =	Net income before extra-ordinary items – Operating cash flow + Depreciation expense ÷ Average total assets for 3 years	× -1

(Feltham and Ohlson, 1995; Givoly and Hayn, 2000; Ahmed and Duellman, 2007).

Accounting conservatism persistently results in accruals. More negative average accruals over a number of periods indicate more conservative accounting, where the reason for focusing on accruals is to postpone the recognition of financial gains and to accelerate the recognition of economic losses. Thus, the rate of cumulative accruals of the firm will become more negative over time. The purpose of using the average over a number of periods is to ensure that the influence of any large accruals is mitigated, which mitigates the impact of earnings manipulation on accruals, by reducing the temporary reversal of accruals stemming from the earnings management, as they usually reverse within one to two periods. The measure is multiplied by -1, so it is increasing in the magnitude of accruals. Higher conservatism is expected to generate higher measures of conservative accruals.

Market-to-Book Ratio Measure (M/B)

Another measure of the level of conservatism relies on the M/B, the relation between the market value and the book value of firms' equity and in its application, firms tend to lower their net book value over their true market value. Therefore, high M/Bs indicate practicing conservative accounting. When the M/B is greater than 1, the greater the indication of conservatism. This measure captures conservatism's cumulative effects from the beginning of the firm (Zhong and Li, 2016).

M/B_{it}	MV_{it}
	BV_{it}

Company's Profitability

The success of companies is mainly defined by their financial profitability over a certain period of time and since it is the first thing investors evaluate, scholars and researchers have condensed their efforts with a view to determine measures for performance which will help in evaluating and comparing the effectiveness and efficiency of a firm's actions and operations (Al-Matari et al., 2014).

Performance measures aid managers to improve their performance by focusing on the areas that need to be adjusted (Tayeh et al., 2015).

For the purposes of this study, return on equity is utilized to measure firm's profitability.

ROE= Net profit after tax/ Shareholder equity

Ownership Concentration

Ownership concentration has been identified as an influential mechanism of governance. Ownership concentration means that a big number of the firm's shares are concentrated in the hands of a small number of shareholders, which puts them in a powerful position by controlling the right to vote (Kiatapiwat, 2010). The possession of a large number of shares allows the shareholders to participate in directing the firm's operational and financial polices along with the company's management (Al Kurdi et al., 2017). Boone et al. (2011) have identified block shareholders as an influential monitoring corporate governance mechanism which mitigates the tussle of interests between stockholders and managers (agency cost).

According to the 'opportunistic behavior' hypothesis, firms with a dispersed or diffused ownership structure present lower earning quality, since their managers' actions are not observable, as the managers have the ability and incentive to manipulate the earnings and hide unfavorable performance (Hope et al., 2012). Thus, predicting positive effects of ownership concentration on profitability is based on its efficient monitoring power on mitigating deviant managerial actions (Nguyen et al., 2015). Shleifer and Vishny (1997) suggested that ownership concentration encourages the practice of accounting conservatism and consequently causes the enhancement of company's profitability. However, one of the top concerns of corporate governance is that, instead of the traditional conflict between the principal and agent, conflicts between the minority and controlling shareholders could occur (Kiatapiwat, 2010).

This study used the following calculation to measure the amount of ownership concentration of firms:

% of common shares owned by shareholders who possess at least 5% of the total equity (Nguyen et al., 2015).

Previous Studies

The effect of accounting conservatism on a company's profitability has been investigated by several studies around the world. Xie et al. (2012) applied the M/B ratio and total accruals to measure unconditional conservatism. Cash flow rights and voting rights were used as a proxy to capture controlling shareholders' private benefits. The study was conducted in Hong Kong during the period 2002–2004 using 259 Hong Kong listed companies. The study demonstrated that accounting conservatism can be opportunistically adopted by controlling shareholders through assets and equity tunneling, purchasing equity and assets at lower prices from listed firms.

The study of Allam and Hamdan (2012) investigated the level of accounting conservatism and the factors affecting accounting conservatism on a sample of 114 Jordanian companies for the period (2002-2006). The results of the study showed that the level of accounting conservatism by Jordanian companies is low. The study also found that financial reports of the bank sector are the most conservative ones. In addition, small companies were more conservative than bigger ones.

Artiach and Clarkson (2014) studied the nature of the relationship between conservatism and the cost of equity capital. The study sample consisted of U.S.-listed firms over the period 1985-2000. They found that conservatism is inversely related to the cost of equity capital and the power of the relation depends or is conditioned on the company's information. The relationship is stronger for companies with high information asymmetry (conditional conservatism) and weaker for companies with low information asymmetry (unconditional conservatism). Moreover, they documented that this relationship is diminished for companies with low information asymmetry. Accruals were used as a measure of conservatism and modified price-earnings-growth (MPEG) as a proxy for the cost of equity capital.

Yunos and Ahmad (2015) determined that concentrated ownership has a negative effect on the relationship between firms' governance and accounting conservatism, as large shareholders employ less conservative practices to avoid this governance tool and to ease their opportunistic behavior which influences the quality and reliance on financial reports, in turn lowering the financial performance. The study suggested that accounting conservatism is not an effective tool, since controlling shareholders determine to what level conservatism is practiced in the financial reports.

Affes and Sardouk (2016) used 60 French listed firms over the period 2007-2012 to examine the moderating effect of ownership concentration on the effect of accounting conservatism on the company's performance. Performance was measured by the ROE and the C-score was used to measure accounting conservatism. The results of the study showed a positive moderating impact of ownership concentration on the relationship between accounting conservatism and corporate performance, suggesting that concentrated ownership favors the commitment of companies to conservative accounting practices, which brings value and enhances the company's performance.

Sana'a (2016) investigated the effect of accounting conservatism and size of the company on financial performance of Jordanian insurance companies, for the period (2007-2014). The study used the accrual-based approach in order to test the hypotheses of the study. The results showed that the Jordanian insurance companies have practiced accounting conservatism policies and there was a significant and positive effect of accounting conservatism on financial performance of the Jordanian insurance companies.

Ademola and Moses (2017) studied the association between the shareholders' value and accounting conservatism in Nigeria over the period 2006-2015. Multiple regression analysis was used to analyze the data collected and to test the study hypotheses. The study sample included 20 firms quoted on the Nigerian Stock Exchange. Accounting conservatism was measured using AACF and the proxy used for the shareholders' value was the shareholders' fund. The results identified a positive relationship between the shareholders' value and accounting conservatism. The result was validated by a robustness check and it was discovered that the relationship was stronger for companies with higher information asymmetry. This implied that accounting conservatism was an effective governance tool to reduce information risk and agency conflicts.

Lawal and Hassan (2017) examined the relationship between accounting conservatism and bank performance in Nigeria. The study used a sample of 10 Nigerian deposit money banks for a period of 5 years (2012-2016). The study tested the effect of accounting conservatism on bank performance, by using multiple regression analysis. The results indicated that there was a significant relationship between accounting conservatism and bank performance in Nigeria. The conditional accounting conservatism has a positive relationship with bank performance (ROA), while unconditional accounting conservatism (UC-ACC) is negatively related to bank performance (ROA).

Hsieh et al. (2018) investigated the ability of considering accounting conservatism as a rational reaction to ambiguity. The study used a sample of 126,421 Chinese firms during the period from 1980 to 2010. Both accrual-based approach (unconditional conservatism measure) and Basu's 1997 measure (conditional conservatism measure) were used as measures of accounting conservatism. According to decision analysis, decision rules which work better under ambiguity lay more weight on negative outcomes than on positive outcomes. Increasing the timelines of bad news is the mechanism of accounting conservatism which is an ideal choice under cautious decision rules and as a result of that, managers apply them. The study stated that there are two types of business strategies: the "defender" using the existing resources and the "prospector" seeking new business opportunities and facing greater ambiguity, therefore conducting more conservative reporting.

Khalifa et al. (2018) conducted a study in the Middle East and North Africa region to examine the effect of the two types of conservatism-conditional

and unconditional – on the cost of equity during the years 2004-2009. The M/B ratio was employed to measure unconditional conservatism, where (C-score and G-score) based on Basu's (1997) famous measure were used to measure conditional conservatism. The results supported the theoretical pillar that conditional conservatism positively affects the cost of equity capital by worsening the information quality. Conditional conservatism enhances the debt contracts' efficiency through accelerating the violations of debt covenants.

Mohammadi and Noshahr (2018) examined the relation between conservatism and stock rate of returns on one side and cash holdings on the other side in Tehran between 2012 and 2016. The study sample consisted of 104 firms listed in Tehran Stock Exchange. The results revealed that conservatism is positively related to total stock return. Furthermore, the study revealed that cash holdings and stock returns are negatively related. Therefore, investors are recommended to invest in firms with low level of cash holdings in order to gain higher returns.

Khamees and Al-Momani (2018) examined the effect of conditional and unconditional accounting conservatism on

managing the downside risk of operating cash flows of companies listed in Amman Stock Exchange for the period 2005-2014. The researchers found that companies listed in (ASE) (industrial, financial and service) practiced conditional and unconditional accounting conservatism and that the financial sector practiced accounting conservatism more than industrial and service sectors. In addition, the results indicated that there was a significant effect of both types of accounting conservatism on the downside risk of operating cash flow.

Study Model and Hypotheses

The purpose of the current study is to demonstrate the effect of accounting conservatism on the company's profitability, moderated by ownership concentration. Thus, the independent variable of the study is accounting conservatism, while the dependent variable is company's profitability (ROE) and the moderating variable is ownership concentration. Figure (1) represents the study model.
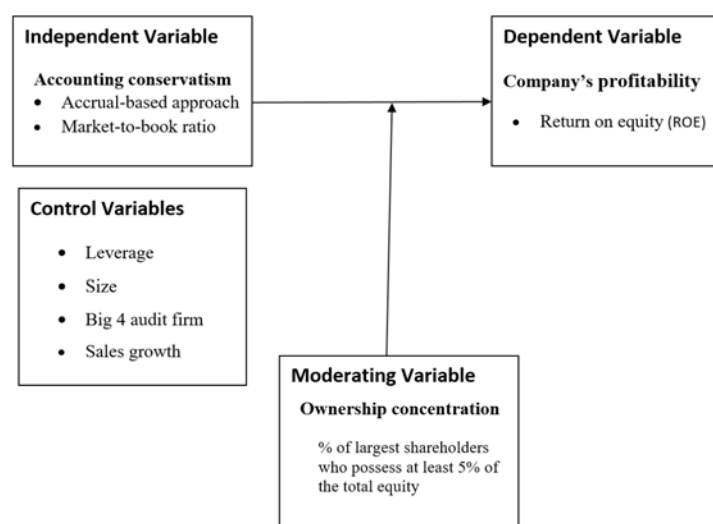

Figure (1): The study model

In order to achieve the study's objectives, the researchers formulated the following principal and sub-hypotheses:

H1.1: There is a significant statistical effect of accounting conservatism on a company's profitability.

This hypothesis generates the following sub-hypotheses:

H1.1.1: There is a significant statistical effect of accounting conservatism measured by the accrual-based approach on a company's profitability.

H1.1.2: There is a significant statistical effect of accounting conservatism measured by the market-to-book ratio on a company's profitability.

H1.2: Ownership concentration plays a moderating role in the effect of accounting conservatism on a company's profitability.

Research Methodology

The current study used the descriptive and analytical methodologies. In the descriptive methodology, the researchers reviewed the relevant literature in order to make up the theoretical framework of the study and was extract the measurements. In the analytical methodology, the required data was obtained from the actual financial statements disclosed on Amman Stock Exchange site. Then, the researchers used statistical techniques to analyze the collected data.

Study Population, Sample and Analysis Unit

The targeted population of this study included all industrial and service companies listed in ASE, equaling 121 companies: 63 industrial companies and 58 service companies as of 2016, representing approximately 52% of the market size for the

period that extended from 2006 to 2016.

Thirty-seven companies were excluded because the associated data was not available for at least 4 years. An outlier of 5% of the whole observations was eliminated on each of the study variables to avoid the impact of extreme values. The final sample included 84 companies: 42 industrial companies and 42 service companies, with 852 observations.

Study Instrument

The study utilized several statistical techniques to analyze the data after the processes of collecting, filtering, confirming and entering the data into the Statistical Package for Social Sciences (SPSS). The analysis techniques included descriptive statistics to describe the sample, which involved the arithmetic mean, standard deviations and the highest and lowest values. The second technique was the correlation analysis between the study variables. Third, multicollinearity tests were conducted to test for high correlation between the independent variables of the research. Fourth, multiple regression was used to test the study hypotheses to find out the effect of accounting conservatism on a company's profitability and the moderating role of ownership concentration in the industrial and service sectors.

Descriptive Statistics for the Variables of the Study

Descriptive statistical data to describe the sample, which involved arithmetic means, standard deviations and the highest and lowest values, are represented in Table (1).

Table (1): Descriptive statistics for the dependent, independent, moderating and control variables

Dependent variable	Observation	Minimum	Maximum	Mean	Std. Deviation	Median
ROE	852	–0.9977	0.8557	0.0326	0.1529	0.0472
Independent variables						
M/B	833	0.2200	8.6400	1.4143	0.9964	1.1000
ACCR	841	–0.3754	0.8147	0.0017	0.1024	–0.0044
Control variables						
Lev	852	0.0015	0.9178	0.3162	0.1902	0.2894
Log (Size)	852	5.9016	8.7953	7.3960	0.4835	7.3850
Big 4	833	0	1	0.3301	0.4705	----------
SalesG	827	–1	6.4972	0.0944	0.5415	0.0392
Moderating variable						
OwnCon	796	0.0069	0.9860	0.5911	0.2296	0.6264
ROE: Return on equity, **M/B:** market-to-book ratio, **ACCR:** accrual-based approach, **LEV:** leverage ratio, **Size:** log of assets, **BIG 4:** audited by one of the Big 4 firms, **SalesG:** sales growth, **OwnCon:** ownership concentration.						

The descriptive analysis illustrates that the mean value of the dependent variable (ROE) is about 3.3%, which reveals that the sampled firms achieve relatively low profits through their management ability to effectively generate earnings using money invested by shareholders. In addition, the standard deviation of the ROE is about 15.3%, which indicates the convergence of the results of the studied sample. Furthermore, the maximum value observed was 85.57% while the minimum value was –99.77 %.

Table (1) also demonstrates that the mean value of the M/B ratio is about 141%, which may indicate the implementation of accounting conservatism, since the market values of the firms' equity are higher than their book values. In other words, companies use more conservative accounting policies valuing their equity in financial reports, minimizing the book value of the net assets. A high M/B ratio implies the implementation of accounting conservatism in order to dodge the losses that may stem from contracting, regulation and shareholders' litigation

costs. The standard deviation of the M/B ratio is 99.64%, which indicates the high convergence of the results of the studied sample. The maximum amount observed is 864% while the minimum amount is 22%, implying that there is a variation among firms in applying conservative policies.

The accrual-based approach of accounting conservatism was observed to have a mean value of 0.17%, implying that, in general, the majority of the studied firms implement a prudent level of conservative accounting standards. The standard deviation of the accrual-based approach is 10.24%, which indicates the high convergence of the results of the studied sample.

The ratio of the leverage has a mean value of 31.62%, indicating that 31.62% of the sampled firms' assets were financed from debt and loans. This result also implies lower financial risks faced by the firms as they tend to depend mainly on shareholders to

finance their assets rather than utilizing debt. Furthermore, the mean value of the sampled firms' size is 739.6%. The mean value of the Big 4 audit firms is about 0.33; this result indicates that nearly 33% of the sampled companies are audited by one of the Big 4 auditing firms, meaning that the other 67% of the sampled companies were audited by audit firms other than the Big 4 audit firms. Sales growth has a mean value of 9.44%, while the maximum value is about 650% and the minimum value is –100%. Based on the mean value of the ownership concentration, about 59% of the sampled firms have an ownership concentration of more than 5%, indicating that the ownership structure of the companies is highly concentrated. The existence of ownership concentration may signal that the legal system does not provide enough protection for investors, since owners maintain large positions in businesses (Chen and Hsu, 2009). However, others argue that those controlling owners may improve the firm's performance by helping select accounting policies which reduce managers' opportunistic behavior, make optimum use of resources and increase investors' wealth (Ammann et al., 2011).

Correlation Analysis

To examine the relationships between dependent, independent and control variables, Pearson test was used. According to the results in Table 2, we can conclude that accounting conservatism, measured by the M/B ratio, has a significant correlation with the company's profitability, ROE, (R = 0.249, Sig. = 0.000), which means that the financial profitability measured by ROE increases when the M/B ratio increases. Profitable firms tend to be more conservative in valuing their book values by understating the book value of their equity, which, in turn, results in a higher M/B ratio. For this reason, investors believe that the firm has an excellent future for growth, expansion and raised profits, which maximizes their capital gains. The company's profitability– ROE – and accounting

conservatism – accrual-based approach – have a negative significant correlation (R = –0.293, Sig. = 0.000), which indicates that financial profitability measured by the ROE decreases when the accrual-based approach increases.

According to Kung et al. (2010) and Ahmed and Duellman (2007), profitable firms lean to adopt conservative accounting practices. This stems from the fact that the cost of choosing to conduct more conservative accounting practices is higher for low-profitability firms (Kung et al., 2010). On the contrary, according to the IASB, neutrality is the higher objective and conservatism is a desirable reaction to uncertainty. However, Conservatism may lead to a bias in the reported financial position affecting firms' financial profitability (Artiach and Clarkson, 2014).

Accounting conservatism, measured by accrual-based approach and the M/B ratio variables, is observed to have a positive significant correlation with leverage, indicating the influential effect of debt contracts on forcing businesses to adopt conservative accounting.

Accounting conservatism, measured by accrual-based approach and the firm's size, has a significant negative correlation (R = –0.109, Sig. = 0.002), indicating that larger companies demonstrate less conservative practices, despite the fact that according to the positive accounting theory, large companies would be more conservative in order to avoid political costs when disclosing great earnings, because large firms are subjected to a higher supervision from the government and financial analysts. Others noted that small companies are more able to practice conservatism, since they are subjected to low levels of control and governance from authorities (Behrghani et al., 2013). On the other hand, significant positive

relationship was identified between accounting conservatism measured by the M/B ratio and firm size (R = 0.077, Sig. = 0.025).

A positive significant relationship between conservatism measured by the M/B ratio and audit firm type was observed (R = 0.162, Sig. = 0.000). This is due to the professional care of the Big 4 audit firms in reducing litigation costs; they prefer and require their clients to conduct more conservatism in their accounting practices.

Accounting conservatism measured by the M/B ratio has a significant positive relation with ownership concentration (R = 0.187, Sig. = 0.000), implying that firms with concentrated ownership are more conservative on their balance sheets, understating the book value of assets and equity relative to their market value. It was also observed that controlling shareholders constrain the opportunistic behavior of managers by encouraging them to use more conservative accounting practices, since both conservatism and concentrated ownership are effective mechanisms to reduce agency conflicts by making the optimal selection of the accounting policies to reduce management's opportunistic behaviors and make optimum use of the firm's resources to increase investors' trust (Lskavyan and Spatareanu, 2011; Ammann et al., 2011).

In addition, ownership concentration has a positive significant correlation with the company's profitability, ROE, (R = 0.095, Sig. = 0.007), indicating that concentrated ownership affects the corporate governance mechanism that enhances firms' profitability. As suggested by the agency theory, conservatism mitigates agency conflicts derived from the monitoring incentives of block shareholders to discipline and control the managers' opportunistic behavior, which, in turn, improves the profitability of the companies (Lin et al., 2018).

A negative significant correlation between leverage ratio and ROE was found (R = –0.214, Sig. = 0.000), which indicates that, in certain situations, profitable firms reduce their borrowings, since they can raise extra capital internally with no bankruptcy cost, supporting the pecking order theory.

A positive significant correlation between the Big4 ratio and size was found (R = 0.265, Sig. = 0.000), which indicates that bigger firms tend to hire one of the Big four auditing firms.

Table (2): Correlations between dependent, independent, moderating and control variables

		ROE	M/B	ACCR	LEV	SIZE	BIG 4	SALES G	OwnCon
ROE	Pearson Correlation	1							
	Sig. (2-tailed)								
	N	852							
M/B	Pearson Correlation	0.249**	1						
	Sig. (2-tailed)	0.000							
	N	833	833						
ACCR	Pearson Correlation	–0.293**	0.020	1					
	Sig. (2-tailed)	0.000	0.568						
	N	841	828	841					

LEV	Pearson Correlation	–0.214**	0.109**	0.115**	1				
	Sig. (2-tailed)	0.000	0.002	0.001					
	N	852	833	841	852				
SIZE	Pearson Correlation	0.219**	0.077*	–0.109**	0.271**	1			
	Sig. (2-tailed)	0.000	0.025	0.002	0.000				
	N	852	833	841	852	852			
BIG4	Pearson Correlation	0.012	0.162**	0.065	0.022	0.265**	1		
	Sig. (2-tailed)	0.722	0.000	0.063	0.523	0.000			
	N	833	820	828	833	833	833		
SALESG	Pearson Correlation	0.136**	0.052	–0.210**	–0.036	–0.001	–0.103**	1	
	Sig. (2-tailed)	0.000	0.141	0.000	0.306	0.983	0.003		
	N	826	813	826	826	826	816	826	
OwnCon	Pearson Correlation	0.095**	0.187**	–0.070	–0.036	0.117**	0.244**	0.033	1
	Sig. (2-tailed)	0.007	0.000	0.050	0.309	0.001	0.000	0.359	
	N	796	783	792	796	796	790	777	796
**Correlation is significant at the 0.01 level (2-tailed).									
*Correlation is significant at the 0.05 level (2-tailed).									

Multicollinearity Test

Multicollinearity has been defined by Menard (2000) as a phenomenon which occurs when there is a high correlation between two or more independent variables in a multiple regression model. This creates negative effects on the analysis by eliminating the ability to interpret the results and conclusions of the study, which impacts the generalizability and accuracy of the OLS model if it is left untouched (Schreiber-Gregory and Jackson, 2017). To verify that there is no problem of multicollinearity, variance inflation factor (VIF) and tolerance tests were implemented.

Variance Inflation Factors

The general rule of VIF test is that if it is greater than 10, the regression coefficients are poorly determined due to multicollinearity (Field, 2013). In reviewing the existence of multicollinearity in the current study, the OLS regression tables (Tables 3 and 4) include the VIF statistics. Since the VIF values are less than 10, this study's results display no indications of multicollinearity.

Tolerance

Another test is used to show whether there is a multicollinearity problem or not; the general rule of tolerance is that a tolerance of less than 0.2 indicates a problem with multicollinearity. In reviewing the existence of multicollinearity in this study, the OLS regression tables (Tables 3 and 4) include the tolerance in the statistics. Since tolerance is greater than 0.20, this study displays no indications of multicollinearity.

OLS Regression Analyses

The following section presents the results of multiple regression analysis with an interpretation of these results for each study model. Then, the results are compared with those in the literature and previous studies.

Model 1:

$$ROE = \beta 0 + \beta 1 \, ACCR + \beta 2 \, M/B + \beta 3 \, LEV + \beta 4 \, SIZE +$$

$$\beta 5 \, BIG \, 4 + \beta 6 \, SalesG + e$$

The first model was designed to examine the effect of accounting conservatism measured by accrual-based approach and the M/B ratio on the company's profitability, measured by ROE, controlled by leverage, size, Big 4 audit firms and sales growth. Table 3 presents the results of testing the first model.

Table (3): Model (1) analyzing the effect of the independent variable (accounting conservatism) and control variables on the dependent variable (company's profitability)

Variables		T-Value	B	Sig. (T)	VIF	Tolerance
Constant		−8.235	....	0.000	……	………
Independent	ACCR	−8.670	−0.266	0.000	1.081	0.925
	M/B	10.099	0.304	0.000	1.042	0.959
Controls	LEV	−9.577	−0.298	0.000	1.111	0.900
	Size	8.719	0.283	0.000	1.208	0.828
	BIG 4	−3.819	−0.120	0.000	1.139	0.878
	Sales G.	1.317	0.040	0.188	1.070	0.935
F-Model		58.824				
Sig. (F)		0.000				
Adjusted R^2		0.302				
R^2		0.307				
R		0.554				
ACCR: the accrual-based approach, **M/B:** the market-to-book ratio, **LEV:** the leverage ratio, **Size:** log of assets, **BIG 4:** audited by a Big 4 firm, **Sales G:** sales growth.						

The results demonstrate that the value of adjusted R^2 was 30.2 %, indicating that the independent variable (accounting conservatism) and controlling variables (leverage, size, Big 4 and sales growth) explain 30.2% of the total variation in the dependent variable (company's profitability).

The results also reveal that accounting conservatism, measured by the accrual-based approach and M/B ratio along with control variables, significantly explains the variation in the company's profitability measured by ROE at less than 0.05 level of significance with F value = 58.824, indicating that the first proposed model of the study is appropriate and has an explanatory power. Thus, the researchers accepted the first hypothesis, which signifies that there is a significant effect of accounting conservatism on the

company's profitability along with the existence of the control variables for the sample companies listed in Amman Stock Exchange.

The primary or the dependent variable of interest, company's profitability measured by ROE, has a negatively ($\beta = –0.266$) significant (Sig. = 0.000) relation with the accrual-based approach as an indicator of accounting conservatism. This result suggests that companies that engage more in implementing conservative accounting understate earnings, which generates less constant and predictable earnings from one period to another and might affect the projections and timing of future earnings, hence impacting the equity valuation. The persistence of earnings is a vital indicator of earnings quality which reflects the company's current and future profitability (Chen et al., 2013; Kim and Kross, 2005; Bandyopadhyay et al., 2010).

The M/B ratio, as an indicator of accounting conservatism, has a positive effect on the company's profitability, ROE, ($\beta = 0.304$) and it is statistically significant at Sig. = 0.000. This result suggests that adopting conservative practices through the M/B approach and minimizing equity and net assets of the book value have a positive impact on improving the company's profitability.

Moreover, Table 3 reveals that leverage has a negative effect on the company's profitability, measured by ROE, ($\beta = -0.298$) and it is statistically significant at Sig. = 0.000. A higher leverage ratio indicates higher financial risks, since it will increase the debt in the firm's capital structure. Thus, profit becomes more volatile and less stable because of the financial obligations and the increased interest rate. The size variable, measured by the natural logarithm of the assets, has a positive effect on the company's profitability measured by ROE ($\beta = 0.283$) and it is statistically significant at less than 0.05 level of significance, where its value is equal to 0.000, implying that the greater the firm's size of assets, the higher its profitability. However, in terms

of the audit firm type, hiring a Big 4 audit firm, has a negative effect on the company's profitability as measured by ROE ($\beta = –0.120$) and it is statistically significant at less than 0.05 level of significance, where its value is equal to 0.000. Finally, the results of the analysis demonstrate that the variable sales growth has no significant effect on the company's profitability as measured by ROE. This result could be justified by that sales increase rate may be lower than or equal to the amount of expenses incurred by the firm.

Model 2:

ROE = β0 + β1 ACCR + β2 M/B + β3 OwnCon + β4LEV + β5SIZE + β6 BIG 4 + β7 SalesG + e

The second model was designed to examine the effect of accounting conservatism measured by accrual-based approach and the M/B ratio on the company's profitability, measured by ROE, controlled by leverage, size, Big 4 audit firms and sales growth in the presence of ownership concentration as a moderating variable.

Table 4 shows the results of regression model (2); the variables' coefficients, expected significant values, value of F statistic and adjusted R^2 are presented.

The results reveal that the value of adjusted R^2 was 30.3%, indicating that 30.3% of the total variation in the dependent variable (company's profitability) is explained by the variations in the independent variable (M/B ratio and accrual-based approach), control variables (leverage, size, BIG 4 and sales growth) and ownership concentration as a moderating variable. The results also indicate that accounting conservatism measured by the accrual-based approach and M/B ratio indicators along with control variables significantly explains the variation

in the company's profitability, measured by ROE, at less than 0.05 level of significance with F value = 48.199, indicating that the second proposed model of the study is appropriate and has an explanatory power.

Table (4): Model 2 analyzing the effect of the independent variable (accounting conservatism) and control variables on the dependent variable (company's profitability) in the presence of ownership concentration as a moderating variable

F-Model = 48.199						
Sig. (F) = 0.000						
First model			Second model			
Adjusted R^2 = 0.304			Adjusted R^2 = 0.303			
R^2 = 0.309			R^2 = 0.309			
R = 0.556			R = 0.556			
R Square Change = 0.000						
Sig. F Change = 0.976						
All variables		**T-Value**	**B**	**Sig. (T)**	**VIF**	**Tolerance**
Constant		−7.495	....	0.000	……	………
Independent	**ACCR**	−8.115	−2.57	0.000	1.091	0.917
	M/B	9.991	0.313	0.000	1.071	0.934
Control	**LEV**	−9.195	−0.295	0.000	1.123	0.891
	Size	7.940	0.269	0.000	1.256	0.796
	BIG 4	−3.411	−0.114	0.001	1.213	0.824
	Sales G	1.933	0.061	0.054	1.070	0.934
Moderating	**Ownership concentration**	−0.031	−0.001	0.976	1.111	0.976

Comparing the results of the first model with those of the second one, the explanatory power of the study model was not improved as expected by the value of the adjusted coefficient of determination after adding the moderating variable represented by ownership concentration to the second study model. The change of Sig. F, which is 0.976, confirms this result, demonstrating that the change in the R square is not statistically significant. For this reason, the second hypothesis can be rejected and the null hypothesis can be accepted, meaning that ownership concentration has no moderating role in the effect of accounting conservatism on the company's profitability. This indicates that the controlling shareholders do not prefer engagement in conservative accounting practices to create value for firms and enhance their profitability. Concentrated ownership does not seem to function as a governance technique, since the extent of its application is subjected and determined by the controlling shareholders and since conservatism is considered to limit the opportunistic behavior of managers, protecting minority shareholders' interest and increasing value of the firm. Controlling shareholders

utilize their power to determine the amount of conservatism in financial reporting and because of their close monitoring, agency problems are reduced as they see. Thus, they rely less on conservatism, even though they would not employ it at all (Watts, 2003; Dargenidou et al., 2007). This result is conflicting with those of the previous studies of Yunos et al. (2010) and Affes and Sardouk (2016).

Conclusions

Many researchers have examined the incentives of conservative reporting. This study investigated the effect of accounting conservatism on a company's profitability as moderated by ownership concentration, to test the effect of conservative accounting practices on enhancing the company's financial profitability. The company's profitability was indicated by ROE and accounting conservatism was measured by two proxies: the accrual-based approach and M/B ratio. Ownership concentration is the proportion of the total number of shares held by the major shareholders who own more than 5% of the total equity. This study focused on the industrial and service companies listed in ASE during the period 2006-2016.

The results of the study demonstrate that the accounting conservatism proxy M/B has a positive effect on the company's profitability, suggesting that, firms with higher levels of accounting conservatism and M/B ratio appear to have better profitability. The study concluded that the use of the accrual-based approach of accounting conservatism has a negative effect on the company's profitability. Based on the conclusions of the study, the sampled companies are prudently conservative, adopting low levels of accrual-based conservatism, resulting in high accruals and severe problems, which may decrease the quality of financial reports and distort the firm's financial ratios and overall profitability. Further, the results demonstrate that the existence of controlling shareholders appeared to have an insignificant effect on the relationship between accounting conservatism and the company's profitability.

Recommendations

Based on the above results and conclusions, the researchers suggest the following recommendations:
- Applying multiple measures for accounting conservatism to improve the strength of research conclusions by using both conditional and unconditional conservatism, by using methods such as Basu's (1997) method for listed firms and AACF for non-listed firms which do not have share prices, side by side with the current unconditional measures for conservatism.
- Firms, policymakers and regulators need to consider the adoption of several conservative accounting practices as a corporate governance mechanism with a view to improve the accounting information quality and the overall profitability, since conservatism is deemed as a feature of financial reporting that may affect the decisions of possible users of financial statements.
- Since companies are controlled and directed by different corporate governance systems and this study has chosen ownership concentration as a corporate governance mechanism to test its effect on the relationship between conservatism and profitability, future studies need to test other forms of ownership structures which may affect the relation.

The Limitations of the Study

The major limitation of this study concerns the missing information that some companies experienced, as annual reports were not available for more than 3 years, especially during the period 2005-2007. This absence led to the exclusion of some companies and observations causing a smaller sample size.

Financial companies were excluded, because they are regulated by different accounting practices; therefore, a problem of generalization may be incurred, since the sample is limited to non-financial listed companies.

Future Research

The current study and its results are limited to Jordanian industrial and service companies. Therefore, future research may include the financial sector and compare the results between the different industries, in order to provide more generalizable results. Applying multiple measures for accounting conservatism should be considered to improve the strength of research conclusions. The existence of both conditional and unconditional conservatism should be tested.

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