

**THE RELATIONSHIP BETWEEN CORPORATE
GOVERNANCE MECHANISMS AND COMPANY
ATTRIBUTES AND ACCOUNTING CONSERVATISM OF
JORDANIAN LISTED COMPANIES**

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**THE RELATIONSHIP BETWEEN CORPORATE GOVERNANCE
MECHANISMS AND COMPANY ATTRIBUTES AND ACCOUNTING
CONSERVATISM OF JORDANIAN LISTED COMPANIES**

By

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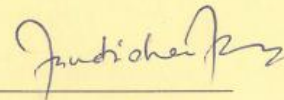
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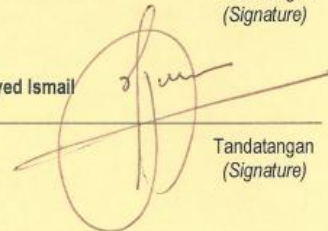
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ABSTRACT

This study examines the relationship between the corporate governance mechanisms related to the ownership structure, board of directors, audit committee and auditor quality along with company attributes and the accounting conservatism of Jordanian listed companies. The theoretical foundation of such a relationship was provided by five comprehensive theories which are the agency theory, the positive accounting theory, the resource dependence theory, stewardship and the signaling theory. The data were obtained from the annual reports of 348 Jordanian companies from 2009 to 2011. Upon using the multiple regression analysis, the results show that the relationship between the corporate governance mechanisms and accounting conservatism was somewhat varied. Fifteen hypotheses were developed in this study. Seven of them were significant while eight were not. For ownership structure, institutional and foreign ownership were significant while family and managerial ownership were not statistically significant. Board independence, financial expertise and board tenure were significant, while board size, CEO and multiple directorships were not significant due to the higher level of P-value compared to 0.05. On the other hand, audit committee and auditor independence were statistically significant to conservatism, while auditor brand name, company size and debt contract were reported to be negatively and not significantly related to conservatism. These results indicate that corporate governance plays a vital role in enhancing the level of conservatism and reducing agency conflict. Further, regulator bodies in Jordan should increase the effectiveness of corporate governance in Jordanian companies in order to enhance the quality of financial reports. In addition, this study opens up avenues for more studies on accounting conservatism not only in Jordan, but also in other countries where this area of study is lacking. Furthermore, it opens up opportunities and provides avenues for more in-depth research related to the quality of financial reports.

Keywords: corporate governance, accounting conservatism, board of directors, accrual-based, Jordan

ABSTRAK

Kajian ini mengkaji hubungan antara mekanisme tadbir urus korporat yang berkaitan dengan struktur pemilikan, lembaga pengarah, jawatankuasa audit dan kualiti juruaudit serta atribut syarikat dan konservatisme perakaunan syarikat-syarikat yang tersenarai di Jordan. Asas teori dalam perhubungan tersebut telah disediakan berdasarkan lima teori yang komprehensif iaitu teori agensi, teori perakaunan positif, teori pergantungan sumber, dan teori pengawasan dan pengisyaratan. Data diperolehi daripada laporan tahunan 348 buah syarikat di Jordan dalam tempoh 2009-2011. Dalam analisis regresi berganda, keputusan menunjukkan bahawa hubungan di antara mekanisme tadbir urus korporat dan konservatisme perakaunan adalah agak berbeza-beza. Lima belas hipotesis telah dibangunkan dalam kajian ini. Tujuh daripadanya adalah signifikan manakala lapan lagi didapati tidak signifikan. Bagi struktur pemilikan, pemilikan institusi dan pemilikan asing adalah signifikan manakala pemilikan keluarga dan pemilikan pengurusan didapati tidak signifikan secara statistik. Kebebasan lembaga pengarah, kepakaran kewangan dan tempoh lantikan lembaga pengarah adalah signifikan manakala saiz lembaga pengarah, Ketua Pegawai Eksekutif dan kepelbagaian jawatan pengarah didapati tidak signifikan kerana nilai P berada pada tahap yang lebih tinggi berbanding 0.05. Sebaliknya, jawatankuasa audit dan kebebasan juruaudit secara statistiknya signifikan kepada konservatisme, manakala penjenamaan juruaudit, saiz syarikat dan kontrak hutang dilaporkan negatif dan tidak signifikan dengan konservatisme. Keputusan ini menunjukkan bahawa tadbir urus korporat memainkan peranan penting dalam meningkatkan tahap konservatisme dan mengurangkan konflik agensi. Tambahan lagi, badan-badan pengawal selia di Jordan perlu meningkatkan keberkesanan tadbir urus korporat dalam syarikat-syarikat di negara tersebut bagi meningkatkan kualiti laporan kewangan. Di samping itu, kajian ini membuka ruang kepada lebih banyak kajian tentang konservatisme perakaunan bukan sahaja di Jordan, tetapi juga di negara-negara lain yang kekurangan kajian dalam bidang ini. Tambahan pula, kajian ini membuka peluang dan menyediakan ruang bagi penyelidikan yang lebih mendalam berkaitan kualiti laporan kewangan.

Kata kunci: tadbir urus korporat, konservatisme perakaunan, lembaga pengarah, asas keakruan, Jordan

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Last but not least, I am presenting this thesis and this effort as present to the spirit of my brother Baha'a Aldin in his grave. Amin! Thank you, God, for making it all possible.

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LIST OF ABBREVIATIONS

| | |
|-------|---|
| AC | Audit Committee |
| ASE | Amman Stock Exchange |
| BCBS | Basle Committee on Banking Supervision |
| CEO | Chief Executive Officer |
| IFRS | International Financial Reporting Standards |
| JACPA | Jordanian Association of Public Accountants |
| JSC | Jordan Securities Commission |
| OECD | Organization for Economic Cooperation and Development |
| OLS | Ordinary Least Square |
| PCAOB | Public Company Accounting Oversight Board |
| SOX | Sarbanes Oxley |
| VIF | Variance Inflation Factors |

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CHAPTER ONE

INTRODUCTION

1.0 Background of Study

Accounting conservatism is considered as the most effective principle underpinning accounting valuation and has a lengthy historical application to financial accounting exceeding, five centuries (Basu, 1997; Sterling, 1970). Nonetheless, the concept of conservatism faces significant criticism by academics, capital market regulators and standards-setters. Critics such as LaFond and Watts (2008) argued that conservatism leads to understate of net assets in the present period leading to overstate of earnings in the future periods due to the understate of future expenses. Despite heavy criticism, previous empirical studies reported that conservatism has increased during the past decades (Givoly & Hay, 2002; Lobo & Zhou, 2006). This suggests critics may overlook major benefits of conservatism. The lengthy persistence and resilience to criticism of accounting conservatism are intriguing empirical impasses producing a number of significant unanswered questions.

Previous studies have defined conservatism by the aphorism “anticipate no profit, but anticipates all losses” (Watts, 2003a). Basu (1997) defined accounting conservatism as earnings asymmetric timeliness that requires high level of verification for recognizing of good news as an economic profit than recognizing bad news as an economic loss. Givoly and Hayn (2000) defined accounting conservatism as a choice between the principles of accounting that lead to decrease the cumulative earnings by slower recognition of

revenue. All previous definitions have acknowledged that earnings that reported under accounting conservatism practices are understated rather than overstated.

The significance of conservatism to accounting is believed to have many facets. One field receiving much attention is related with agency theory. Previous studies have documented that conservatism decreases agency conflict as it limits over payment of incentive to directors (Kwon, Newman & Suh, 2001), permitted for early detection of adverse net present value projects as it promptly recognizes expected losses (Ball, 2001). Additionally, prior studies suggested that conservatism limits the opportunistic behavior of managers (Brown, He & Teitel, 2006; Chen, Hemmer & Zhang, 2007; Watts, 2003a) and decreases information asymmetry among outside shareholders and managers (LaFond & Watts, 2008). Moreover, conservatism is more beneficial in monitoring the cost of suboptimal managerial decisions than if the earnings were measured liberally or neutrally (Kwon, 2005). The usefulness of conservatism in the agency relationship, ultimately enhance the usefulness of financial reports (Ball & Shivakumar, 2006) and improve firm value (Watts, 2003b).

Others suggest conservatism is effective in earnings quality. For example, Kung, James and Cheng (2008) reported that conservatism is a significant underlying attribute of reporting quality often used by participants of capital market to benchmark the earnings quality of firm. Meanwhile, Ball and Shivakumar (2005) reported conservatism is a significant attribute of earnings quality because it makes financial reports more useful and informative. Therefore, stakeholders are better capacity to monitor performance of firm. In addition, Ball, Robin and Wu (2003) believed that conservative accounting

practices present more timely information giving creditors and shareholders better opportunities to make main decisions on loss making projects.

Prior studies showed that conservatism is an effective mechanism for constraining the opportunistic behavior of managers (Kung *et al.*, 2008) such as earnings manipulation. Chen, *et al.* (2007), Kung *et al.* (2008) and Watts (2003a) suggested that pressure to comply with the underlying tenets of conservatism provides a significant disincentive for corporate firm to actively seek to manipulate earnings. Whilst it may be argued that conservatism acts as a deterrent to manipulation of earnings. The mere existence of this belief is unlikely in exercise to be a complete constraint. Rather, the level to which conservatism limit earnings manipulation is more likely to be a function of vital human driven the mechanisms of corporate governance that enact and enforce the principle.

Recent financial scandals that resulted in the unexpected collapse of high profile companies such as (WorldCom, 1990; One-Tel, 1995; Enron, 2001; Harris Scarfe, 2001 and HIH, 2001) have led investors, regulators, general public and the academician to focus on enhancing corporate governance and accounting quality. Evidences suggest that earnings manipulation and weak corporate governance were the key drivers of these collapses. For example, Downes and Russ (2005) reported that Enron's collapse was caused by the lack of audit committee independence, which resulted from weak governance.

In the Jordanian context, International Monetary Fund (IMF) and World Bank in 2004 have evaluated the status of corporate governance in Jordan. The body has issued a

report on the level of adherence of standards and codes; Corporate Governance Country Assessment (ROSC) which highlights some weaknesses in the framework of corporate governance in Jordan. Nonetheless, the report suggests that the corporate governance of Jordanian companies remains at a relatively underdeveloped stage.

Empirical researches have focused on creating an association among corporate governance and firm performance (Barbu & Bocean, 2007; Bhagat & Bolton, 2008). However, the evidence is inconclusive. This study seeks to utilize from the results of past studies to establish an association among corporate governance and accounting conservatism. Firms that adopt more conservatism procedures will reduce the profits that are reported in financial statements, and thus the perception of inferior financial performance (i.e., a downward bias in tests of any governance-performance association). Furthermore, if market participants fail to recognize a link among accounting conservatism and corporate governance mechanisms, thus the companies with better governance will be undervalued (Wen, 2005). Thus, the extent of any link among accounting conservatism and corporate governance is of considerable interest.

Previous evidences showed that corporate governance plays a vital role in restricting opportunistic behavior of managers in ways such as limiting high levels of management compensation (Core, Holthausen & Larcker, 1999) and decreasing earnings management (Dechow, Sloan & Hutton, 1996). Additionally, it has been found that if the financial reports environment is not accurately upheld to high standards, high quality of accounting standards might not necessarily lead to high quality of accounting information. For example, weak enforcement of rules governing investors' protection

and poor governance system (Ball *et al.*, 2003; Ball & Shivakumar, 2005; Leuz, Nanda & Wysocki, 2003). Therefore, studying whether corporate governance increases the supply of accounting conservatism (a significant attribute of earnings quality) is potentially interesting and significant to investors, regulators and academician.

1.1 Motivation for this Study

The current study is motivated by the disagreement on the conservatism practices between the supporters and detractors to limit the possibility of manipulation in the financial statements, constraining the opportunistic behavior of managers and reduce the agency conflict.

This study is motivated by the results from prior studies that conservatism practices can control the problems of moral hazard arising from agency conflict. Since the Jordanian firms practice high earnings management (Rahman & Ali, 2006), it is important to check the level of conservatism practices in Jordanian listed firms. Previous studies have suggested some mechanisms to constraining the opportunistic behavior of the controlling shareholders. One of these mechanisms is corporate governance (Ahmed & Duellman, 2007). A conservatism practice is another mechanism used to ensure the quality of financial reports (Chen, *et al.*, 2007; Kung *et al.*, 2008). Thus, the lack of an effective agency instrument motivates this study to examine whether conservatism practices is useful tool to decrease the agency conflict in Jordanian firms. This is done by investigating factors that determine accounting conservatism in Jordanian financial statements.

Several mechanisms have applied widely to monitor the controlling shareholders are not working soundly. For example, Satkunasingam and Shanmugam (2006) reported that minority shareholders of firms cannot depend on the board of directors because the majority of boards are dominated by the major shareholders in Malaysian firms. The large institutional investors are helpless to protect the interests of minority investors because they are frequently subject to political pressure. They (Satkunasingam & Shanmugam, 2006) found that the Minority Shareholder Watchdog Group (MSWG) which established in Malaysia as a channel for protecting the minority shareholders and to report their issues and concerns. However, there are doubts about the effectiveness of the MSWG, because the founding members are institutional investors in government agencies which are often subject to political pressure.

The lack of such tool in Jordan (to protect the minority shareholders) motivates this study to examine whether conservatism practice is useful to decrease the agency conflict in Jordanian firms. This is done by investigating factors that determine accounting conservatism in Jordanian financial statements.

On the other hand, previous studies highlighted that the accuracy of the financial reporting process relies on the philosophy of management control and corporate governance (Dechow, Sloan & Sweeney, 1996). Specifically, a lack of close supervision from the audit committee and board of directors will motivate management to practice earnings manipulation. This study investigates board of directors because they are responsible for reviewing the integrity and adequacy of the financial reporting system and are responsible to the stakeholders for corporate performance. The audit committee

is considered as one of the most important pillars of accountability because it supports the role of boards to monitor the process of financial reporting.

1.2 Problem Statement

The major companies' collapses and related financial frauds which occurred in most countries of the world have stirred uncertainties about the credibility of the operating and financial reporting procedures of listed companies in Jordan (Hamdan, 2012). This raised a number of professional, organizations, regulatory and scholars to suggest some reforms and practices that will enhance the quality of financial reporting, such as focusing on the conservatism principle and application optimized for corporate governance mechanisms as well as increasing the quality of audit (Hamdan, 2011; 2012, Hamdan, Kukrija, Awwad & Dergham, 2012; Adeyemi & Fagbemi, 2010).

Accounting conservatism is a bone of attention at the global and local level. At the global level, many researchers have criticized the use of a low level of conservatism as they claim it to be responsible for the demise of some large companies such as Enron and WorldCom (Biddle, Ma & Song, 2012; Lobo & Zhou, 2006). However, researchers such as Watts (2003a) and Hamdan (2012b) argue by saying that the benefits of applying accounting conservatism exceed its disadvantages. At the local level, the Jordanian Association of Public Accountants (JACPA), which was established in 1988, recommended Jordanian auditors to follow the international accounting and auditing standards. Thereafter, in 1997, Amman Stock Exchange joined the International Organization for Securities Commissions (IOSCO) that requires member countries to

apply International Financial Reporting Standards (IFRS) and International Accounting Standards (IAS). Besides, in 1997 the companies' Law No. (22) was issued in Jordan. Thereafter, the application of IFRS and IAS become mandatory for Jordan companies. In Jordan (2007) International Accounting Standards (IAS) No. 39 was issued under which the companies have to follow the conservative policy when estimating assets, earnings and liabilities, resulting in a loss or profit which will affect the owner's equity and the income statement (IASB, 2007).

On the other hand, the Companies Controlling Department (CCD) and the Department of Income Tax follows a critical policy towards this principle. Furthermore, they fear that directors of firms may abandon the use of this principle to use their own estimations in order to increase their own profit, which would affect the continuity of the companies. As a result, the governmental related departments (i.e. Companies' Controlling Department and Income Tax) encourage the companies to employ conservative policy in evaluating their assets, earning and liabilities in an attempt to prevent the overstate or understate in the evaluation process and reducing the manipulation in financial reports that could mislead investors (Hamdan, 2012a).

Faudziah, Dea'a Al-Deen and Syed-Soffian (2014), Hamdan (2010, 2012a) and Hamdan et al. (2012) reported that accounting conservatism level in Jordanian firms is very low, where the rate was lower than 21%. The low level of conservatism of Jordanian listed firms was attributed amongst others to the poor of corporate governance practices (Abed et al., 2012; Hamdan, 2012a). This reluctance in using conservatism has led Jordanian firms to prepare two types of financial reports: the first, in compliance with international

accounting standards, and the second, an adjusted financial report for governmental purpose (Abu-Haija, 2012). According to Hamdan (2012a), the absence of control of government departments (i.e. Companies Controlling Department and Income Tax) in the applying of conservatism may increase the possibility of manipulation in the financial reports and will be more likely to practice earning management. Al-Zoubi (2012) and Abed et al. (2012) found evidences on the existence of earning management in financial reports of Jordanian companies. They attributed their findings to that the managers have the opportunity and incentive to manage earnings. Siam and Abdullatif (2011) reported that the bankers in Jordan see the earning management as one of the main obstacles of the usefulness of accounting conservatism practices in financial reporting. Their results suggest that presence of high level of conservatism adds valuable value to the financial reports; plausibly because it produces clean and reliable accounting figures and vice versa.

The World Bank and International Monetary Fund (IMF) in 2004 have evaluated the status of corporate governance in Jordan. They concluded that the corporate governance of Jordanian companies remains at a relatively late stage. Their findings have also been confirmed by Abdullatif and Al-Khadash (2010), Ajeela and Hamdan (2011), Bawaneh (2011) and Nimer, Warrad and Khuraisat (2012) also showed that the performance of the audit committees in Jordanian listed firms appear to be weak and ineffective due to the constraints on the work members of audit committees as well as the weak the level of independency of the members of such committees. Their findings also indicated that there is a close relationship between majority members of audit committees and the firm's management and the board of directors. On the other hand, Abed, Al-Badainah

and Serdaneh (2012) showed that there is a weakness in the monitoring function of the board of directors in Jordanian firms. They attributed the result to the existence of more than 14 members in the board and existence the duality between CEO/Chairman roles. These results are not consistent with the Corporate Governance Code (2009) issued by ASE, which recommended that the members of board should not exceed 13 members, and separating between CEO/chairman roles. These results refer that the Jordanian companies do not follow the instructions of corporate governance issued by Amman Stock Exchange, which indicates that there are quite low penalties in the case of violation of regulation (Abed *et al.*, 2012). Interestingly, the shareholders and investors in Jordan face too many business risks, particularly because of poor corporate governance structures, weak control systems and non-existent or unclear corporate strategies and objectives (Abdullatif & Al-Khadash, 2010).

Very scanty studies have been conducted in Jordan to link between corporate governance and accounting conservatism, although evidence of corporate governance practices exists from developed economies (Abed *et al.*, 2012; Hamdan, 2011; 2012; and Hamdan *et al.*, 2012). Therefore, this study provides an optimal combination of internal and external corporate governance mechanisms based on the costs and benefits as well as company related attributes from a developing country, Jordan are vital factors in explanation the accounting conservatism (Ahmed & Duellman, 2007; Lara, Osma, & Penalva, 2007).

1.3 Research Questions

The research questions are as follows:

1. Is there a relationship between the ownership structures (institutional, foreign, family and managerial ownership) and accounting conservatism of Jordanian listed firms?
2. Is there a relationship between the board characteristics (independence, size, CEO duality and skills) and accounting conservatism of Jordanian listed firms?
3. Is there a relationship between audit committee and accounting conservatism of Jordanian listed firms?
4. Is there a relationship between auditor quality (independence and brand name) and accounting conservatism of Jordanian listed firms?
5. Is there a relationship between company related attributes (company size and debt contracts) and accounting conservatism of Jordanian listed firms?

1.4 Research Objectives

In addressing the above mentioned questions, this study addresses the following research objectives:

1. To identify the relationship between ownership structures (institutional, foreign, family and managerial ownership) and conservative accounting of Jordanian listed firms.
2. To identify the relationship between board characteristics (independence, size, CEO duality and skills) and accounting conservatism of Jordanian listed firms.

3. To identify the relationship between audit committee and accounting conservatism of Jordanian listed firms.
4. To identify the relationship between auditor quality (independence and brand name) and accounting conservatism of Jordanian listed firms.
5. To identify the relationship between company related attributes (company size and debt contracts) and accounting conservatism of Jordanian listed firms.

1.5 Significance of the Study

Through a comprehensive review of previous studies, and to the best of the researcher's knowledge, this is the first comprehensive study that examines the influence of four internal and external mechanisms of corporate governance along with company related attributes on accounting conservatism in emerging market, Jordan.

This study provides several main contributions to the accounting conservatism and the corporate governance literatures. First, the agency theory suggests that agency conflict could be decreased through managerial ownership and strong structure of governance mechanism. Previous corporate governance literature, which also focused on agency theory does not find decisive evidence to support the theory. Thus, complementary theories were developed in the previous literature to interpret evidence which is not consistent with the agency theory, namely resource dependence theory, stewardship theory and managerial hegemony theory.

The findings that are expected from this study will enhance the understanding of the importance of the abovementioned theories in interpreting the behavior of the governance practices and financial reporting in the Jordan business environment. In addition, this study provides evidences that support the positive accounting theory that stated that conservative accounting is considered as a useful instrument to decrease agency conflict. Several studies only focused on examining the effectiveness of corporate governance structure in decreasing agency conflict, through examining earnings management, firm performance and disclosure. Additionally, to assess the effectiveness of governance structure in Jordanian companies, the main outcome from this study will turns out whether the current governance structure is effective in generating another agency instrument that is, accounting conservatism.

Evidence from UK and U.S. are supportive of the positive accounting theory as companies with good governance structure use more conservative accounting (Ahmed & Duellman, 2007; Pourkazemi & Abdoli, 2011). The outcome of this study will seek to decrease the gap on the literature of corporate governance and provide evidence whether the same instrument can be employed in emerging economies like Jordan.

Secondly, previous studies related to accounting conservatism have focused on examining the influence of ownership concentration on accounting conservatism with limited attention to ownership structure on conservatism (Faudziah *et al.*, 2014; Lara, Osma & Neophytou, 2009a; Nekounam, Sefiddashti, Goodarzi & Khademi, 2012; and Yunos, Smith & Ismail, 2010). Ramalingegowda and Yu (2012) examined the institutional ownership and Basu Model (1997). LaFond and Watts (2008) examined the

relationship among outside and inside investors and conservatism using Basu (1997) Model. Shuto and Takada (2010) focused on the influence of managerial ownership on accounting conservatism in Japan listed companies. This study seeks to fill this gap by examining the relationship between ownership structure (institutional, foreign, family and managerial ownership) and accounting conservatism by using accrual-based. This study was based on the recommendations of previous studies that suggested the study of the relationship between the accounting conservatism and ownership structure, where these studies suggested that the use of different classification of the ownership structure includes (institutional, foreign, family and managerial ownership) will give different and valuable results (Yunos *et al.*, 2011). Institutional ownership is considered as an important group of investors that demands accounting conservatism as a governance device. Foreign ownership is added as a new dimension because of its significance to an emerging market such as Jordan. Family ownership is added to the analysis to reflect a significant aspect of ownership structure that reflects the cultural environment of Jordan. Managerial ownership is an additional dimension that generally reflects the institutional status similar to several emerging countries, where a high share owned by insider ownership, less mature block-shareholders and weak investor rights are prevalent (Zureigat, 2011).

Thirdly, the link among corporate governance and conservative accounting has not been widely examined. Furthermore, such studies highlight on a single side of governance mechanisms, such as, board composition and earnings timeliness and conservatism (Beekes, Pope & Young, 2004). On the other hand, Ahmed and Duellman (2007) examined board independence and board size on conservatism, and anti-takeover

protection and the involvement of CEO in the decisions of board (García-Lara, Osma & Penalva 2007), and board tenure (Vafeas, 2003). Accordingly, this study extends such studies to a larger (albeit limited) range of governance characteristics, as well as company attributes.

Fourth, most previous studies related to accounting conservatism have focused on determining the benefits and amount of conservatism with limited attention to factors effecting conservatism. For example, Ahmed, Billings, Morton and Harris (2002) found that conservatism practice plays a vital function in mitigating the conflict among bondholder and shareholder through dividend policy, and decreases in a company's debt costs. Given the focus on determinants of accounting conservatism, this study provides new insights and increases the understanding of conservative accounting practices.

Fifth, this study used data from Jordan; an emerging market economy. Previous accounting conservatism studies have focused heavily on developed nations, especially the U.S. and UK. For example, Givoly and Hayn (2002) used U.S. data, found that the U.S. firms are practiced the conservative policy in its financial reports, and had become more conservative in the U.S. since early 1980s. Lobo and Zhou (2006) used U.S. data. They found companies on average became more conservative in their financial reporting practices after the introduction of the Sarbanes–Oxley Act (SOX). In UK, Beekes *et al.* (2004) used UK data, and showed that the composition of board of director is a significant factor in evaluating the quality (conservatism) of a UK company's reported earnings with respect to include bad news on a timely basis. Ball and Shivakumar (2005) using 7,683 UK companies found that the quality of financial reporting (related to

conservatism) is not affected by leverage, size, auditor size and industry membership, or by allowing endogenous listing choice. Furthermore, prior studies (Ahmed & Duellman, 2007; Ball & Shivakumar, 2005; Beekes *et al.*, 2004) using data from developed countries provide valuable insights but such results may not be relevant in emerging economies. This is because there are many structural differences among developed and developing economies. Hence, this study provides insights into accounting conservatism through an alternative country lens.

Six, we believe that the results of this study will contribute to help shareholders who always have the influence on the management of the companies to understand the status of corporate governance in their firms and the quality of financial reports. In addition, the results of this study will become an input for the competent authorities to design policies that are most proper for Jordanian business culture. Jordan Securities Commission, Central Bank of Jordan, Amman Stock Exchange, or other regulatory bodies will benefit from the findings of this study. Findings from this study will be an eye-opener for the Jordanian authorities to understand the situation of agency conflict in Jordan, and thus initiate and formulate an effective system to overcome agency conflict and the authorities will be more able to emphasize proper methods to overcome any loophole within the system preference.

Seven, empirical evidence showed that Jordanian firms practice earnings management (Abed, 2012; Ajeela & Hamdan, 2011; Al-Fayoumi, Abuzayed & Alexander, 2010; Al-Khabash & Al-Thuneibat, 2008; Al-Zoubi, 2012). Abed *et al.* (2012) and Al-Zoubi (2012) claimed that there is an expectation gap among the financial information

disclosed in the financial reports and the method the information is used by the investors for making decisions. This reflects the loss of confidence in the truthfulness of financial information provided by the company when the shareholders use other reliable sources of financial information instead of the annual report. Hence, it is necessary to explore the impact of corporate governance on accounting conservatism; since conservatism has been related with reliable financial information as it monitors managers' expropriation activities.

Creditors will also benefit from the finding of this study because the results may supply a basis for assessing their client. Since prior studies reported that creditors demand higher level of conservatism, they may become more alert to companies that may have characteristics leading to lower conservatism. In addition, the findings of this study are useful to management who are concerned with the corporate governance practices and the financial reporting quality in their companies. The shareholders and management should learn from the current study that they are responsible on determining the level of accounting conservatism. Thus, this should discourage them from expropriating company's wealth for their own use. Knowing the impact of large shareholders who always have an influence on the management of the companies and internal governance mechanisms on accounting conservatism would be an advantage to the auditors. The auditors will be more able to plan the audit work and to focus on financial figures that are within the discretion of the management.

Hence, this study will provide outputs that are beneficial for decision-makers and legislators, and in attempt to fill the existing gap between the detractors and supporters

to estimate financial statement items. Furthermore, the findings of this thesis will be helpful in promoting the level of conservative reporting in Jordan. The main motivation for the emergence of the current study was the lack of empirical studies that addressed the relationship between corporate governance and accounting conservatism, particularly in Jordan. Moreover, the lack of empirical evidence regarding to the role of corporate governance mechanisms in the level of accounting conservatism has motivated this thesis to explore such relationship (Hamdan, 2012).

Overall, this study provides important insights into accounting conservatism and the determinants of corporate governance in an emerging market (i.e. Jordan). However, the study is not without limitations as highlighted in the last section of this study.

1.6 Scope of Study

Several aspects should be taken into account with respect to the scope of this study. According to Amman Stock Exchange (ASE), the Jordanian listed companies are divided into three sectors: financial, industrial and services sector. This study chose only two sectors (industrial and services sector) because these sectors makes up 53.5% of the Jordanian listed companies that contribute significantly 73% of Jordanian GDP (Al-Akra, Ali & Marashdeh, 2009). The current study did not include financial sector because it has different regulations and practices issued by the Central Bank of Jordan and the Insurance Commission, and these regulations are different from other sectors.

This study was limited to the data of Jordanian companies after 2009, in other words, after it has become imperative for the Jordanian listed companies to apply the rules of corporate governance. Therefore, this study used only data from 2009 to 2011 because the financial reports of Jordanian companies after 2011 have not been published yet.

Corporate governance mechanisms that were employed to achieve the objectives of the current study were limited to the ownership structure, board characteristics, audit committee and auditor quality, previous studies considered these mechanisms serve as the pillars to monitor the companies and control the opportunistic behavior of managers. As for accounting conservatism, this study employed only one measurement of accounting conservatism namely accrual based conservatism (ACCR) introduced by Givoly and Hayn (2000).

1.7 Definitions of Terms

For the purposes of the current study, this is important as the definition of terms would give a deeper understanding in discussion the pertinent issue in hand. The following terms were used widely throughout the study.

1. Accounting conservatism: Accounting conservatism is considered as the most effective principle underpinning accounting valuation. Givoly and Hayn (2000) have defined conservatism as "a selection criterion among accounting principles that leads to the minimize the cumulative reported earnings through slower recognition of revenue, faster recognition of expense, higher liability valuation and lower asset valuation".

2. Corporate governance has been defined by the Cadbury Committee (1992) as a system by which firms are controlled and directed. From the other perspective, the corporate governance has defined as the major pillars of fairness, accountability, responsibility and transparency in managing a company (Jensen & Meckling, 1976). Therefore, for the purposes of the current study, this definition of corporate governance is adopted.
3. Audit committee: for the purpose of this study, a committee established by board of director contains a group of senior staff, with the financial expertise. The purpose of such committee is overseeing the accounting and financial reporting processes and audit of financial reports.
4. Board independence: board independence means the number of non-executive member on the board of directors.
5. CEO duality: the duality occurs when the same person serves as chairperson on the board of directors and as CEO simultaneously.

1.8 Organization of Study

This study is divided into five chapters. As for the first chapter, the background of the study and the problem statement are explained. Research questions and objectives of the study were provided also, discusses the significant of the current study, scope, and the terms definitions are also explained, finally, the organization of the chapters.

Chapter Two contains a literature review and a summary of prior research that are related to accounting conservatism and corporate governance. In addition, a discussion

of the major theories in this study namely agency theory and positive accounting theory were presented in Chapter Two.

Chapter Three describes the research framework, hypotheses development, and methodology used in the current study. Research design, sample and data collection as well as operation definitional statistical and finally measurement the independent and dependent variables were presented.

Chapter Four examines and provides the descriptive analysis of the variables. Correlation matrix, regression assumptions and hypotheses testing through multiple regression and additional analysis were also presented.

Finally, Chapter Five gives the discussion on the study findings that extracted from the main results that were given in Chapter Four, study implications as well as limitation of the current study and some suggestions and recommendations for future research are provided, and, finally the conclusion of the chapter.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

Agency theory reported that an increase in share ownership might limit agency conflict (Zeitun & Tian, 2007). Initiated from the agency theory, many previous studies have examined the impact of corporate ownership on companies' economic activities and financial reporting. Additionally, ownership structure, board of directors, audit committee and auditor quality are important governance mechanisms in addition to the attributes of the company to control directors' opportunistic behavior (Rahman & Ali, 2006; Choi & Doogar, 2005; Hamdan, 2010). Whilst it is expected that these mechanisms decrease agency conflict, it is not as effective as those in developed countries.

This chapter consists of the empirical results of previous studies on the accounting conservatism, followed by the theoretical aspects, and examines each independent variable by reviewing the previous literature on ownership structure, board of directors, audit committee, auditor quality and company attributes, and finally chapter summary.

2.1 Accounting Conservatism

Accounting conservatism has a lengthy history in financial accounting field (Watts, 2003a). Despite criticism on accounting conservatism, previous studies suggest that

accounting conservatism has increased in the previous decades (Givoly & Hayn, 2000, 2002; Lobo & Zhou, 2006).

This study highlights on the various aspects of accounting conservatism. The following sections explain the definition of conservatism and its importance, reviews the major explanations of conservatism and also clarifying the key measures of accounting conservatism used in previous studies in some detail.

2.1.1 Definitions of Accounting Conservatism

Despite that conservatism is well known and a very important attribute to Generally Accepted Accounting Principles, however, the previous studies argued that there is no common definition of conservatism (Zhang, 2000).

Statement of Financial Accounting Concepts (SFAC) No. 2 (FASB, 1980) paragraph 95 states: “if there are two estimates of amounts to be received or paid in the future are about equally likely, conservatism dictates using the less optimistic estimate”. Therefore, the firm should choose the lower estimate for profits/gains and the higher value for losses/liabilities if the firm can choose among different estimates. The firm is being cautious in measuring the liabilities and assets, or amounts to be paid or received in the future. In addition, Belkaoui (1985) reported that accounting conservatism tend to use the highest values of expenses and liabilities and lowest values of revenues and assets.

On the other hand, Bliss (1924) has defined conservatism as “anticipate no profits, but anticipate all losses. Watts (2003a) has defined conservatism as the differential verifiability required for recognizing losses versus profits. It depends on the verification degree of losses and profit. If the difference of verification is greater, the level of conservatism will be greater. In particular, Watts (2003a) has argued that accounting conservatism is an “efficient technology employed in the organization of the firm for its contracts with various parties. In a similar vein, Basu (1997) has explained that conservatism in accounting as: “the accounting tends to require a higher level of verification to recognise good news as earning than to recognise bad news as losses”.

Givoly *et al.* (2007) have confirmed that no common definition of accounting conservatism exists, despite a consensus suggests that accounting conservatism systematically undervalues a company's net assets relative to its economic value. Moreover, Givoly and Hayn (2000) have described conservative accounting as the accounting principles choice that lead to a minimisation of reported earnings. Conservatism also leads to consistently lower cumulative earnings relative to operating cash flows.

Beaver and Ryan (2005) stated that “accounting conservatism as the on average understatement of the book value of net assets relative to their market value.” Conservative accounting is a measure to limit the amount of financial statement risk (Lin, Wu, Fang & Wun, 2014). LaFond and Watts (2008) stated that accounting conservatism is employed as an instrument to limit the negative effects of existing

asymmetry of information between managers and outside investors by restricting the manipulation on the accounting statements.

Previous studies also argued that there is no common definition of conservatism, despite it is well known and a very important attribute to Generally Accepted Accounting Principles (Zhang, 2000). Accordingly, this study follows Givoly and Hayn (2000) who defined conservatism as "a selection criterion among accounting principles that leads to minimise the cumulative reported earnings through slower recognition of revenue, faster recognition of expense, higher liability valuation and lower asset valuation". This study uses the definition of Givoly and Hayn (2000) because such definition is consistent with the purposes of the current study.

In conclusion, previous studies have offered various reasons for the causes of accounting conservatism and different views on conservatism. For example, Francis, LaFond, Olsson and Schipper (2004) assumed that accounting conservatism is one of the desirable characteristics of financial reports because it improves the level of transparency among firms. Ball and Shivakumar (2005a) employed conservatism in their study as a measure of earnings quality. On the other hand, Penman and Zhang (2002) reported that accounting conservatism results in lower level of earning quality because the practices of accounting conservatism accelerate expensing the cost of investment, thus generating hidden reserves and decreasing income, when the investment expenditures of firms grow.

2.1.2 The Importance of Conservatism

The examination of merits of accounting conservatism is especially important because it's deemed as one of agency instrument that limit the agency conflict (Basu, 1997). Bushman and Smith (2001) reported that the data in the financial statements offers both of direct and indirect important and useful contributions to corporate control mechanisms. Kwon (2005) reported that accounting conservatism was helpful in monitoring the sub-optimal administrative decisions regarding to earnings reported liberal or neutrally. Conservative accounting also reduces information asymmetric and improves earnings value relevance; therefore, enhance its role as an important aspect of governance mechanism. Lin (2006) reported that conservatism is deemed as an effective tool in disclosure of private information on projects undertaken by the firm. The study also showed that for good projects, managers are more likely to use conservative accounting policy as they could benefit from remunerations in the project duration produces cash flow. Lara *et al.* (2009a) found that UK bankrupt companies reported a decrease in the level of conservatism along with the aggressive behaviour regarding to earnings management before the company failure.

Accounting conservatism has been practiced by corporate for centuries and it is a significant feature of earnings (Penman & Zhang, 2002). Previous studies suggest that accounting conservatism plays an informational role that decreases information uncertainties along with asymmetries through restricting upward overstatement biases in corporate assets and its net income (Watts, 2003b). Such informational role of accounting conservatism decreases the risk of bankruptcy indirectly by supplementing its role as a cash-enhancing. In addition, conservatism limits adverse risks to investors,

selection costs, debt capital and the cost of equity, thus increasing availability of cash from different external sources when corporate approach default (Watts, 2003b).

Corporate managers in general prefer to employ less level of conservatism because it limits their perquisites and compensation, and limits the other opportunistic activities. In particular, distressed firms' managers have more incentives to exaggerate profits and blocking the negative news, at least until improving the performance or obtaining alternative employment (Kothari, Shu & Wysocki, 2009).

In a similar vein, Li (2006) and Balachandran and Mohanram (2008) showed that conservatism level reduces the analyst forecasts' uncertainty. Li (2007) documented that accounting conservatism has a negative relationship with the errors in analyst forecast. Conservatism could also be employed to protect excessive earning from regulation (Mensah *et al.*, 1994). In addition, recent studies have documented that accounting conservatism helps to enhance contracting efficiency, and serves as a governance mechanism restricting opportunistic behaviour of corporate managers (Ahmed *et al.*, 2002; Holthausen & Watts, 2001; Watts, 2003a; Watts & Zimmerman, 1986). Building on these streams of studies, Hu, Li and Zhang (2014) contend that accounting conservatism as part of disclosure policies in firm, and facilitate the flow of certain information of companies from insider parties to outsiders in order to limit the asymmetric information.

Ishida and Ito (2014) reported that conservatism probably impedes corporate investment behaviour and limits a company's earnings volatility, particularly downward volatility,

through providing an accounting slack. Hence, it is likely that accounting conservatism enhances the investment behaviour of companies. They (Ishida & Ito, 2014) also found that accounting conservatism influence corporate investment behaviour. Chen, Folsom, Paek and Sami (2013) found that companies with high level of accounting conservatism generate less persistent earnings than companies with low level of conservatism practices. They also reported that the pricing multiple on high conservative earnings is less than pricing multiples on low conservative earnings.

A variety of perspectives on the demand for accounting conservatism practices currently exist in the relevant literature. Watts (2003a) and other researchers such as Qiang (2007) have offered a number of explanations for the useful implications of accounting conservatism. This study illustrates the major explanations of accounting conservatism in the following section.

2.1.3 Theories of Conservatism

In the literature, there are diverse hypotheses to explain the demand for accounting conservatism. Those explanations of accounting conservatism are: litigation, taxation, contracting and accounting regulation (Basu, 1997; Watts, 2003a). These explanations are discussed in the following sections in more detail.

1. Contracting

The contracting hypothesis is the older explanation to explain the demand for accounting conservatism. Contracts have been used to decrease agency problems that are related with the separation of ownership and control within a company. In addition, accounting has been used also for many centuries by corporate in order to facilitate contracting (Watts & Zimmerman 1986). The two main contracts within the firms are debt contracts and managerial compensations contracts.

Under contracting explanation, accounting conservatism is deemed as part of the efficient technology used in order to organise the company's contracts with different parties (Watts, 2003a). Agency is a contract under which director/directors employ an agent to perform some service on their behalf which entails allocating some of the decisions to the latter. Therefore, conservatism can include opportunistic behaviour by management in reporting accounting procedure used in the contract.

Ball *et al.* (2008) stated that debt contracts deem the losses and gains asymmetrically. Because financial losses lowers the debt value, as well as lenders protect themselves from loss-making management via the launching of covenants into debt contracts that enable the restriction of major decisions that leads to the decrease of overhang debt value and the potential for creditors to utilize from the investment returns. Consequently, debt owners demand accounting conservatism (Ahmed *et al.*, 2002; Ball & Shivakumar, 2005; Watts, 2003a). Similarly, Ahmed *et al.* (2002) reported that conservatism is deemed as a mechanism that seeks to mitigate the conflict in debt contracts among

creditors and shareholders of unfair distributions. For instance, limits on retained earnings as well as restrictions on dividends to shareholders. They (Ahmed *et al.*, 2002) also documented that creditors award accounting conservatism with a lower level of debt cost.

On the other hand, Zhang (2008) investigated the benefits of contracting of conservatism practices in the contracting process and revealed that conservative borrowers are more inclined to violate the debt following a negative shock in price and that lender offers low level of interest rates to them. In addition, previous studies (Dechow *et al.*, 1996; Dichev & Skinner, 2002; Klein, 2002a) suggested that the ability of debt holders and shareholders to enforce demands for conservatism is greater when debt governance mechanisms and equity are stronger. Accordingly, companies with stronger debt governance mechanisms and equity are expected to choose the accounting conservatism.

As for managerial compensation contracts, managers often have more information about the future operations for their companies than other parties. Without conservative accounting, the managers can employ their own estimates which are inherently biased to overstate the future cash flows because of their own private information and overstated earnings and net assets of their firms in order to obtain large sums of money under their compensation plans based on the earnings (Ball, 2001; Watts, 2003b). Such behaviour is called managers' opportunistic behaviour which reduces firm value and creates deadweight losses.

2. Litigation Risk

Another possible explanation of accounting conservatism is the litigation risk. Law suits against auditors and shareholders are far more likely to occur when net assets and earnings are overstated. Thus, both auditors and managers are more aware to employ conservative policy in their financial statements in order to limit litigation costs. (Khalifa, Trabelsi & Matoussi, 2014). As suggested by Kellogg (1984) who documented that litigation also offers incentives for accounting conservatism. He also provides evidence that companies and auditors are more likely to be sued for overstatements cases than for understatement cases. Corporate thus bear costs that are related with litigation against them. Moreover, to reduce litigation costs, auditors often tend to publish unfavourable audit opinions and be more conservative in their policies. They have different ways to limit the litigation costs such as abandon relationships with customers with more risk (Krishnan & Krishnan, 1997) or demand for obtaining more fees as mentioned by Pratt and Stice (1994).

Auditors prefer to employ income-decreasing strategy (conservative policy) as an accounting choice rather than income-increasing choice. Chung *et al.* (2003) have supported such view and reported that Big audit firms are more able and effective in limiting income-increasing accrual than non-Big audit firms, and they concluded that Big audit firms are far more likely to encounter the risk of litigation in the case of audit failure. Khalifa *et al.* (2014) argued about the role of conservatism and its importance. They reported that conservatism has a role in reducing auditor litigation risk in corporate with low level of technology. The results of their study have implications on the setters

of the standards who are interested to abandon conservative accounting in the interest of neutrality. In other words, both managers and auditors have more incentives to choose conservatism policy in order to reduce expected litigation costs.

As mentioned above, litigation risk for overstatement assets and earnings of firm is much higher than for understatement the firms' assets and earnings (Watts, 2003a). The reason is that when the company overstated its assets and the market finds out that the firm overstates their assets, there will be a drop in the market value of the firm. This decrease of market value will cause financial harm to shareholders. On the contrary, in the understating case, the firm has actually a higher market value. Therefore, the shareholders are not immediately harmed. Thereby, litigation costs of firm arise when different parties sue management, directors or auditors to recover suffered losses caused by the misstatements in the financial reports.

3. Regulation

The setters of standard and regulators are likely to face many criticisms if companies overstate earnings and net assets than if companies understate earnings and net assets. Thus, conservative financial reporting is likely to reduce the political costs and political consequence imposed. Xinrong (2004), at the same time, reported that regulation costs are considered as a secondary factor for conservative reporting because it follows investor's demand for accounting conservatism predicted by the contracting and litigation hypothesis.

Some of the previous empirical studies have sought to examine the effect of standard regulation and setters on accounting conservatism. Huijgen and Lubberink (2005), for instance found no differences in accounting conservatism level between U.S. GAAP and UK GAAP counterparts. However, Huijgen and Lubberink (2005) found UK cross-listed companies were significantly more conservatism than those UK companies without a U.S. cross-listing. They suggested that besides the higher threat of litigation risk from a wider shareholder audience, a stricter enforcement system on cross-listed companies might explain the significantly higher levels of accounting conservatism. The result of the regulation was to force firms to defer the revenues' recognition to later periods, thus increasing conservatism.

Watts (2003b) refers that it is essential to investigate the behaviour of conservatism over periods of varying regulation to investigate how regulation influences conservatism. In response to such recommendations, for instance, Bushman and Piotroski (2006) provide evidence that firms in countries with strong investor protection and high level of judicial systems reflect bad news in reported earnings in timelier manner (i.e. earnings conservatism) than companies in countries characterized by low quality judicial systems and weak investor protection. Therefore, Bushman and Piotroski (2006) showed that investor protection item that embodied in company law and the impartiality and efficiency of a judicial system play an important role in providing incentives for earnings conservatism. As such, Crawford, Price and Rountree (2011) provided important evidence regarding to the influence of regulation on conservatism, which addresses one of the significant questions as suggested by Watts (2003b). Their results

help to provide better understand the political nature of the context in which it was issued and thus documents one aspect of increasing accounting conservatism practices over time that relates to regulation. They (Crawford *et al.*, 2011) suggested the regulation may have served in favour of the Securities and Exchange Commission's reputation as a conservative regulatory body.

4. Taxation

In the literature, some cases showed that companies have the ability to increase their book income and at the same time they reduce their taxable income. The good example here is Enron, which employed different financial instruments. Enron paid small sums of money as taxes before bankruptcy in 2001, while during the same period; Enron has reported billions of dollars of earnings. Many relevant studies in the literature seek to show empirical evidence on whether company actually practices conservative accounting to save taxes (Shackelford & Shevlin, 2002).

The book income is closely related with taxable income. Thus, the best tax strategy of firms would be to reduce taxable income without reducing book income. Such practice is not possible in general because as mentioned earlier that the taxable income is often related with the book income. Kim and Jung (2007) found that taxation is deemed as a determinant of financial statement conservatism in Korea. The evidence also shows that companies with high (low) rate of marginal tax use more (less) conservatism. Overall, they (Kim & Jung, 2007) concluded that tax incentive has a role in explaining accounting conservatism.

Accounting conservatism is utilized by firm directors as a technique to minimise the current value of taxes and hence increase the firm value (Lara *et al.*, 2009b). In cases where companies face higher tax pressures, management has a tendency to employ accounting conservatism practices (Lara *et al.*, 2009b). For instance, management utilised earnings conservatism to drive income throughout periods, particularly from periods with high tax rates to periods of expected low ones as this would minimise the present value of tax payment and the total amount paid.

Previous studies have mentioned that tax motivated conservatism is deemed as a missing link in current accounting and tax research. It is possible that increasing conservative accounting reported in Givoly and Hayn (2000) partly stems from the increasing various needs and possibility to decrease the costs of tax. Tax motivated accounting conservatism is a legitimate means to decrease the cost of tax of a firm compared with different ways that bypass financial reports that increase the difference of book-tax (Kim & Jung, 2007).

2.1.4 Accounting Conservatism Measurements

This study seeks to offers more details regarding the measurement of accounting conservatism as mentioned in the previous studies. The following sections illustrate these measurements in more detail.

1. Basu Model (1997)

As mentioned earlier, accounting conservatism has been defined by Basu (1997). He explained that "accountants require a higher level of verification in order to recognise good news than recognising bad news in financial reports". Under this interpretation, he has concluded that "earnings reflect bad news more quickly than good news".

Basu (1997) has predicted that earnings are more concurrently or timely sensitive in showing publicly available bad news than good news. In order to examine this prediction, he employed positive and negative unexpected returns of annual stock as a proxy for good news and bad news respectively (Basu, 1997). The Basu (1997) cross-sectional regression model is calculated as:

$$\frac{E_{it}}{P_{it}} = \beta_0 + \beta_1 R_{it} + \beta_2 D_{it} + \beta_3 R_{it} * D_{it} + \epsilon_{it}$$

Where:

E_{it} = Refers to the net income of firm (i) before extraordinary items.

P_{it} = Market value of equity at the beginning of the year.

R = Share return of a fiscal year.

D = Dummy variable = 1 in negative return case and 0 otherwise.

$R*D$ = The interaction among R and D

Many studies have used the Basu model and found that their studies' results are compatible with their theoretical expectation, which have increased their reliability in

the measure itself (Ryan, 2006). Despite the widespread use of Basu model, but some of previous studies have criticised this measurement. Recently, some empirical studies have questioned the validity of Basu measure, as an empirical measurement of accounting conservatism. Those studies have observed that there is inverse relationship among Basu (1997) model and other measurement of conservatism, especially the market-to-book ratio (MTB) which means an important basis for such questioning (Roychowdhury & Watts, 2007).

In addition, Roychowdhury and Watts (2006) reported that such measurement has ignored the influence of conservative accounting before to the evaluation period and therefore also does not show total conservatism absolutely. They also have shown another point which is that the amendment in economic rents is supposed not to be added in the stock-return as shown in the Basu (1997) model. Another limitation of the Basu (1997) model noted by Givoly *et al.* (2007) reported that the Basu model can include large value of measurement error and this depends on the information environment's features. For instance, they documented that for big corporate, the Basu model is roughly one-third the size of the measure for small corporate. Ball and Shivakumar (2005) argued that Basu's model is not proper measurement for private firms, due to the lack of information about price of stocks available for private firms.

Dietrich *et al.* (2007) have concluded that the Basu (1997) model may lead to biased results and they recommend for future studies to employ an alternative approaches to validate their results. Thus, if there is any bias in Basu's model, Ball and Shivakumar

(2005) reported that this bias decreases the efficiency of contracting. In addition, Artiach, and Clarkson (2014) and Givoly *et al.* (2007) have revealed that the Basu model to be un-trusted measure when evaluated the conservatism at the firm level using time series. These weakness points refer that the Basu model may be a biased evaluator of the actual level of accounting conservatism in the sample.

2. Cash-Flow Model

Ball and Shivakumar (2005) have created an alternative proxy of accounting conservatism based on the relationship between operating cash flows and total accruals. They cannot employ Basu model in their study as a measurement of conservatism due to the lack of disclosure about the prices in the private companies.

In order to compare the financial reporting quality between public and private UK firms, they use timely losses recognition as a proxy for the quality of financial reporting. Ball and Shivakumar (2005) stated that negative accruals are more likely to happen in negative cash flows periods. Their model illustrates as follows:

$$ACC_t = \beta_0 + \beta_1 DCFO_t + \beta_2 CFO_t + \beta_3 DCFO_t * CFO_t + v_t$$

Where:

ACC_t = Accruals that calculated by the following equation:

$[(\Delta Inventory + \Delta Debtors + \Delta Other\ current\ assets) \text{ minus } (\Delta Creditors - \Delta Other\ current\ liabilities + Depreciation)]$.

CFO_t = Refers cash flows generated from operations

$DCFO_t$ = Dummy variable equal to 1 if $CFO_t < 0$, and 0 otherwise.

Both of ACC_t and CFO_t variables are deflated by total assets at beginning of the period. In addition, Ball and Shivakumar (2005) predicted and found β_2 to be negative; referring that in losses periods the value of cash flows will not be influenced. They also predicted and found β_3 to be positive, pointing that accrued losses are more potentially in cash outflows periods. In conclusion, previous relevant studies have not determined any bias in the measurement of Ball and Shivakumar because that this measurement is still new and its durability has not been validated yet.

3. Book-to-Market (BTM) Ratio

Beaver and Ryan (2000) have measures conservative accounting as a persistent bias component in market-to-book ratio since such ratio represents both lagged accounting recognition and biased accounting recognition. This measurement tends to the notion that results of conservatism in the undervaluation of book value relative to equity value (Beaver & Ryan, 2005; Roychowdhury & Watts, 2007). Market-to-book ratio measure is used to measure unconditional conservatism because it highlights on perspective of balance sheet as well the persistent bias of book value is news independent. They (Beaver & Ryan, 2000) empirically sought to measure the conservatism's bias and lagged components through regressing market-to-book ratio on lagged and current returns with fixed corporate and time influences in the model which shown below:

$$MTB_{it} = \alpha + \alpha_i + \alpha_t + \sum_{k=1}^6 \beta_k R_{it-k} + \epsilon_{it}$$

Where:

MTB_{it} = Refers to the market-to-book value.

α_i = The persistent bias component for a certain company from market to book value over the sample period.

α_t = Refers to the proxy of bias of certain company in book value due to conservatism.

R_{it-k} = Refers to the lagged annual return.

ϵ_{it} = Error term.

Numerous studies have pointed that the Market-to Book (MTB) is one of the accounting conservatism indicators. The theoretical frame that provided by Beaver and Ryan (2000), has been employed by few studies such as LaFond and Roychowdhury (2008), Ahmed and Duellman (2007), and Jain and Rezaee (2004) and others have proposed using Market-to Book ratio (MTB) in order to measure the level of accounting conservatism. The Market-to Book ratio is employed to examine the book value of shares in comparison with its market value. The market value of shares equal its closing price at the end of the fiscal year, while the book value is calculated by dividing (the gross value of equity deducted from the value of outstanding shares) on the value of average weighted of the total value of outstanding shares.

Market-to Book ratio reflects the cumulative influence of accounting conservatism since the company's establishment. Such point is deemed as a strength point of this measure. Moreover, Lindenberg and Ross (1981) refer that market-to-book ratio also refers value

of economic rents expected to be created by assets of the company along with the growth opportunities in future. Thus, it is necessary to control such factors (growth opportunities and economic rents).

Regarding to the criticism of this measure, Roychowdhury and Watts (2007) have developed the theory means that the ratio of BTM is deemed as an upward biased evaluator of the level of accounting conservatism, because that there is presence of economic rents values in most companies. They (Roychowdhury & Watts, 2007) argued that such values are not recognisable in the firm's book value, based on GAAP. In addition, Market-to-Book ratio is widely employed by various researchers in the finance and accounting field for many factors other than conservatism, for instant, this ratio has been used as a measure for default risk by Fama and French (1993; 1995). Such criticisms on this measure create more question marks and uncertainty about how to interpret such measurement.

4. Accrual-Based Conservatism

The accrual-based as a measurement of accounting conservatism has been developed by Givoly and Hayn (2000). They defined conservatism “as a selection criterion between accounting principles that leads to the minimisation of cumulative reported earnings by slower revenue recognition, faster expense recognition, lower asset valuation, and higher liability valuation”.

Accrual-based conservatism can be calculated by income before extra-ordinary items minus cash flow generated by operations plus depreciation expense divided by total assets, and then averaged over a 3-year period, and multiplied by negative one. The notion underlying of Givoly and Hayn (2000) model is that accounting conservatism results in negative accruals persistently (Givoly & Hayn, 2000). Negative numbers of accruals over the periods indicate that the firms employ more conservative policy.

Richardson, Sloan, Soliman and Tuna (2005) reported that the averaging through a long period of time also provide evidence that the influence of any values of accruals are controlled. Such measurement is not influenced by future growth opportunities or economic rents. Moreover, this measurement does not refer cumulative or total conservatism since this model has ignored the influence of accounting conservative in previous periods. The following equation illustrates this measurement:

$$Accruals = \frac{Income + DepreciationExpenses - OperatingCashFlows}{Totalassets}$$

$$ACCR = (Accruals/3\ years) * (-1)$$

However, this survey indicates that there is one weak point; the above mentioned equation requires proxy to the accumulated accrual over a long period of time starting from a certain base year. Such issue (base year) is hard to standardise amongst companies in practice. Recent studies such as Artiach and Clarkson (2014); Ahmed and

Duellman (2007) and Lara *et al.* (2009a) have used a particular strategy depends on calculating the mean of non-operating accruals during 3 years. Obviously, using this new strategy of this measurement avoids the problem of base-year.

Artiach, and Clarkson (2014) documented that the accrual-based conservatism appear to be the most reasonable and best suited measure of conservatism. On the other hand, this may be a better and more accurate measure of conservatism according to Hui, Matsunaga and Morse (2009).

5. Conservatism Index (C-Score)

The C score measurement is one of the accounting conservatism measurements as proposed by Penman and Zhang (2002). They sought to measure the influence of accounting conservatism on the balance sheet. C-score is the measurement for the degree of estimated reserves generated by the conservatism. Penman and Zhang (2002) have used the following model in order to measure C-score:

$$C_{it} = \frac{ER_{it}}{NOA_{it}}$$

Where

C_{it} = Refers to measurement of the influence of accounting conservatism on the balance sheet

ER_{it} = Refers to the hidden reserves generated by conservatism.

NOA_{it} = Refers to the net operating assets, its calculated using the following equation: (assets – liabilities), excluding financial assets and liabilities.

Balance sheets usually provide the value of these items using market value, so accounting conservatism does not influence such items. In the NOA calculation, they subtract the value of operating liabilities from operating assets in order to measure the value of net operations investment. This equation recognises that accounting conservatism can influence both operating liabilities and operating assets.

In order to measure the hidden reserves, ER is created by employing conservative accounting policy; where ER measurement is still not an easy task. Penman and Zhang (2002) provide the following equation in order to address this issue:

$$ER_{it} = INV_{it}^{res} + RD_{it}^{res} + ADV_{it}^{res}$$

Where:

ER_{it} = Refers to the hidden reserves generated by conservatism.

INV = Refers to the inventory reserve

RD = Indicates to research and development (R&D) reserve

ADV = Refers to brand asset.

There are various points make the hidden reserves measure harder to apply to global studies of accounting conservatism. For example, the advertising expense and the expense of research and development (R&D), as such items are often not available by corporate and do not often appear in their financial statements (Wang, 2009). Perhaps for these reasons, this study found that very few studies have used this measure of accounting conservatism.

This review highlights the advantages and disadvantages of these measurements (Basu 1997, Cash-Flow Model, BTM, Accrual-Based and C-Score. Based on these reviews, the current study adopts the accrual-based measure that was developed by Givoly and Hayn (2000) as a measurement for accounting conservatism. This measurement is adopted in the current study to measure the accounting conservatism for several reasons. First, it is a corporate-specific measure of accounting conservatism. Second, this measure is generally easy to practice and implement, because it does not need a lot of data items. Third, in the previous study (Wang, 2009), there has not detected any possible biases in this measurement. For the above mentioned reasons, this measurement has been chosen for the accounting conservatism in this study.

On the other hand, there is lack of studies in the accounting conservatism in developing countries such as Jordan (Abed *et al.*, 2012; Hamdan, 2012a, 2012b). However, the differences between the current study and that of Hamdan (2012) as well as that of Abed *et al.* (2012) are as follows; Hamdan (2012) examine the influence of sector, company size and debt contract on the accounting conservatism, while the current study examines the relationship between corporate governance mechanisms and company related attributes on accounting conservatism. On the other hand, the current study uses accrual-based model to measure accounting conservatism while Hamdan's study used Basu (1997) model. In addition, the current study employs four complementary theories to support the results which are not supported by agency theory. On the other hand, the study of Abed *et al.* (2012) in Jordan investigated the effect of the level of accounting conservatism on earnings management among Jordanian manufacturing firms, while the

current study examines the relationship between corporate governance mechanisms and conservatism among service and industrial sectors. Therefore, there is still an urgent need to conduct such a study to give comprehensive view regarding the relationship between corporate governance mechanisms and accounting conservatism in Jordan.

2.2 Overview of Corporate Governance

Mechanisms of corporate governance have become one of the hot issues discussed in the world economies (e.g. Abed *et al.*, 2012; Al-Najjar, 2010). Corporate governance represent a significant variables that enhance the success of the organizational and economic reforms presently undertaken in the context of globalization, openness of global economies and competition (Abed *et al.*, 2012).

The applying of corporate governance principles and rules has become a slogan for private and public sectors, and an instrument for reinforcing confidence in any national economy and an evidence of the presence of fair polices and transparent and for protecting traders and investors alike (Abu-Haija, 2012; Al-Fayoumi *et al.*, 2010; Hamdan, 2012a). It is also considered as an important indication to the level of professional commitments reached by the firm's management towards transparency, accountability and good governance, the existence of measures to reduce corruption, and consequently increase the attractiveness of economy to local and foreign investments and support its competitiveness (Al-Tahat, 2010; Jordan Securities Commission, 2009).

Corporate governance is considered as a point of convergence of economics and relationships that determine a company's performance and direction. Its purpose is to optimize resources to enhance efficiency and accountability within the company structure. Most firms' corporate governance is set by the boards of directors, which establish and enhance policies for the employees and management of the companies. The board of directors is responsible to customers and shareholders for the company's outcomes. This section provides a general overview about the corporate governance in the world and previous studies that addressed the role of corporate governance in various fields.

In the U.S, Katz (2008) studied the relationship among earnings quality and ownership structure. She used a sample of private firms before and after initial public offering. She showed that firms which have private equity sponsorship have higher quality of earnings, and involve less in earnings management than those do not have sponsorship of private equity. She ascribed the superiority of firms that have private equity sponsorship to high monitoring, professional ownership, and reputational considerations exhibited by sponsors of private equity. Ghosh, Marra and Moon (2010) reported that the separation of chairman positions and CEO are unrelated with earnings management. They also revealed that companies with larger audit committees and boards have fewer tendencies to practice the earnings management, which indicates that larger audit committees and boards are more effective in monitoring and controlling financial accounting process. Dhaliwal, Naiker and Navissi (2010) examined the relationship among audit committee and accrual quality. They reported that audit committee

consisting accounting experts who are independent, have a lower tenure in their companies and hold fewer directorships, associate positively with accruals quality. They also recommended firms to focus on experts in accounting especially with the establishment of the audit committee.

Mitra and Hossain (2011) examined the relationship among corporate governance characteristics (i.e. ownership and board characteristics) and remediation of internal control weaknesses. They found a positive association among CEO-independent board, board diligence, and institutional, managerial, and dominant shareholdings with internal control weaknesses' reform. They remarked that ownership attributes are more significant in the company' weaknesses remediation than the board attributes. Bedard *et al.* (2004) examined the impact of audit committee attributes on aggressive earnings management. They used two groups of U.S. companies, one with high and one with low levels of abnormal accruals in 1996. They found a negative association among aggressive earnings management (both types of earnings management, decreasing or increasing income) and governance or financial expertise of audit committee members.

Rainsbury, Bradbury and Cahan (2009) examined the relationship among the quality of audit committee and the quality of financial reporting and external audit fees. They used a sample of 87 firms from New Zealand including 29 firms that adopted high quality audit committee in 2001. They found no significant association among the quality of an audit committee and the financial reports quality. Machuga and Teitel (2007) examined the effect of applying of corporate governance on the earnings quality in Mexico. They

showed that the earnings quality improves after Mexico issued the code of corporate governance. Similarly, Teitel and Machuga (2010) provided evidence on the association among the audit quality and earnings quality. They found that firms that hire a high quality auditor show a high level of earnings quality.

Bauwhede and Willekens (2003) studied the relationship among audit firm size and board size, and earnings management. They found that companies with larger boards have a negative relationship with income-decreasing earning management, and audit firm size has a negative association with earnings management. Meca and Ballesta (2009) analyzed the findings of 35 studies that examined the influence on earnings management of companies' ownership structure and boards of directors. The finding showed an adverse relationship among board size and discretionary accruals. They also showed no relationship among CEO duality and existences of chairman and increasing probability of earnings management. The analysis also indicated no association among insider ownership and discretionary accruals. Similarly, there is no association among institutional ownership and discretionary accruals. They also found that independent audit committee considered an effective instrument in mitigating earnings management. However, their findings of investigating the presence CEO duality and earnings management do not support agency theory since the result of most prior researches do not find any significant relationship.

In Europe, Song and Windram (2004) examined the effectiveness of audit committees in financial reports in UK. They showed weak evidence on the relation among the member

financial literacy, outside directorships, meeting frequency and the effectiveness of audit committees. They found that increasing directors' shareholders would not necessarily enhance the effectiveness of audit committee in financial reports. Greco (2011) examined the determinants of board attributes and audit committees meeting frequency in Italian companies. He explored ownership structure and board attributes. He reported that insider ownership has a negative effect on the board attributes and audit committees meeting frequency. However, the rate of independent directors in the board has a positive effect. He found that audit committee is more active in large companies.

In Asia, Fan and Wong (2002) examined the relationship among ownership structure and the accounting earnings informativeness. They used data from 977 firms' annual reports. They showed that concentrated ownership is correlated with low informativeness of earnings. They reported that the concentrated ownership, correlated pyramidal and cross-holding structures create agency conflicts among outside investors and controlling owners. Goodwin and Seow (2002) studied the directors and auditors perceptions on the relationship among the quality of financial reporting and corporate governance practices and auditing in Singapore. They concluded that the presence of a strong audit committee reduces errors in financial reports and increases the possibility of detection of management fraud. Moreover, the strength of the internal audit is perceived to limit the fraud and errors in the financial reports.

Yuemei and Yanxi (2007) found an adverse relationship among earnings management and rate of the independent directors. There is also an adverse relationship found among

ownership of the board and board size and earnings management. They found slight evidence that large total assets motivate the directors to practice earnings management. Firth, Fung and Rui (2007) examined the role of foreign ownership in reducing earnings management in China. They found that firms with foreign shareholders have less earnings management and higher earnings informativeness. They reported that the foreign shareholders put pressures on firms to improve the quality of financial reports. Wenyao and Qin (2008) explored the relationship among board composition and earnings management in manufacturing listed companies in China. They showed that small board is more effective in constraining income-increasing earnings management than the large board. They also found that separation of CEO/ chairman and inclusion of independent directors did not enhance monitoring and controlling of earnings management. They also showed that the presence of audit committee did not limit income-increasing earnings management.

Xia and Zhao (2009) studied the relationship among attributes of supervisory board and quality of earnings. They analyzed 160 of annual financial reports for 160 public firms in 2006. They showed no significant relationship among attributes of board and earnings management. They also found that the supervisory board size, board meeting frequency, and the shareholding proportion of supervisors have no association with earnings management. Jiaguo, Qian, Mi and Yun (2010) also examined the independence of supervisory board of Chinese listed companies and showed a significant positive relationship among status of management and independence of supervisory board. Board of directors was also found to have an adverse association with independence of

supervisory board and management status, while management status has a positive relationship with independence of supervisory board. Jaggi, Leung, and Gul (2009) studied the relationship among board independence and earnings management and the impact of the family control on the relationship among independent non-executive directors and earnings quality in Hong Kung firms. They showed that a higher rate of independent non-executive directors has a positive relationship with earnings quality. They also found that increasing the proportion of outside directors to enhance board monitoring and controlling is unlikely to be effective in family-controlled companies.

Kung, Cheng and James (2010) examined the impact of ownership structure on earnings conservatism in Chinese listed companies. They presented evidence on how firms' ownership structure affects the properties of earnings in emerging markets. They found that earning of firms with higher level of non-tradable shares have lower conservatism. In other words, the firms with concentrated ownership structure are more likely to depend on their private resources to solve agency problems. Cullinan, Wang, Wang and Zhang (2012) examined the relationships among ownership structure and conservatism in Chinese firm listed on Shanghai Stock Exchange from 2007 to 2009. They found that conservatism has adverse relationship with the percentage of shares-held by the largest shareholder, and that this effect is significant especially when the ownership proportion is more than 30%.

Shah, Zafar and Durrani (2009) reported that institutional ownership plays a significant role in improving corporate governance in Pakistan. They proved that the presence of

institutional investors decrease the management ability to practice earnings management. In addition, there is an adverse relationship among the independence of non-executive directors and earnings management. They attributed this result to the Pakistani context as there are no obvious measures to measure the independence of non-executive directors. Lin and Hwang (2010) examined the relationship among corporate governance, audit quality, and earnings management. They showed that the expertise and independence of board of directors have a negative relation with earnings management. Earnings management is also negatively related with expertise, independence, and number of meetings of audit committee, while the audit committee's share ownership is positively related with earnings management. They concluded that earnings management has a negative relationship with auditor tenure, audit quality, auditor specialization and auditor size. They reported that, in general, the findings are almost the same across the countries under study, but the impact of variables varying from country to another one. Gulzar and Wang (2011) found that CEO duality, board meetings, concentrated ownership, and females' directors related positively with earnings management. They found no significant relationship among presence of audit committee, board size, proportion of independent directors, and director's shareholdings, and earnings management.

In Malaysia, Ismail, Iskandar and Rahmat (2008) examined the relationship among audit committee and external audit with financial reports quality for 45 firms listed on the Bursa Malaysia. They showed that only the audit committee with multiple directorship members has a positive relationship with financial reports quality. They also found no

relationship among the audit quality and quality of financial reporting. They (Ismail *et al.*, 2008) provided clear evidence on the relationship among corporate governance and the quality of earnings during 2003 to 2007. They showed that size of the audit committee and size of the board of directors have positive correlation with earnings quality; in other words, the quality of earnings become higher when the firm has a large audit committee and large board of directors. Yang, Chun and Ramadili (2009) examined the relationship among institutional shareholders and outside directors and earnings management activities in Malaysia. They found no significant association among the proportion of institutional shareholders, outside directors, and earnings manipulation. They reported that increasing rate of institutional ownership and adding more outside directors in the board would not limit earnings management in highly concentrated ownership companies.

Yunos, Smith, Ismail and Ahmad (2011) examined the relationship between accounting conservatism and ownership concentration using sample of Malaysian listed companies from 2001 to 2007. They showed that there is a no significant relationship between inside concentrated ownership and conservatism, while there is positive association between board independence and expertise and conservatism. Hashim and Rahman (2011) studied the relationship between corporate governance mechanisms and audit report lag between 288 Malaysian companies for period 2007 to 2009. Three attributes of board are examined namely, board expertise, board independence and board diligence. Their study reported that the number of meetings per year held by the board in a firm is able to limit the lag of audit report. A higher number of board meetings reported the board of directors is discharging their duties towards the firm. They also

could not give any evidence on the relationship among board expertise and board independence on the lag of audit report.

In the Middle East, Klai and Omri (2011) examined the relationship among mechanisms of corporate governance and financial reporting quality in Tunisia. They studied characteristics of ownership structure and board of directors of Tunisian firms. They found an adverse relationship among foreign and family ownership with quality of financial reporting. They reported that the governmental ownership and financial institutions have a positive relationship with quality of financial disclosure. They showed that there is a concentration of ownership and lack of board independence in the Tunisian firms.

Sarikhani and Ebrahimi (2011) examined the relationship among management ownership, ownership concentration, institutional ownership, board composition, corporate ownership, board size and leadership structure with earnings informativeness in Iran. They also found that institutional ownership and ownership concentration have a significant and positive relationship with earnings informativeness, while there is no significant association among corporate ownership, management ownership, board composition, board size and leadership structure with earnings informativeness.

Roodposhti and Chashmi (2011) investigated the relationship among board independence, ownership concentration, institutional shareholders, CEO dominance and earnings management in Iran. They concluded that firms with independent boards and higher ownership concentration have a negative relationship with earnings management, while higher institutional ownership has a positive relationship with earnings

management. Finally, they showed a positive relationship among the existence of CEO-Chairman duality and earnings management.

Al-Junaidi (2010) examined the role of applying corporate governance in raising the efficiency of the stock market in Saudi Arabia. The study found that there is a large and positive role of corporate governance on the efficiency of the stock market. The study recommended that there is an important need to develop a general framework for corporate governance, enhance market efficiency and transparency, and to require all firms in the Saudi stock market applying of corporate governance by the Capital Market Authority supervision.

2.3 Overview of Jordan

Jordan is one of small Arab country which located in the Middle East with a population of 6,482,081 million (July 2013 est.), divided into Arab 98%, Circassia 1% and Armenian 1%. Arabic is the official language, while the English language is widely understood among upper and middle classes (CIA-The World Fact Book, 2005). 32% of Jordanian population is under the poverty (Jordanian Department of Statistics JDS, 2008 est.).

Jordan became independent in 1946, where it was under British colonial rule before that. Jordan was ruled by King Hussein since independence (1953-99). In its humble beginnings, Jordan relied mostly on agriculture for its income, but with the limited cultivable land and low rainfall, the agriculture contribution decreased, with

agriculture contributing only about 4 percent of the Gross Domestic Product (GDP) in 2000 (Central Bank of Jordan, 2000). As a result of decreasing rainfall, Jordan has followed other strategy by developing other sectors such as banking, tourism, insurance, and manufacturing to increase its income. It has a rapidly growing population. In addition, Jordan has limited natural resources such as water and oil (The World Fact Book, 2013 est.).

The main economic problems that Jordan faced such as unemployment and poverty, Shaban, Abu-Ghaida and Al-Naimat (2001) reported that the unemployed had the highest of incidence of poverty at 16.4 and 26.3 percent in 1992 and 1997, respectively. The poverty incidence in 2000 is about 14% of the total population, while in 1987 the poverty incidence was about 3%. In more detail, the number of poor people in 1987 was 85,000, and this number has increased into 907491 in 2008. A large number of external shocks in the Middle East region have affected the general situation in Jordan. For example, the Arab-Israeli war of 1948-1967 led to hundreds of thousands of refugees from Palestinian to Jordan with the scarcity of the internal resources, such dilemma led to the worsening unemployment and poverty problems (Abedl'Al, 1995). On the other hand, the first Gulf War in 1990-1991 and the return of migrant workers increased both unemployment and poverty in Jordan. More than 300,000 people came back to Jordan from Gulf countries during the Gulf Crisis in the 1991 (World Bank, 2003). The ongoing difficult situations on the Gaza and West Bank, as well as the second Gulf War in 2003 which had a major negative influence on investment and tourism in region. Moreover, Jordan was badly affected by the Palestinian Intifadah which began in September 2000.

In Jordan, there are a few government bodies overseeing the various sectors of firms listed on the financial market. The Central Bank has service inspection directly to the banks. Insurance authority oversees insurance firms. The Jordanian Securities Commission oversees all the activities of the listed firms. Firms' control department provides and guidance to the investment firms besides overseeing their activities.

The history of financial reporting in Jordan is relatively short. Public shareholding firms were established in the beginning 1930's. Ever since, Jordanian public have been subscribing and dealing in shares. Corporate bonds were issued in the beginning sixties. Transactions were handled in individual brokerage offices. Thus, the need for a well-organized market aroused, and the establishment of the Amman Financial Market became crucial. 1st January 1978 was the birth of a leading securities market in the region. Since that date, the Amman Financial Market played the role of the stock exchange as well as a regulatory body. The following section illustrates the nature of the corporate governance in Jordan in more detail.

2.3.1 Corporate Governance in Jordan

Corporate governance has defined in various ways by advocates of corporate governance, scholars and regulators (Singam, 2003; Gay & Simnett, 2007). Text-books commonly define the corporate governance as the system by which companies are managed and cover and conduct and directed of the board of directors and association between the boards, shareholders as well as the management (Gay & Simnett, 2007).

Corporate governance is defined as a set of relationships among the management, shareholders, board and stakeholders of a firm (OECD, 2004). It provides a structure over which the firm's aims and methods of achieving them are set and controlling performance is identified. Good corporate governance should provide proper management and board incentives so that the shareholders and firms aims are followed and effective controlling is established to promote the use of resources effectively. This definition is the one adopted by the Jordan Investment and Finance Bank in 2009 along with the Amman Stock Exchange in terms of Corporate Governance policies.

The rules of corporate governance are considered as a hot issues discussed in the international economies (e.g. Abed *et al.*, 2012; Al-Najjar, 2010). In the Jordanian context, corporate governance represent a significant factor that enhance the success of organizational and economic reforms recently undertaken in the globalization context; global competition, openness of global economies, and in light of requirements and conditions of international organizations for dealing with countries of the world and with markets and institutions of these countries or accepting membership to countries. The application of these principles and rules has become the mantra in both sectors (public/private) and an approach to support and promote confidence in any national economy and it evidences the presence of clear and equitable policies that safeguard traders and investors. This is also deemed as a critical indication of the degree of professional commitment achieved by the management of the firm towards the realization of accountability, transparency and effective governance and towards the establishment of measures to minimize corruption and eventually maximize the

economy's attractiveness to both local and foreign investments and reinforces its competitiveness (JSC, 2009).

Since 1990s, corporate governance reform has been an increasingly important agenda item in Jordan's pursuit of sustainable and enhances economic growth. The creation of three new institutions, the JSC, the Amman Stock Exchange, and the Securities Depository Centre (SDC), has helped to an improvement in the regulatory environment. JSC is responsible for the supervising and regulating the equity market, the SDC is responsible for the safeguarding the rights of ownership and settling transactions, whilst the Amman Stock Exchange which is created in 1999, is responsible for the trading of public securities.

In Jordan, the guidelines of corporate governance were established the Company Law in 1997, Jordan has launched also the initial principles of the corporate governance policy framework in the same year to address the following; the just treatment of shareholders, protection of shareholder's rights and the responsibilities of the board and its key role in corporate governance. Additionally, the Company Law 2007 mandates that listed firms form audit committees that comprise of at least three non-executive directors. Nevertheless, the same law failed to elaborate the audit committee responsibilities particularly its adherence to the JSC established requirements. These were later addressed in the Securities Law 2002 (Al-Akra *et al.*, 2009). Jordan exerted efforts to consolidate and enhance corporate governance by employing sets of economic, legislative and financial reforms targeted at enhancing accountability, transparency and

the rule of law in an economic climate. Moreover, the consequent crisis from the Shamayleh Gate scandal in 2003 solidified the interest in supporting the corporate governance principles and foundations in the economy of Jordan (Jordanian Forum for Economic Development (JFED), 2003). Hence, this increase in international and regional attention in corporate governance field prompted the Jordanian focus group debate on the nature and situation of corporate governance in the country which was held on the 8th of July, 2003 in an initiative to increase the economic awareness of Al Urdun Al-Jadid (New Jordan) Research Center (UJRC), and Jordanian Forum for Economic Development (JFED) with the advocacy of the Center of International Private Enterprise (CIPE) and the Global Corporate Governance Forum (GCGF).

These guidelines are established in Jordan towards developing the national economy at various levels, consistent with the JSC efforts to forming a national capital market and its organizational and regulatory framework. It comprises the CG rules for firms that are listed on the Amman Stock Exchange geared towards developing a framework for the regulation of their relations and management and the determination of their rights, responsibilities, and duties for the realization of their aims and protection of stakeholder's rights. These rules have their basis on a number of legislations, primarily from the Jordanian Securities Law, the Companies Law and relevant regulations, and from the international principles established by the Organization of Economic Cooperation and Development (OECD). It is noteworthy that majority of these principles and rules are based on the legal provisions provided by the above laws. These rules only touched upon the issues and requirements and did not delve into detail. In

fact, they were laid down as general rules, while the details were handled by relevant legislation. For instance, the details needed in the annual report of the firm were not addressed in detail within the guide because the Accounting Standards and Instructions of Issuing Companies Disclosure are expected to have them listed in detail (JSC, 2009).

In 2004, the Jordanian Stock Exchange mandated that the application of rules will initially be via “compliance/explains” indicating that firms should adhere to the rules listed in the guide. However, deviation from the rules that are not based on legal provision and is covered under responsibility would entail clear explanation behind the reason of such deviation in the annual report (JSC, 2009). This aims to provide firms with versatility in employing the corporate governance rules and enough time for adaption, in order to maximize awareness of rules and to eventually reach full compliance (JSC, 2009; Al-Tahat, 2010).

Management of firms listed on Amman Stock Exchange are expected to implement rules in a way that the entire stakeholders would push for implementation to promote confidence in firms in the way they enhance management performance and safeguard stakeholders’ rights. This in turn would increase confidence in the firm and the investment environment. Therefore, the performance of the national economy will consequently improve (JSC, 2009; Abu Hajja, 2012).

In recent years, especially after the financial crisis in 2008, Jordan showed great interest in consolidating and improving corporate governance by adopting a series of economic,

legislative, and financial reforms aimed at improving accountability, transparency, and the rule of law in economic climate. Especially after scandal of Jordanian firms such as Shamayleh Gate in (2003) in defraud some of Jordanian banks for loans reached to one billion USD or more. The issue has opened both the eyes of the management of firms and government and of banks and large firms' on the risks associated with the lack of controls and restrictions governing the management of firms. This lack of controls and restrictions are classified as the main reason for the loss confirmed by shareholders who have interests in these firms, designed to destabilize and damage the national economy and investment climate (Al-Tahat, 2010; JFED, 2003).

The world has faced a big financial turmoil in the last few years. The financial crisis that has befallen in 2007 to 2008 was considered as a worst financial crisis since the Great Depression of the 1930s (Brunnermeier, 2009; Erkens, Hung & Matos, 2012). The crisis not only resulted in the collapse of financial institutions like Lehman Brothers in (2007), but this crisis also halted global credit markets, which requires unprecedented intervention from the government worldwide to tackle the impact of this crisis. For example, in October 2008, the British government has announced banks rescue package totaling USD 740 billion (£500 billion) in guarantees and loans. In the same month, the government of U.S. launched Troubled Asset Relief Program (TARP) to insure or purchase up to USD 700 billion of financial institutions' assets. In addition, UBS in Switzerland and Citigroup in the U.S. have experienced large losses in subprime mortgage (Erkens *et al.*, 2012).

In the face of this crisis, Jordan displayed explicit focus on corporate governance in an attempt to improve the financial reports quality. As such, legislators enacted rules to guarantee that public firms adhere to the corporate governance requirements. The JSC issues the Code of Corporate Governance Code for listed firms on the Amman Stock Exchange on September 1999 (JSC, 2009). In Jordan, Corporate governance Code has been divided into six main dimensions namely government oversight, legislative framework, capital market, accounting standards and disclosure, privatization transparency, preservation of protection of minority rights and property rights and finally, board of directors' effective supervision (Abu-Tapanjeh, 2009). The above dimensions were addressed in the 1997 Company Law and in the Securities Law of 2002. In addition, the controller of the company holds a key function in the enforcement the provisions of corporate governance stipulated in the Company Law. The code describes the committees' creation and responsibilities. For instance, boards of directors' responsibilities as determined by the code are;

1. To establish policies, strategies, procedures and plans that creates towards the firm objectives.
2. To take the required steps to guarantee adherence with the laws in force, with the inclusion of internal supervision on the firm's work in progress.
3. To adopt conditions for granting compensations, incentives and privileges to both the executive management and the board of directors members.
4. To develop a policy in order to organize relations with stakeholders to make sure that the firm's commitment towards them are fulfilled and to facilitate them with

sufficient information, safeguard their rights, and maintain effective relations with them.

5. To establish procedures firm insiders from utilizing inside information to obtain moral or material benefits.
6. To evaluate and review the executive managements' performance.
7. To establish necessary measures guaranteeing adherence to the rules in force; and finally.
8. To develop a risk management policy that addresses the risks faced by the firm (JSC, 2009, p.8).

In Jordan, the Code of Corporate Governance provides a description of the formation of committees under the supervision of the board of directors, such as the audit committee. According to the JSC (2009), the audit committee members should be knowledgeable in accounting or finance, with at least one of them having prior experience in accounting or finance fields and having a professional/academic certificate in accounting, finance or other related fields. Additionally, the code mandates that the committee meet periodically, with one of the meetings held with the external auditor. The code also stipulates that the audit committee's duties are; to discuss matters relating to the external auditor's nomination and working and to review the correspondents of the firm with the external auditor, to monitor any change in the accounts or accounting policies of the firm stemming from the audit processes, to monitor the adherence of the firm to the regulations and laws in force and the regulatory institutions requirements, to ensure that no conflict of interest arises from the transactions, projects or contracts of the firms with

related parties, and finally, to evaluate the auditing and internal control procedures and the auditor for internal control.

The current statuses of corporate governance in Jordan, the World Bank and the International Monetary Fund (IMF) in 2004 have evaluated the status of corporate governance in Jordan. The body issues a Report on the Observance of Standards and Codes (Corporate Governance Country Assessment ROSC) which highlights some weaknesses in the framework of corporate governance in Jordan. Nonetheless, the report suggests that the corporate governance of Jordanian companies remains at a relatively underdeveloped stage (Berg & Nenova, 2004). Even though the development of modern board of directors' practices is at an early stage, Jordan is advanced in its early reliance of the audit committee. The evaluation concludes a minor evidence of corporate governance scandal. The report sheds some points that need to be reviewed where the rights' shareholder can be improved. The World Bank (2004) suggests many steps to improve the current framework of corporate governance, such as focusing on the duties, functions and roles of the board. It further recommends a re-review be made to Companies' Law to be more harmonious and compatible with the OECD principles. It also recommends that there is a need to unification of the regulations in force in the three main bodies (ASE, JSC, and SDC) which supervise corporate governance in Jordan.

2.3.2 Empirical Evidences of Corporate Governance in Jordan

The debate of corporate governance was emerged as a hot issue and of critical interest since the mid-1980s attracting a great deal of attention for the practitioners, communities as the regulatory agencies, shareholders, managers, investors as well as in the academic research (Abu-Tapanjeh, 2009).

Researchers have provided great interest about the role of corporate governance in the business environment, which studied with different economic fields. For example, Noor and Matar (2007) studied the compliance of Jordanian companies with corporate governance principals. They have prepared a questionnaire to test the durability and strength of corporate governance in banking and industrial sectors. They found that the compliance of Jordanian public companies with principles of corporate governance ranged from weak to moderate. In general, the compliance of the Jordanian companies with corporate governance is at a moderate level. Al-Shareif (2008) examined the association between earnings quality and corporate governance in Jordan. He showed that the independence of audit committee has a positive relationship with earnings quality, while there is no association between board independence and board size with earnings quality.

Al-Khabash and Al- Thuneibat (2008) correspondingly examined the earnings management practices in Jordan from the external and internal auditors' perspective. They found that the internal and external auditors believe that the management engages largely in legitimate earnings management by increasing or decreasing the income, but

the internal auditors think that the management tends to increase the income only. They found no significant differences among small and big corporations regarding earnings management practices. They demonstrated that the weakness of corporate governance was a result of the absence of the audit committee, combination of the CEO and founder roles, and board of directors dominated by insider's relationship significantly and positively with earnings management.

Almajali (2009) has developed a questionnaire to study the extent of corporate governance in the commercial banks operating in Jordan. She concluded that the application of corporate governance in commercial banks in Jordan is moderate. Ajeela and Hamdan (2011) also examined the relationship between earnings management and corporate governance in Jordan. They found that the Jordanian industrial companies listed in Amman Stock Exchange have practiced earnings management in different degrees. They pointed out that the application of good corporate governance and formation of committees has reduced the practice of earnings management. They found that between 43% and 76% of the Jordanian companies comply with the Code of Corporate Governance.

Al-Fayoumi *et al.* (2010) examined the relationship among ownership structure and earnings management in Jordanian companies. They found a positive relationship among insider ownership and earnings management, which reduce the informativeness and quality of earnings. Regarding institutional and block-holders, they showed no relationship among these two variables with earnings management. They attributed this result to many reasons such as strategic alliance with the management or problem of free

rider among insider owners, and the lack expertise. They also showed no significant association between firm's growth and leverage with accounting information quality even though they demonstrated that size and profitability associate positively with earnings management.

Al-Najjar (2010) showed that the Jordanian institutional investors consider companies' profitability, capital structure, asset structure, business risk, asset liquidity, firm size and growth rates when they take their investment decisions. In addition, Jordanian institutional investors prefer to invest in services sector rather than manufacturing sector. However, the study cannot find any significant association among institutional investors and companies' dividend policy.

Shanikat and Abbadi (2011) have evaluated the corporate governance in Jordan. They found that the board of directors carries out the duties as defined by the Company's Law, including the planning and setting policies for the management of the firm and the appointment of the CEO. They indicated that the board is responsible for ensuring commitment with the laws. In practice, there is no difference among the board and the management because, for example, the CEO and the chairman positions are held by one person in many firms. In relation with the quality of audit, they found that the audit profession in Jordan is controlled by a few smaller national audit firms and big audit firms. They also found that most of audit firms in Jordan are of low quality.

Al-Haddad, Al-zurqan and Al-Sufy (2011) examine the relationship among corporate governance and firm performance in Jordan. They found a positive association between

corporate governance and firm performance. They further showed that good corporate governance is positively associated to firm value. Similarly, Aydin, Sayim and Yalama (2007) study the relationship among foreign ownership, and firms' performance. They found that in increasing the foreign ownership in firm will increase the firm performance. They reported that foreign owned firms' perform better than domestically owned. Ben-Nasr, Boubakri and Cosset (2009) showed that the presence of foreign ownership and institutional ownership correlate with less persistence of negative changes of earnings. Al-Tahat and Ismail (2010) reported there is no significant relationship among the extent of disclosure and board leadership structure, board composition, government ownership, foreign ownership, number of shareholders, size, profitability, leverage, age, audit firm size and market listing status.

Manaseer, Al-Hindawi, Al-Dahiyat and Sartawi (2012) investigated the effect of board composition, board size, foreign ownership, and chief executive officer (CEO) status on the performance of Jordanian banks. They used data of 15 banks quoted on the Amman Stock Exchange over the period of 2007 to 2009. They found a positive relationship among the foreign ownership and number of outside board members with Jordanian banks' performance, while, the board size and separation of CEO and chairman have an adverse relationship with performance.

Al-Zoubi (2012) studied the relationship among board characteristics and earning management in Jordanian listed companies. He found a positive relationship among CEO duality and earning management. On the other hand, he also found a negative

relationship among board meeting, financial expertise, and size with earning management in Jordanian listed companies. He also showed that independent boards provide effective monitoring of earning management. Bawaneh (2011) has found that Jordanian banks comply with corporate governance requirements by acting in accordance with a request from the central bank of Jordan based on Basle Committee on Banking Supervision (BCBS) and Organization for Economic Cooperation and Development (OECD) guidelines and requirements which improve the corporate governance procedures. Al-Sharif and Abu-Ejilih (2009) examined the relationship between earning quality and corporate governance in the financial reports issued by Jordanian listed companies for the period of 2001 to 2007. They found that there is a negative relation between earnings quality and board shareholdings, while a positive relation was found between earnings quality and audit committee Independence. No significant relation existed between earnings quality and the other characteristics of corporate governance.

Yaseen (2009) measured the level of conservatism in the accounting policies under the corporate governance and its impact on the quality of disclosure in financial reports issued by Jordanian banks. The study found that there is a low level of accounting conservatism in the accounting policies used by Jordanian Banks. The study also found that there is a significant relationship between accounting conservatism and the quality of disclosure for financial information, but he did not find a role for corporate governance in Jordanian banks in the relationship between the conservatism and the quality of accounting disclosure of financial information. In Hamdan's (2011) study, he confirmed accounting conservatism practices level in the financial reports published by

the industrial corporate listed on ASE is very low, and he examined the effect of auditing quality characteristics (i.e. auditing firms size, other global auditing firms, retention period of clients, auditing fees and the client industry's specialty) on the improvement of accounting conservatism level. The findings showed significant low level of accounting conservatism practices in the Jordanian financial reports and indicated that some auditing quality characteristics impacted the improvement of conservatism practice level.

Hamdan (2012a) verified the earning quality in the industrial companies listed in Amman Stock Exchange. The study also examined factors that affect the level of quality of earnings in these companies that are accounting conservatism, debt contracts, company size, auditing quality, return on investment, audit committees and corporate governance. The study found important results indicating a high level of earnings quality in Jordanian industrial corporations. It also found evidence that company size, debt contracts and auditing quality have an effect on earnings quality.

In conclusion, based on the best of the researcher's knowledge, and according to the previous studies, the researcher could provide some inferences that there is a severe lack of studies that have been conducted in Jordan that link between broader range of corporate governance mechanisms and accounting conservatism (Hamdan, 2012a). Previous studies have suggested that there is an urgent need to study such a relationship in the Jordanian environment (Abed *et al.*, 2012; Hamdan 2011; Hamdan, 2012a; and Yaseen, 2009).

2.4 Underlying Theories

Corporate governance studies were motivated from the agency perspective whereby companies used governance mechanisms to control agency conflict in companies. Ownership structure, board characteristics, audit committee and auditor quality are governance mechanisms developed to achieve this purpose as well as company attributes. In addition, empirical researches showed that conservatism could also govern the company as it reduces the opportunistic behavior of managers and increases firm value (Watts, 2003a), hence complementing the monitoring and controlling role of the other governance mechanisms.

2.4.1 Agency Theory

Agency theory addresses the contractual relationships, for example, among the agent (director of the firm) and the principal (shareholders of the firm) whereby shareholders delegate responsibilities of the directors to manage their business. This theory shows that when both of the parties are expected to optimize their utility, there is a good reason to believe that the agent (directors) may engage in opportunistic behavior at the expense of the interest of shareholders (Jensen & Meckling, 1976).

Most studies in earnings quality (conservatism) have used the agency theory as the underlying the propositions of research (e.g. Ahmed & Duellman, 2007; Beekes *et al.*, 2004; Lara *et al.*, 2007; Ruddock, Taylor & Taylor, 2006). Berle and Means (1932) showed that the agency theory arose as a result of the separation of ownership from management in modern companies. They have discussed the potential conflict among

management and shareholders when ownership is widely distributed between shareholders. Jensen and Meckling (1976) were of the first researchers to place the agency theory in a fixed theoretical framework. More developments from this theoretical perspective have provided by Fama and Jensen (1983). Both Jensen and Meckling (1976) and Fama and Jensen (1983) posit the relationship of agency arises when one party, directors, delegates some decision authority to other party, the agent (Gaffikin, 2008). The principal (shareholders) and the agent (directors) enter into a contract to recognize this relationship. It is argued by the agency theorists that both parties will act in their own self-interest that does not necessarily coincide with each other.

The main assumption of agency theory is that individuals maximize their own utilities. In addition, this conflict arises from the possibility that the directors are maximizing their wealth, whereas shareholders tend to maximize their own profits (Reis & Stocken, 2007). Conflicts could also occur among the company and auditors (Goldman & Barlev, 1974). Abdullah and Valentine (2009) showed that agency theory can be used to explore the relation among the management structure and ownership. However, separation can be applied to the agency model in aligning the objectives of the management with that of the owners.

Jiraporna, Millerb, Yoonc, & Kimd (2008) showed the importance of agency cost with the earnings management in company. They found a positive relation among the gravity of agency conflict and the practice of earnings management in the company. For example, Gibbons (1998) showed that high rewards will motivate the agent to maximize their wealth that is to get higher rewards. This may motivate the directors to manipulate

the financial report to decrease the expenses thereby increase the revenues. Ramanna and Watts (2007) reported that fair values are based on directors' or appraisers' unverifiable subjective estimates. Agency theory assumes that directors will take advantage of this non-verifiable to manage financial reports to extract benefits (p. 39).

The most common example of an agency relationship is between a principal (shareholders) and agent (firm management). Shareholders are interested in maximizing their wealth by ensuring the increased in the firm value. Meanwhile, firm management will seek to maximize their benefits and rewards from managing the company (e.g. perquisites, material-financial, reputation of the manager). Agency costs are incurred by the shareholders (principal) due to the need to monitor the agent's behavior who have been delegated responsibility for managing the firm assets, and, thereby, the principal may act out of self-interest rather than for the principal (Deegan, 2009). A number of monitoring costs could directly involved accounting such as the need for engagement of an external auditor (Gaffikin, 2008). Beside the cost of controlling the conflicts related to the principal/agent relationship, there are other costs incurred under this concept. In principle, several costs stemming from conflicts within the principal/agency relation arise from opportunistic behavior of firm management. Within the agency theory environment, the structure of corporate governance in companies is viewed as very important mechanisms to solve agency problems and prevent directors' opportunistic behavior. Burton (2000) showed that agency costs are best monitored by reducing the discretion of management by the establishment of structures to control and monitor management behavior. Such structures include an independent chairperson, an

independent board of directors, and audit committee independence (Ellstrand, Daily, Johnson & Dalton 1999).

Previous studies (e.g. Ang, Cole & Lin, 2000) showed that agency costs will be higher when the company is managed from the outside, and agency costs vary inversely with the director's ownership share, and agency costs will be higher with the number of non-director shareholders. These findings are consistent with Jensen and Meckling (1976) and Fama and Jensen (1983). In addition, agency theory reported the role of the board of directors to control both the management and majority shareholders; and to protect the interests of minority shareholders (Fama & Jensen, 1983). It was suggested that the board of directors may help limit agency costs because it maintains ultimate monitor management even if some of the important decisions are entrusted to senior management.

The role of corporate governance in agency theory is to ensure the quality of financial reports (Cohen, Krishnamoorthy & Wright, 2004). For example, Bonazzi and Islam (2007) showed that the board controlling of CEO will enhance the CEO performance and avoid possible interests' conflict. Bushmana and Smith (2001) found a relationship between corporate governance mechanisms and quality of accounting information. In this context, Bhat (2008) found that corporate governance affects the quality of estimates of assets and liabilities by many ways that is corporate governance limits the measurer bias through its impact on the director's process which makes the directors follow the good disclosure policy. Ben-Nasr *et al.* (2009) also showed that institutional ownership is related with active controlling of management activities. On the other hand, Firth *et al.*

(2007) found that foreign shareholders placed pressure on firms to enhance the financial reporting quality.

In an agency theory context, the structures of corporate governance in companies are viewed as significant instruments to limit agency problems. In addition, Burton (2000) showed that agency costs are best monitored by reducing management opportunist by the establishment of structures to control and monitor the behavior of management. Such structures include independent chairperson, an independent board of directors and audit committee independence (Ellstrand *et al.*, 1999). Audit committees as a corporate governance mechanism are appointed in companies to limit agency problems between shareholders and management. They are also more common when there are substantial agency conflicts among minority and majority shareholders and when political costs related with reporting errors and fraud are larger.

Generally speaking, these results support results from researches in other institutional settings (Burgstahler & Eames, 2006). On the other hand, the auditor quality is the important factors in reducing the agency conflict, as well as monitoring the firm performance, and reducing the exploitation of directors or major shareholders positions in transferring the firms' wealth to their own accounts, and limits the managers' opportunistic behavior (Chang, Dasgupta & Hilary, 2008). In the next section, the role of corporate governance mechanisms in the agency theory is presented in more detail.

2.4.2 Positive Accounting Theory

The company is considered as ‘interrelated of contracts’ (Jensen & Meckling, 1976), where it has a contractual relation with different groups of people such as creditors, employees, public and government, simply referred to as the stakeholders. Positive accounting theory is related with the contractual view of the company where accounting is used as an instrument in order to facilitate the formation and fulfillment of the contract by reducing the contractual costs that arises from the agency conflict.

Positive accounting theory expects and explains actual accounting practices and highlighting on analysing the agency costs that arise from the contractual arrangement among the top management and owners (Jensen & Meckling, 1976). This theory assumes that directors make accounting choices designed to meet their needs to increase their wealth by compensation and incentives, to limit the political cost or to avoid violation of the debt contract. Positive accounting theory further suggests that accounting choices like accounting conservatism are desirable to decrease the opportunistic behavior of directors, without which directors are able to extract company wealth for their private benefit (Milne, 2002). The role of corporate governance mechanisms in the positive accounting theory is explored in more details in the next section.

2.4.3 Resource Dependence Theory

Resource dependence theory was originally developed to examine relationships among companies. In addition, the theory is also applicable to association between units within

companies. In corporate governance context, such theory can be employed to suggest effective structures of corporate governance within companies that lead to the generation more of resources. In particular, a boards of directors contribute to a company by linkages to other institutions and companies and the expertise of members of the boards, as well as. Directors on the board can also contribute positively to the positive valuation of a company through reputation. Boards of directors can be a major source of diverse resources (McGregor, 1960; Pfeffer, 1972; Hillman & Dalziel, 2003) based on social capital and human capital (Certo, 2003). The previous includes the director's advice and expertise and the latter covers resources such as legitimacy (Westphal & Zajac, 1994) and links to other companies. Cumulatively, these resources are all considered as board capital (Hillman & Dalziel, 2003). The association among board capital and corporate performance is well authenticated by several of studies (Pfeffer, 1972; Daily, Johnson, Ellstrand & Dalton, 1998).

Previous studies have used resource dependence theory to investigate boards focus on board composition and board size as indicators of the ability of boards to provide critical resources to the corporate. For instance, Pfeffer (1972) reported that board size relates to the corporate environmental needs and those with more correlation require a higher proportion of outside directors. He concluded that board composition and board size are not independent or random factors; rather, it is a logical response to the requirements of the external environment (Pfeffer, 1972). Numerous studies also examine the association among board size and corporate performance as an indicator of a success the strategy of resource dependence. On the other hand, Dalton, Daily, Johnson and Ellstrand (1999) found a positive association among board size and corporate performance.

Different elements of corporate governance are considered significant resources for the company; this is the premise, which is based upon the resource dependence theory (Psaros 2009). Advocates of the resource dependence theory argue that a corporate level of success is mortgaged on their ability to control and monitor external resources. Companies must deal with large uncertainty in order to survive. This uncertainty may harm the strategic choices and corporate function to control the resources leading to inefficiencies in the corporate operations. The board of directors is considered the connecting link to external resources for a corporate when they are seeking to get their stated purposes and goals. In a resource dependence function, directors act to link the corporate with external variables which limit the external dependencies and environmental uncertainties (Pfeffer, 1972; Hillman, Cannella & Paetzold, 2000).

It is further posited by the resource dependence theory's advocates, the directors also contribute to the firm by adding value to their firms in various ways. For instance, Hillman *et al.* (2000) suggested that directors bring further resources to their company including specialist information, unique skills and access to major constituents (e.g. environmental groups, suppliers, government and educators policy makers). The value that added by directors to their firms depends on the resource and skills base of those directors. The board members may also enhance the reputation of their firms by virtue of personal reputation.

2.4.4 Stewardship Theory

The individuals have higher-order association needs; these needs are related to non-financial factors such as personal growth and acceptance, satisfaction by conducting challenging functions, exercising authority and responsibility and ultimately, getting recognition from counterparties and bosses. The individual's needs subsequently consistent with the corporate are objectives. This is the key premise of stewardship theory (McGregor, 1960). The general attitude of this theory is that a manager mainly wants to do a unique job and be a steward of the corporate resources, thereby, suggesting that the executive motivation is not inherent problem with them (Donaldson & Davis 1991).

This theory sees the managers as proper stewards of corporate resources for a several reasons; managers considered as honest people who trying to do the right thing by the company that manager manage (Donaldson & Davis, 1991); there is a number of evidence that some of senior managers are motivate the personal motivations such as being successful and achievement at work which mean self-actualization not by external motivations such as financial remunerations (Donaldson & Davis, 1991). Barney (1990), Donaldson and Davis (1991) and Donaldson and Preston (1995) reported a strong argument that the reputation of managers is their key asset. Accordingly, self-interested behavior aligns against the possible damage to this key asset.

In a corporate governance field, stewardship theory presents that, in the existence of motivated managers who are striving for self-actualization and job satisfaction instead than monetary wage, there is less level of pressure on boards within companies to

closely monitor the performance of managers. Furthermore, the emphasis of independent directors representation on corporate boards and subcommittees such audit committee is unnecessary and possibly counterproductive where shareholder economic returns are best achieved through enhancing management and having minimum independent representation on boards (Barney, 1990; Donaldson & Davis, 1991; Psaros, 2009).

2.4.5 Signaling Theory

Global financial scandals have renewed the attention of regulators, scholars and financial bodies about the transparency of corporate. According to signaling theory, in light of the asymmetry of information, companies with high level of information transparency indicate better system of corporate governance. Previous studies also refers that companies that have better practices of corporate governance indicate better performance (Chiang, 2005).

According to the result of previous studies which stated that if asymmetry of information exists among a firm's managers and outside parties such as investors, the firm can supply information to the investors in an attempt order to limit such asymmetry. In other hand, the investors do not have another option to understand the situation of company's operations realistically (Spence, 1973). Poitevin (1990) and Ravid and Saring (1991) refer that investors depend mainly on the information that received from the firm to make their investment decisions. In practice, firms with high level of operating performance seek to enhance the positive impressions of their firms by disclose more information to the public.

2.5 Corporate Governance and Accounting Conservatism

Corporate governance is a hot topic in the U.S. and Europe (Pourkazemi & Abdoli, 2011). Hasas (2009) defines corporate governance as the regulations, laws, structures, culture and processes that lead to the fulfillment of transparency and give the ability to protect the shareholders' rights. Accounting conservatism is an important feature of quality financial reports because it helps to improve the reliability of financial reports by facilitating effective monitoring of directors and contracts as part of corporate governance mechanisms (Ball, 2001; Ball & Shivakumar, 2005; Basu, 2005; Watts, 2003b).

Evidence has emerged on a relationship between mechanisms of corporate governance and accounting practices, with stronger corporate governance structures encouraging the implementation of conservative accounting policies (Ahmed & Duellman, 2007; Ahmed & Henry, 2011; Beekes *et al.*, 2004; LaFond & Roychowdhury, 2008; Lara *et al.*, 2007). In the following sections, this study seeks to examine the relationship between corporate governance mechanisms and accounting conservatism in more detail in the following section.

2.5.1 Ownership Structure

Fan and Wong (2002) reported that the structure of ownership is defined by the distribution of company's equity with regard to capital and votes but also by the identity of the owners of equity. The association among shareholders and firm managers is replete with conflicting interests due to the separation of control and ownership. Al-Fayoumia and Abuzayed (2009) argued that the separation among the ownership and the

management of company are more likely to create conflicts of interests among the managers and shareholders. Consequently, the owners (managers themselves in some situations) have reason to find mechanisms to monitor and control managerial activities and limit undesirable behavior of managers (Warrad *et al.*, 2012). As a result, structures of corporate governance evolve that assist in mitigating these agency conflicts. These conflicts were the subject of many studies (Al-Fayoumia & Abuzayed, 2009; Ellili, 2011; Rahimah, Smith & Ismail, 2010).

The study of the association between the ownership structure and the conservatism passes firstly by the distinction between the several types of shareholders, such as: the institutional ownership, foreign ownership, family ownership and the managerial ownership.

2.5.1.1 Institutional Ownership

Previous studies suggested that equity investors are a significant source of the conservatism demand as a governance device (Ball, 2001; Watts, 2003b). Empirical evidence supports such assumption. Consistent with equity investors driving accounting conservatism demand, LaFond and Roychowdhury (2008) reported that conservatism level is higher when the separation of control and ownership is more visible. They found that higher information asymmetry among managers and shareholders leads to more conservatism. Many research showed that individual investors are considered small-unsophisticated investors who trade originally for causes not related to information such as rank speculation or liquidity (e.g. Barber, Lee, Liu & Odean, 2009; Odean, 1999). Accordingly, individuals are improbable to have insufficient sophisticated to gauge

whether companies consistently use conservative reporting, while, institutional investors are both more sophisticated and more significant price setters in capital markets (e.g., Hand 1990; Sias, Starks & Titman, 2006; Walther 1997). Thus, if a conservatism practices give governance benefits, certain that institutional investors will appreciate such benefits, accordingly, the demand for accounting conservatism will be from institutional investors. In addition, institutional investors probably have an advantage access to inside and management information (Carleton, Nelson & Weisbach, 1998). They may depend more on direct controlling and less monitoring by financial numbers (e.g. Holmstrom 1979; Ke, Petroni & Safieddine, 1999; Prendergast, 2002).

Previous studies (for example, Brickley, Lease & Smith, 1988; Chen, Harford & Li, 2007; Gaspar, Massa & Matos, 2005; Shleifer & Vishny, 1986) suggested that institutions investors that have long horizons of investment, independence from management and concentrated share holdings are responsible to monitor managers. The demand for high level of conservatism is more likely to stem from monitoring institutions. Overall, previous findings suggested that monitoring institutions demand accounting conservatism in investee company' reporting practices, and this demand is more explicit when both direct controlling is more difficult and conservatism provides more benefits of governance.

Ramalingegowda and Yu (2012) found that institutional ownership are more likely to monitor the managers behaviors through the use of conservative accounting policies in financial reports. They also showed that this positive relationship is more pronounced between companies with a higher information asymmetry and more growth options. In

addition, lead-lag tests yield consistent evidence that monitoring institutional ownership leads to more conservatism, rather than the other way round. Taken together, these findings are consistent with monitoring institutions demanding further conservatism. In Jordan, Al-Fayoumia and Abuzayed (2009) reported that most of institutional ownership consists of financial institutions and Social Security Corporation (SSC). There is no existence of investment companies or developed mutual funds. As a result, institutional ownership in Jordan is expected to have a bad ability to exert influence power or control over management actions. They (Al-Fayoumia & Abuzayed, 2009) also found no evidence of the active monitoring role of institutional ownership, indicating that those ownership do not rely on capital structure decisions to monitor and control managerial behavior of Jordanian firms.

The current study contributes to the knowledge of the economic factors nature that generates demand for more conservatism. In specific, according to the previous studies (LaFond & Roychowdhury, 2008; LaFond & Watts, 2008), this study tries to show direct proof suggesting that institutions ownership are a significant class of investors that demands accounting conservatism as a device of governance.

2.5.1.2 Foreign Ownership

Since the financial crisis in Asia in 1997, the weak transparency in the capital markets of most countries in Asian has received great attention from the of global investment society. It has been suggested that, financial disclosures of companies in East Asian, including Japan, China and South Korea, and Western standards are not transparent enough to help foreigner investors assess the timing, amount and doubt of expected cash

flows in future (e.g. Ang & Ma, 1999; Ball *et al.*, 2000). This lack of transparency increases the asymmetry level of information in the capital market, which leads to raises in the cost of capital from external suppliers. Accordingly, there are two reasons at least. First, more asymmetry of information may decrease liquidity of market, thus increasing capital cost, and thus, protect the foreign investors against the bad selections (Botosan, 1997; Diamond & Verrecchia, 1991; Welker, 1995). Second, high level of information asymmetry is more likely to impose greater valuation-risk to avoid the doubt from foreign investors, when they estimate the distribution of returns, thus requiring higher level of a risk premium (Clarkson, Guedes & Thompson, 1996; Coles, Loewenstein & Suay, 1995).

Previous studies showed that foreign investors in capital markets give priority for equity shares of companies with low level of asymmetry information to those with high level (Ball & Shivakumar, 2005; LaFond & Watts, 2008). If foreign investors were attracted to the firms that have rich information and have a low level of asymmetry, the size of foreign shareholdings should be negatively associated to the level of asymmetry (Anonymous, 1996; Fan & Wong, 2002). LaFond and Watts (2008) showed evidence that there is positive relationship between asymmetry of information among outside and inside investors and the level of conservatism and thus the information asymmetry drives to conservatism. They also showed that conservatism decreases the incentives of managers and their capacity to manipulate financial figures and so decrease such asymmetry and the deadweight losses that information asymmetry creates. This raises company and equity values. In short, the problems that arise due to information asymmetry among shareholders and managers impose more use of financial reporting

in communicating and contracting, and therefore attract a demand for high level of conservative reporting (Ball & Shivakumar, 2005).

In Jordan, the government has issued and revised a number of important regulations and laws, such as Privatization Instructions and Banks Law in (2000), in order to encourage and attract the investment by non-Jordanians. The Jordanian Securities Commission (JSC) addressed a private strategy to encourage and attracts the foreign investments in the capital markets (JSC, 2009). One of the strategy objectives is to prompt efficiency; transparency and fairness in the market, as well as to insure a high level of earning quality through adopting a higher level of conservatism and reduces the information asymmetric between managers and shareholders (Hamdan, 2011; Hamdan, 2012a; Zureigat, 2011). Zureigat (2011) has recommended that the Jordan Securities Commission (JSC) keep its ongoing strategy in encouraging and attracting foreign investments in Jordanian listed firms, and to adopt new instructions that attract the foreign investments to maintain the level of audit quality that will be reflected in high quality financial reports. Moreover, it will be better to assign auditors to the audit committee that should ensure that it has people of good knowledge in the auditing and accounting processes.

2.5.1.3 Family Ownership

Family ownership is considered as an important structure of ownership. Burkart, Panunzi and Shleifer, (2003) reported that most companies in the world are considered family-owned businesses. The separation of ownership from control is one of the typical attributes of publicly traded firms in the U.S., which increase the agency conflicts

among managers and major shareholders (Demsetz & Lehn, 1985; Jensen & Meckling, 1976; Shleifer & Vishny, 1997). In addition, professional managers of pervasively owned companies have more incentives to provide financial information that veers from the substance financial transactions in order to maximize their private benefits at the cost of creditor or shareholders (Christie & Zimmerman, 1994; Healy & Kaplan, 1985; Leuz *et al.*, 2003; Warfield, Wild & Wild, 1995). Thus, ownership structures influence the supply of quality of financial reports (Fan & Wong, 2002; Francis *et al.*, 2005; Warfield *et al.*, 1995). Furthermore, earnings are used to reduce agency conflicts by harmonizing the benefit of firm managers with those of outside creditors or shareholders (Bushman & Smith, 2001; Christie & Zimmerman, 1994; Kaplan, 1985; Watts & Zimmerman, 1986). Thus, shareholders and other users of financial reports demand a high level of quality of financial reports for the purpose of effective monitoring and contracting. In turn, the demand for financial reporting with high level of quality creates more incentives for companies to give high quality financial reports to obtain better terms of contracting (Ball & Shivakumar, 2005; Ball *et al.*, 2000; Ball *et al.*, 2003).

Family ownership could influence the request and supply the quality of financial reporting in one of two competing ways: the alignment and entrenchment effect (Wang, 2006). The alignment effect, which depends on the supposition that family ownership have many motivations to show earnings in good faith and therefore earnings will be high quality. The alignment effect means that ownership concentrated produces greater controlling by monitoring owners (Demsetz & Lehn, 1985; Shleifer & Vishny, 1997). They suggested that controlling families might monitor companies more efficiently. For instance, family firms are eligible to make decisions quicker and have more motivations

to make long-term loyalty of employees (Weber, Lavelle, Lowry, Zellner & Barrett, 2003). Furthermore, because of the family owners' long-term and sustainable existence in the company and their purpose to safeguard the name of their family, families have a senior share in the company than non-family executives. In contrast, Christie and Zimmerman (1994) reported that managers with short-run purposes may report earnings that support their personal wealth at the cost of other shareholders. Thus, families are more probable to forgo benefits of short-term from earnings management because of their intention to pass on their own business to future generations and to protect the reputation of their family name. Accordingly, that implies that family ownership is less likely to employ their power in the practices opportunistic behavior in earnings because it potentially could harm the reputation of their family, wealth, as well as long-term performance of the firm. Therefore, family firms have more incentives than non-family firms in terms of reporting higher quality earnings. In short, family firms prefer high level of earning quality and thus high level of conservatism, because previous literature have provided many evidences that earnings considered high quality if reported conservative earnings (Ball & Shivakumar, 2005; Ball *et al.*, 2000; Ball *et al.*, 2003; Basu, 1997).

The other point of view is the entrenchment effect stimulates financial reports suppliers (companies) to opportunistically earnings management. It is consistent with the assumption that family companies are less effective because the concentration of ownership makes incentives for majority shareholders to employ their power in order to expropriate minority shareholders' wealth (Fama & Jensen, 1983; Morck, Shleifer & Vishny, 1988; Shleifer & Vishny, 1996). Family members generally have influential

positions on the board of directors and the management team. Therefore, these companies may have weak level of corporate governance because of incompetent monitoring and controlling by the board. Another reason of entrenchment effect is potentially more asymmetry of information among families' members and other shareholders. On the other hand, Fan and Wong (2002) showed that ownership concentrated reduces the flow of financial information to outside investors, however Francis, Schipper and Vincent (2005) reported that asymmetry of information limits the level of transparency of financial disclosures. As a result, family owners have both the opportunity and the incentive to practice earnings manipulation to their advantage. Thence, the entrenchment effect expects that firms that owned by families is related with the supply of lower level of earnings quality and thus low level of conservatism.

In Jordan, family business groups are prevalent form of the structure of ownership. These families have various listed and unlisted firms that operate in various sectors. These firms seem legally independent. They are related to each other because they are owned by same family. It is predicted that agency theory could not be usable over these groups, as the major shareholders and managers of these companies are owned by the family that harm the entity theory as well as the Jordanian code of corporate governance (Warrad *et al.*, 2012).

2.5.1.4 Managerial Ownership

Demsetz and Lehn (1985) used all the measures on the structure of ownership which are based on the percentage of shares held by majority shareholders, they provide most interest to the portion of shares that held by the top five largest shareholders. After

Demsetz and Lehn's (1985) study, the researches focused on the portion of shares owned by the management of firm (e.g. Lafond & Roychowdhury, 2008; Shuto & Takada, 2010). Management holdings contain shares owned by the members of board of director, the top management and CEO. Complete reliance on this measure to follow the severity of the agency problems indicates that all shareholders classified as parties have a common interest. This is unlikely to be true. Board member, for instance, may have a position on the board of firm because he/she has or represents someone who has the major holdings of the firm's stock. In this case, these members do not have similar interests to those of the professional management. Probably, their interests are more related with those of outside shareholders (Demsetz & Lehn, 1985).

Based on the agency theory, the ownership of manage can decrease the managers' incentives to utilize from their position in order to expropriate the shareholders' wealth. Fama and Jensen (1983) who criticized the hypothesis of the convergence of interests and confirmed that managerial ownership is negatively related with the agency relationship (among the shareholders and managers), managerial ownership is also considered a major source of agency costs. Moreover, they confirm that the managerial ownership entrenches the current manager and shows the managerial opportunism. In addition, the managerial entrenchment hypothesis confirms that a high rate of managerial ownership enhances the ability of the managers to make important decisions that do not increase the firm value but their job security and improve their own wealth (Morck *et al.*, 1988).

Denis, Denis and Sarin (1995) studied the association among the managerial entrenchment and the manager turnover. They found that the manager turnover is significantly higher in the firms that the managerial ownership is lower than 5%. Shuto and Takada (2010) examined the influence of managerial ownership with the level of conservatism in Japan. They concluded that within the high and low levels of managerial ownership, managerial has a significant negative relationship to the earnings asymmetric timeliness. This finding is consistent with the incentive alignment effect. They also found a significant positive association among managerial ownership and the earnings asymmetric timeliness for the medium levels of managerial ownership. These evidences suggest potentially that conservatism contributes to limit the agency problem among managers and shareholders. Additionally, LaFond and Roychowdhury (2008) examined the influence of managerial ownership on the accounting conservatism. They showed that accounting conservatism declines with managerial ownership. Wang, Xie and Xin (2011) found that debt holdings by a company's CFO and its top management team decrease accounting conservatism.

In the context of stewardship theory, this theory considers the managers are honest people who trying to do the right thing to the company that they manage. In addition, there is a number of evidence that some of senior managers are motivate the personal motivations such as achievement at work and being successful, which mean self-actualization not by external motivations such as financial remunerations (Donaldson & Davis, 1991). Barney (1990), Donaldson and Davis (1991) and Donaldson and Preston (1995) reported a strong argument that the reputation of managers is their key asset.

Accordingly, self-interested behavior aligns against the possible damage to this key asset.

In Jordanian context, Al-Fayoumi *et al.* (2010) investigated the association between managerial (insider) ownership and earnings management in Jordanian industrial companies. They found significant positive association among managerial (insider) and earnings management. Their finding is supported by the entrenchment hypothesis which reported that managerial (insiders) ownership is more likely to be ineffectual in aligning insiders to take value-maximizing decisions. Jordan has recently displayed a significant attention in consolidating the corporate governance pillars. Additionally, this study uses Jordanian data because it's generally reflecting the similar institutional status to several emerging economics, where a high proportion of shares are owned by managers, which led to weakness in the policies that protect investors' rights.

Table 2.1 presents a brief summarized overview of prominent studies examining the influence of ownership structure on accounting conservatism.

Table 2.1

Summary of Major Previous Studies that Examining Ownership Structures and Accounting Conservatism

| No. | Author/s (year) | Sample | Ownership Structure | | | | Main Results |
|-----|-------------------------------|---|---|-------------------|------------------|---------------------------------------|---|
| | | | Institutional Ownership | Foreign Ownership | Family Ownership | Managerial ownership | |
| 1 | | | - | - | - | Managerial ownership and Basu (1997). | They found that low levels of managerial ownership are related with more conservative earnings. They provide evidence on a source of demand for conservatism from firm's shareholders. |
| 2 | Ramalingegowda and Yu (2012). | 16,911 U.S. firm-years over 1995 to 2006. | Institutions ownership and accounting conservatism using (Basu, 1997; Ball and Shivakumar, 2005). | - | - | . | They found higher ownership by institutions that likely monitor managers is associated with more conservative financial reporting. |

Table 2.1 (Continued)

| No. | Author/s (year) | Sample | Institutional Ownership | Foreign Ownership | Family Ownership | Managerial ownership | Main Results |
|-----|-------------------------|---|---|---|------------------|--|---|
| 3 | | | Institutional ownership and information asymmetry | Foreign investors and information asymmetry | - | - | They found that equity investors' demand for more conservatism. They showed that the level of information asymmetry among outside and inside investors is positively related to the more conservatism |
| 4 | Shuto and Takada (2010) | 27,485 firm listed in Japanese listed firms from 1991 to 2005 | - | - | - | Managerial ownership earnings asymmetric timeliness using Basu (1997) model. | Managerial ownership has a significant negative relationship to the earnings asymmetric timeliness. -They also found a significant positive association among managerial ownership and the earnings asymmetric timeliness for the intermediate levels of managerial ownership. |

Table 2.1 (Continued)

| No. | Author/s (year) | Sample | Institutional Ownership | Foreign Ownership | Family Ownership | Managerial ownership | Main Results |
|------------|--------------------------|--|--------------------------------|--------------------------|-------------------------|---|--|
| 5 | Wang, Xie and Xin (2011) | 3,135 companies available in Execu Comp database from 2007 to 2009 | - | - | - | Size of shares owned by managers and asymmetric timely Basu (1997) model. | They found significant evidence of less conservative financial reporting at firms where CEOs have accumulated more deferred compensation and pension benefits. They also find that debt holdings by a firm's CFO and its top management team reduce accounting conservatism. |

2.5.2 Board Characteristics

Previous studies provides mounting evidence that the characteristics and functioning of the board of directors is related not only to firm performance, but also to the allocation of power within the company, and how this allocation affects the distribution of rents. In addition, board of directors represents the highest form of internal control to monitor top management including the CEO (Fama & Jensen 1983; Lara *et al.*, 2007; Keasey & Wright 1993). This study examined six important characteristics of the board of directors (i.e. size, independence, CEO duality, financial expertise, tenure and multiple directorships) are among the main characteristics of the board. Jensen (1993) showed that these factors influenced the board's role in monitoring directors. Financial expertise, tenure and multiple directorships are serves as directors' skills. These skills are significant factors because directors with a better understanding of business operations could effectively review the financial reports (Lanfranconi & Robertson, 2002).

Resource dependence theory is one additional theory used in corporate governance research (Pfeffer & Salancik, 1978). The organizations are making a great effort to control their environment by woo the necessary resources needed to survive. The notion of cooptation has significant implications for the board of directors' role and its structure. This study employs the resource dependence theory as part of its contribution because board of directors can be used as a mechanism to form links with Inter-organizational and with the

external environment. Therefore, Directors who are work in prestigious professions can be served as vital source of timely information for executives.

2.5.2.1 Independence

One important mechanism that seeks to decrease agency problems is the employment of independent directors on the firm board. Both empirical and theoretical analyses reported that outside members on the firm board serve a vital role in the disciplining and monitoring of senior managers, and thereby affect firm performance (Ghosh & Sirmans, 2003). They acknowledged that internal directors dominate the board because they can perform better if they are in the ability to control and make decisions. However, they further reported that dominant insiders are less probable to survive in a competitive business because of a poor of separation among decision management and decision control (Lara *et al.*, 2007).

Previous studies such as Pfeffer (1972) and Ellstrand (1999) have used resource dependence theory to examine boards focus on board composition and its size as indicators of the ability of boards to provide important resources to the corporate. Pfeffer (1972) for instance, reported that board size relates to the corporate environmental needs and those with more correlation require a higher proportion of outside directors. Different elements of corporate governance are considered significant resources for the company; this is the premise, which is based upon the resource dependence theory (Psaros 2009). In contrast,

stewardship theory presents that, in the existence of motivated managers who are striving for self-actualization and job satisfaction instead than monetary wage, and thus, the level of pressure on boards within companies to closely monitor the performance of managers will be low. In addition, and according to Barney (1990), Donaldson and Davis (1991) and Psaros (2009) who reported that the concentration of independent directors representation on firms boards and its subcommittees such audit committee is unnecessary and possibly counterproductive where shareholder economic returns are best achieved through enhancing management and having minimum independent representation on boards.

Board of directors plays an important role in the governance of big organizations (Lanfranconi & Robertson, 2002). Boards help control and monitor the behavior of senior directors, thereby protecting the shareholder's interests. Lara *et al.* (2007) and Rodriguez (2010) suggested that the existence of independent directors on the board help to ensure independence of board from the management, as it clearly segregates the control tasks and management. In addition, independent directors can contribute to solving the disagreements between the internal managers or between the residual claimants and internal managers. Thus, boards comprising independent managers will give a counterbalance so that the insider managers do not take advantage of their position and sacrifice the wealth of shareholders. Pfeffer and Salancik (2003) showed that the existence of independent directors on the board would

enhance the flow of data, and hence protect the company resources and decrease uncertainty.

The Jordanian Code of Corporate Governance issued in 2009 has defined the independent members as “a member of the board of directors who is not tied to the company or any of its upper executive management, affiliate companies, or its external auditors. This can be through any financial interests or relationships other than his shareholding in the firm that may be suspected to bring that member benefit, whether financial or incorporeal, or that may affect his/ her decisions or lead to the exploitation of his/ her position with the firm” (JSC, 2009).

Prior studies investigated the independent directors effectiveness on the board have mainly suggested that independent directors have a positive effect in the company (Benkraiem, 2011; Bushman, Piotroski & Smith, 2005; Koh, Laplante & Tong, 2007; Peasnell, Pope & Young, 2005; Vafeas, 2000). As demonstrated that independent directors enhance the board's monitoring function. Independent managers are considered better monitors than other managers because they have the “ability to act with a view of the best interests of the company.” (TSE, 1994, p. 24). Some of the previous studies have examined the relationship between independent directors and the financial reporting quality. These studies report mixed results. Specifically, Bushman *et al.* (2005) and Vafeas (2000) failed to find a significant relationship among earnings

timeliness and the proportion of independent directors in the board, whereas Ferreira, Ferreira and Raposo (2011) found a positive relationship among accounting quality and the earnings informativeness, and proportion of independent directors. Beasley (1996) studied financial reports fraud, and compared board independence between companies where fraud occurred and companies with no fraud. It was found that companies with no fraud have a higher proportion of independent directors.

Previous studies have pointed out that the independent directors are considered more effective monitoring of financial reports. Koh *et al.* (2007) on Australian companies and Benkraiem (2011) on French companies all support the important role of the independent directors in reducing the earnings management. Additionally, Peasnell, Pope and Young (2005) showed that independent directors in UK companies have decreased earnings management and the effect was more pronounced when the companies' pre-managed earnings were below threshold. Al-Zoubi (2012) also found that Jordanian firms with larger proportion of independent directors will be less likely to practice earning management than the one that have executive directors and in turn increase financial report quality. This finding has been supported by Peasnell *et al.* (2000a; 2000b; 2005). In contrast, Abdul-Rahman and Ali (2006) showed that there is no relationship among independent directors and earnings management in Malaysian companies, while Abdullah, Yusof and Nor (2010) did not find any relationship among independent directors and financial

restatements. The evidence suggests that independent directors do not have a direct impact on the financial reports.

Though independent directors will improve the monitoring and controlling efficiency of the board, concentrated ownership are less likely to appoint them to the board. The findings were provided by Dahya, Dimitrov and McConnell (2008; 2009) who examined ownership concentrated companies in 22 countries. They found that independent directors help to improve firm value especially in countries with weak legal of shareholder protection. However, some of the concentrated owners chose an independent board and it was due to the need for outside financing to finance their investments. In Australia, Setia-Atmaja (2009) found that companies with ownership concentrated have fewer independent directors. Empirical studies have also reported that independent directors in companies with concentrated ownership are ineffective in enhancing governance of the company. Klein, Shapiro and Young (2005) showed that independent directors in companies with high concentrated ownership have a significant negative impact on firm value of Canadian listed companies. In New Zealand companies, Ahmed, Hossain and Adams (2006) found no relationship among independent directors and earnings informativeness.

Empirical studies have documented the influence of independent directors on firm value. For example, Rosenstein and Wyatt (1990) and Prabowo and Simpson (2011) found that increase the proportion of independent directors

positively related with the market value of the company. Bhagat and Black (2000; 2001) and Prabowo and Simpson (2011) documented that there is a negative relationship between board independence and wealth of shareholders. Salleh, Stewart and Manson (2006) reported that independent directors promote and enhance other governance mechanisms. Abdullah (2006a) failed to find any relationship between independent directors and financial distress status. He also suggested that one contribution to the financial crisis in Asian was the weak corporate governance related with ineffective independent directors.

Many empirical studies have examined the relationship between independence of directors and firm performance. For example, Ritchie (2007) examined the influence of independent directors on corporate governance in U.S, Australia and Europe. He found that independent directors help enhance corporate governance. He supported the idea that outsiders are not beneficial for the firm and supports the hypothesis that there is an indirect relationship among independent directors and firm performance. Abdullah (2004) examined the relationship between independent directors and firm performance in Malaysian listed companies. He found that independent directors have no influence on firm performance. This evidence is consistent in suggesting that one contribution to the Asian financial crisis was the weak corporate governance related with ineffective independent directors. (Central Bank of Jordanian CJB, 2010).

The Policy of Amman Stock Exchange stated that board of directors of Jordanian listed firms must include the independent members to assure the availability of objective decisions. Those independent members contribute in ensuring the balancing of the influences of all the parties, including the principal shareholders and the executive management, to making sure that the decisions taken are consistent with firm interest (ASE, 2009; CJB, 2010). Moreover, Gompers, Ishii and Metrick (2003) provided evidence of a positive relationship among corporate governance and company performance, and such relationship may contribute in the agency explanations.

Ahmed and Duellman (2007) documented that the percentage of inside directors is negatively associated to conservatism, and the percentage of outside directors' shareholdings is positively associated to conservatism in U.S. companies. A Spanish study carried out by Lara *et al.* (2007) also associated conservatism with the board of directors but they used an aggregate index to measure the strength of the board. The study reported that weak boards captured the good news faster than the stronger board. Strong boards, conversely, incorporated bad news into earnings faster. The evidence indicates that independent directors employ further conservatism to help them in monitoring the management. Beekes *et al.* (2004) examined the role of board composition in conservatism in UK companies. Specifically, they examined whether different compositions of the board give rise to different levels of conservatism. Their results indicate that companies with a higher rate of non-

executive directors are more probably to recognize bad news in a timelier fashion.

Overall, the findings from the above mentioned studies imply that independent directors play a significant role in governance. However, in order to improve the effectively the governance, these independent directors must be sufficiently independent in practice in order to be able to reduce the expropriation activities of the majority shareholders from the minority shareholders. In Jordan, Sharar (2007) has recommended that the Jordanian restriction requiring directors to own a certain number of shares to engage for board membership should be removed. This step would encourage the independent technical and professional expertise on boards rather than the current situation of boards of directors being dominated by the controlling family in Jordan.

2.5.2.2 Board Size

There are mixed views about the influence of board size. Agoraki, Delis and Staikouras (2010) reported that larger size of boards is less effective than smaller size of boards due to difficulties in coordination of task. In Jordan, the Code of Corporate Governance (2009) has defined number of board members, should be at least five to thirteen (JSC, 2009). Hermalin and Weisbach (2003) reported that companies should not appoint so many directors to the board and they suggested a maximum of seven or eight directors. According to Lasfer (2004), directors on a large board are less likely to criticize the policies of top

management, hence are subject to the control of CEO. Further, large board tends to employ less meaningful discussion since too many directors attended in the discussion, making it need more time and effort to achieve cohesiveness. Further, a large board is less effective due to the slowdown in decision making, is more averse to the risk and produces a free rider problem i.e. one member will depend on other members to monitor management. However, too many people within the same location cannot work together effectively. Supporting Hermalin and Weisbach (2003) Bhagat and Black (2000), showed that large boards are less involved in strategic decision-making. Forbes and Milliken (1999) reported that a large board led to coordination problems.

Empirical studies have examined the relationship between size of board and firm performance. For example, Topak (2011) examined the relationship among the board size and the financial performance of the Turkish companies. Contrary to the results of previous studies presented in such relationship. He found that there is no relationship between the size of board and the firm performance for Turkish companies. Chang (2009) showed that large board size in Taiwanese firms led to increase the financial distress in firm. This result was confirmed through Hermalin and Weisbach (2003) who found that if members of board exceeded eight, the board becomes ineffective.

Previous studies showed that large board size was related with low firm performance (Cheng, 2009; Guest, 2009; Mak & Li, 2001), low earnings

informativeness (Ahmed *et al.*, 2006) and high earnings management (Abdul-Rahman & Ali, 2006). Agoraki *et al.* (2010) examined the effect of board size and composition on the European bank efficiency. They found that board size negatively affects banks' cost and profit efficiency. Vafeas (2000) found that a small size of board led to higher returns-earnings suggesting that fewer board members are better informed on the company's earnings. Larmou and Vafeas (2010) found that for a significantly small board, adding more directors will increase the share return but when the size of board reached a certain limit, adding more directors would decrease performance. Nevertheless, Bonn, Yoshikawa and Phan (2004) examined companies in Australia and Japan. They found no relationship among board size and performance for Australian companies, but an inverse relation for Japanese companies. Haddad *et al.* (2011) found that board size has significant relationships with operating performance of Jordanian listed companies.

On the other hand, Dalton and Dalton (2005) suggested that a large size of board provides a wider range of expertise and knowledge, but Jensen (1993) showed that the problems of coordination in large board size may outweigh the benefit. In addition, Dalton and Dalton (2005) showed that fewer members on the board of directors occupied themselves with decision-making, and then become less effective in controlling and monitoring the management. These findings are partly supported by Akhtaruddin, Hossain and Yao (2009) through their results that found a positive relationship between size of board and voluntary

disclosure, despite the positive impact as a result to more independent directors on the board. Pietra, Grambovas, Raonic and Riccaboni (2008) found that a large board size decreased firm value only in small and medium companies, but not significantly in large companies. Based on the complexity of the company's business, Coles, Daniel and Naveen (2008) found that many members on the board was beneficial to complex companies because they have greater advisory needs, higher financial leverage, and a larger degree of diversification. Makoto and Pascal (2012) found that companies with large boards exhibit lower performance volatility as well as lower risk of bankruptcy for Japanese firm.

The board size-earning management relationship has been examined in empirical studies. Specifically, Kao and Chen (2004) and Abdul-Rahman and Ali (2006) revealed that the relationship between board size and earning management's empirical indicator is significant positive, while Xie *et al.* (2003) revealed a negative association among the two variables. These inconsistent findings may be attributed to the different types of earning management employed or the different markets and corporate governance practices. Earning management was also found to be not existence in firms with larger boards. According to Al-Zoubi (2012) who found that the relationship between board size and earning management is negative among listed companies in Jordan, while Yu (2008) reported that the boards with small size are more susceptible to failure in detecting earning management. These results mean that small size of boards may be impacted by firm management or block-holders while big size of boards are more able to monitor actions of top management. In a related study,

when Ahmed and Duellman (2007) examined the board size-accounting conservatism relationship via asymmetric timeliness, they revealed that board size effects are not related to the earnings asymmetric timeliness.

In summary, large board size provides a better exchange of knowledge and skill but there is more risk that many members will create free rider problems and will be unable to coordinate well. Therefore, these mixed results of the influence of board size on accounting conservatism encouraged the researcher to conduct such study.

2.5.2.3 CEO Duality

CEO duality indicates the leadership structure where a firm's CEO also acts as chairman of the board (Coombes & Wong, 2004). The CEO and the chair of the board positions should be held by one person or by different persons. According to the agency theory, the combined functions can significantly hamper the boards' most important function of controlling and monitoring, compensating and disciplining senior managers. It also enables the CEO to engage in the opportunistic behavior because of his dominance over the board (Barako, Hancock & Izan, 2006). Two competing theories that interpret the consequences of this structure are stewardship theory and agency theory.

The stewardship theory considers duality roles to improve leadership, as there is no information breakdown among the CEO and the board. Agency theory argues that the chairman and CEO roles should be separated since the

responsibilities of board are to monitor and control the management including the CEO (Yunos, 2011). Leadership structure adopted in U.S. and UK provides an example of adopting these views of conflicting (Coombes & Wong, 2004). There are no recommendations on the structure of leadership for the U.S. companies but they need to present justification for their selection. However, UK follows the separate structure based on that the duties of CEO and chairman are different, thus split the functions are decisive for board independence. Those who have two functions believe that CEO acting as chairman is mostly useful in terms of communication, as it facilitates decision-making.

Agency theory suggests that the separation of duties may lead to an effective monitoring over the board process. Thus, CEO duality will harm the supervisory role of the board. CEO duality suggests that less control is likely to exercise on activities of management and their behavior (Meca & Ballesta, 2009). Jensen (1993) showed that CEO could not become the chairman of the board of directors due to the chairman need to independently run the meetings of board, evaluating, firing and compensating the CEO and oversee the process of hiring. Brickley, Coles and Jarrell (1997) support the stewardship theory by showing that the dual role may harm incomplete communication between the chairman and CEO, thus decrease inconsistencies in decision making and internal conflicts. Furthermore, the knowledge of CEO about the business allows optimal and timely decisions, resulting in better performance of the firm.

Similarly, Klein (1998) stated that inside directors possess more expertise and knowledge about company's activities, which outside directors might lack. The dual role allows the chairman-CEO to utilize the data and enhance the effectiveness of the board. Daily and Dalton (1997) stated that the joint leadership shows a positive signal that the companies have a strong leadership and it is considered as a more reasonable and efficient form of governance. It was proposed that the joint leadership gives a positive signal that the companies have a strong leadership and is considered as a more effective and reasonable style of governance. Nevertheless, financial communities and practitioners prefer the separate structure as it acts as a monitoring mechanism. Farooque, Zija, Dunstan and Karim (2007) showed positive influence of CEO duality on the financial performance of Bangladesh companies, and hence showed that owner-specific attributes such as entrepreneurial skill may enhance the firm value. Dahya, Garcia and Bommel (2009) found that there was no difference in firm performance whether the companies split or combine the CEO-chairman.

Other studies showed that the structure of leadership depend on other factors. Despite the complementing results on the split of chairman-CEO roles, the results of Abdullah (2004, 2006a), Ahmed and Duellman (2007) and Chang (2009) do not support stewardship theory or agency theory as CEO duality was not related with company performance and accounting conservatism. Kim (2013) found that CEO duality associated with superior corporate performance when the firm's task environment is attributed by business diversification. However, board tenure, institutional ownership concentration, and board tenure

heterogeneity have negative moderating influences on the relationship among CEO duality and firm performance.

Cornett, Marcus and Tehranian (2008) showed that the combined structure does not effect on the earnings management of U.S. listed companies. Davidson, Jiraporn, Kim and Nemec (2004) showed a positive association among the dual leadership and earning management. Saleh *et al.* (2005) examined the effectiveness of board characteristics in terms of limiting earnings management in Malaysia. They found that the CEO-Chairman duality is correlated positively with earnings management. Roodposhti and Chashmi (2011) showed a positive significant relationship among the CEO-Chairman duality and earnings management. Ghosh *et al.* (2010) showed that the separation of CEO-Chairman positions is negatively associated with earnings management. Gulzar and Wang (2011) also showed a positive relationship among CEO duality and earnings management. In contrast, Johari, Saleh, Jaffar and Hassan (2008) found no association among CEO duality and practice of earnings management in Malaysia. Similarly, Wenyao and Qin (2008) reported that the separation of CEO-chairman does not improve monitoring of earnings management. Meca and Ballesta (2009) also reported no association between the CEO-Chairman duality and enhancing probability of earnings management. Bowen, Burgstahler and Daley (1986) found that the separation of roles among chairman and CEO was significant in limiting activities of earning management. They discovered that earnings smoothing activities were higher between CEO duality

companies. Abdulrahman and Haniffa (2005) also found also that firms with CEO duality did not perform tend to practice earning management.

Similarly, Sarikhani and Ebrahimi (2011) found no relationship among the structure of board leadership and earnings informativeness. For example, Faleye (2007) showed that CEO duality was beneficial to companies with a complex business; and might not affect the interest of shareholders if the CEO is a reputable person as the CEO might controls his behavior to protect the reputation. Lam and Lee (2008) showed that the joint structure beneficial to the non-family firms whilst the separate structure beneficial to the family firms. The board of the family companies was more likely to be dominated by the insiders' directors; therefore, chairman should be independent from the management to avoid conflict of interest. Ramdani and Witteloostuijn (2010) provided a cross-country analysis on Indonesia, South Korea, Malaysia and Thailand and tested the influence of CEO duality on the different levels of performance. Their results showed that duality of CEO was useful for average performing companies but not significant for low performing companies and top performing companies.

In Spanish listed firms, Lara *et al.* (2007) found that firms where the CEO has a low impact over the functioning of the board show a higher level of accounting conservatism. In the U.S., Ahmed and Duellman (2007) found that there is no relationship between separation of CEO/chairman and accounting conservatism in all specifications. In Malaysia, Yunos (2011) found that conservatism

practices in Malaysian companies were not determined by the CEO and/or chairman leadership structure. This is because empirical evidences on the CEO duality effect are indeed mixed.

2.5.2.4 Financial Expertise

Director experience is considered one of the most important skills of board members (Corbetta & Salvato, 2004; Knyazeva, Knyazeva & Raheja, 2013). Empirical previous studies showed that director expertise might affect the ability of board to monitor management and the company effectively (Anderson, Mansi & Reeb, 2004; Beasley, 1996; Monks & Minow, 1995). Enron and WorldCom collapse were due to the lack of financial knowledge by their board members (Lanfranconi & Robertson, 2002). Therefore, to censorship the financial reporting process, the managers must have accounting knowledge in order to provide quality financial reporting either to limit manipulation or to make financial information more transparent. In the Enron and WorldCom case, the members of board had no knowledge or expertise of basic accounting principles, as they were not aware of expenditure being capitalized rather than expensed. Hence, in both cases, one could ask how effective the managers were in carrying out their work (Lanfranconi & Robertson, 2002).

Previous studies reported that financial expertise is an important determinant of financial report quality. The results of Agrawal and Chadha (2005) on U.S.

companies highlighted the importance of accounting expertise and knowledge between the outside directors. The result implies that outside directors are effective in decreasing the probability of financial restatements only if they have financial expertise. Sarkar, Sarkar and Sen (2008) and Yunos *et al.* (2011) found that financial expertise are attributes of strong governance, hence will lead to employ more conservatism in financial report to assist in their oversight role of the financial reporting process. Guner, Malmendier and Tate (2008) investigated several kinds of financial expertise including financial executives, bank executives and finance professors. The study found that bank executives acting as directors on the board benefit the creditors but not to the shareholders. However, the results confirmed that this type of financial expertise encourage better governance as it led to less value-destroying acquisition.

Xie *et al.* (2003) showed that the board of directors with corporate or investment-banking backgrounds adversely related to the level of earning management. This suggests that the independent directors with financial and corporate backgrounds are critical to determine earning management. Additionally, Park and Shin (2004) found that the presence of officers from the financial intermediaries in the board of director could reduce abnormal accruals as the unmanaged earnings are below the target. They showed also that experienced outside board directors are able to understand the company and its staff better and consequently enhance their governance competencies.

Very few studies addressed the financial expertise on the board as they focused more on the financial expertise to the members of audit committee (Yunos *et al.*, 2011). However, Volpe and Woodlock (2008) noted that many boards have been charged to review the key issues on financial statements presentation and accounting principles. Hence, the knowledge on financial and accounting aspects is of the utmost importance. Gul and Leung (2004) found that an increased controlling by experienced outside directors results in a lower level of voluntary disclosure. Guner *et al.* (2008) showed that an increasing financial expertise on the board members may not benefit shareholders if conflicting interests (e.g., bank profits) are neglected. Al-Zoubi (2012) found that the financial expertise of the board of directors negatively related to earning management among Jordanian listed companies.

Overall, the empirical evidence showed that directors must have financial knowledge and expertise. Otherwise, it may impair their ability to control and monitor the management, and hence is unable to find irregularities in the financial reports.

2.5.2.5 Tenure

Directors, who served on the company's board for a longer duration, would have greater understanding about the companies' businesses and ultimately become more competent (Vafeas, 2003). In Jordanian companies, the board of directors shall manage the firm for the period specified in the firm's

memorandum of association, provided that this period should not be less than three years and not more than four years starting on the election date (JSC, 2009). The empirical literature is replete with references on the importance of the board of directors in maintaining active monitoring over management. However, previous evidence on the value-relevance of directors tenure has not been uniform; some of these studies found that directors with longer tenure assist to protect the interests of shareholder by being independent of the influence of the administration (e.g., Brickley, Coles & Terry, 1994; Byrd & Hickman, 1992; Cotter, Shivdasani & Zenner, 1997; Vafeas, 2003), while, other studies found an adverse effect for board tenure (e.g. Agrawal & Knoeber, 1996; Bhagat & Black, 2001; Vafeas & Theodorou, 1998).

Anderson and Bizjak (2003) showed that longer tenure of the board members associated with more experience, competence and commitment, because it provides a director with important expertise and knowledge about the company and its business environment. Ness, Miesing and Kang (2010) found that director with longer tenure have a positive influence on return on asset and firm growth. Peasnell *et al.* (2005) examined UK companies and showed that outside directors with longer tenure decreased earnings management, implying that managers are more competent to limit earnings manipulation. Rutherford and Buchholtz (2007) found that longer tenure decreased asymmetric information within the companies as it led to frequent information exchange with the other committees in the companies. However, it did not determine the information

quality gathered by the board, and did not lead to more proactive information seeking. Peasnell *et al.* (2005) examined UK companies and showed that outside directors with longer tenure decreased earnings management, implying that managers are more competent to limit earnings manipulation. They also found that the board tenure of outside directors significantly influence the likelihood of financial reports fraud. Rutherford and Buchholtz (2007) found that longer tenure decreased asymmetric information within the companies as it led to frequent information exchange with the other committees in the companies.

The empirical evidences on board tenure are mixed. Beasley (1996) showed that longer tenure of directors on the board are more likely to have a close relationship with top management and suggested that new directors on the board are more likely to be vigilant and independent. However, it did not determine the information quality gathered by the board, and did not lead to more proactive information seeking. The results of Chang (2009) suggested that board tenure was not an important factor to financial distressed status of the Taiwanese companies, though majority members of the non-financial distress companies' board were senior directors relative to those in the financial distressed companies. Yunos (2011) found that longer tenure of directors was faster in recognizing good news. The study also found that longer tenure did not significantly impact asymmetric timeliness, but that it reduced conservatism. This result implies that independent directors who stayed on the board of firm for too long did not improve their ability to monitor.

2.5.2.6 Multiple Directorships

Previous literature provides an advice to the importance of limit the number of directorships due to the workloads they entail. Nevertheless, there is lack of empirical evidence to support this view. Rather, there is a prevalent view of supporting multiple directorships as a one of the companies' mechanisms to co-opt external resources (Kiel & Nicholson, 2006). Fama and Jensen (1983) showed that outside directors develop reputational influences that reflect on them as an expert in controlling decisions. The value of the outside directors mainly depends on their performance as internal directors in other firms. Accordingly, they signal to the market that they are expert in controlling decisions, aware of the importance of separate control of decision and are competent of working in the system of control decision.

Lipton and Lorsch (1992), however, showed that multiple directorships could negatively affect the directors capable to control and monitor the management as they are exhausted and distracted by the affairs of other organizations. The results of Ferris, Jagannathan and Pritchard (2003) are inconsistent with the busyness hypothesis as provided by Lipton and Lorsch (1992). They argued that busyness hypothesis implies that managers with multiple directorships are busy to participate in other committees and attended too many committee meetings. Their results are consistent with the reputational effect as provided by Fama and Jensen (1983), since the companies' abnormal returns increased subsequent to the companies' announcement of the appointment more directorships. In Fich and Shivdasani's study (2006), companies where the

directors' work at three or more directorships experienced less market to book ratios as compared to companies those directors who work at fewer directorships. Perry and Peyer (2005) investigated the announcement influence of outside director appointments for sending companies. They found that when executives joined other boards as outside directors, the announcement return for the sending company is positive when the executive has high stock ownership or the company has an independent board.

Further, it was argued that multiple directorships improve information sharing on legal actions against other firms, thus avoid the same pitfall and litigation. However, Schnake, Fredenberger and Williams (2005) showed that multiple directorships associated with an increased number of legal investigations brought against the companies. The study argued that financial informational advantage gained from other companies might be lost due to lesser amounts of time spent in the companies. Saleh, Iskandar and Rahmat (2005) found that multiple directorships were effective in decreasing earnings management only in companies with adverse unmanaged earnings. The study showed that directors in loss making companies are more likely to be replaced than those of the profit making companies and the result could have been driven by the motivation to secure their staff rather than reflecting their competency. Other prior empirical studies are inconsistent multiple directorships were evidenced by high earnings management (Sarkar *et al.*, 2008), low market performance

(Haniffa & Hudaib, 2006), and low accounting conservatism (Ahmed & Duellman, 2007).

Jaafar and El-Shawa (2009) showed that multiple directorships and board size each have a positive and significant effect on Jordanian firm performance. This result supports the resource dependence hypothesis that companies benefit from appointing directors with cross directorships and from having a large board, through the expertise and knowledge of board members, and the opportunities they can provide for establishing networks with other companies and the external environment.

Table 2.2 presents a brief summarized overview of prominent studies examining the influence of board characteristics on accounting conservatism.

Table 2.2

Summary of Major Previous Studies that Examining Board Characteristics and Accounting Conservatism

| No. | Author/s (year) | Sample | Board of Directors Characteristics | | | | Main results |
|-----|---------------------------|---|-------------------------------------|---|----------------------------------|------------------------------------|--|
| | | | Board Independence | Board Size | CEO Duality | Board Skills (BFI, BTEN and BMULT) | |
| 1 | Ahmed and Duellman (2007) | 306 U.S. firms during the period of 1999 to 2001. | Independence of board of directors. | Board size and accounting conservatism. | CEO and accounting conservatism. | - | <p>-The proportion of inside directors is negatively associated to conservatism, and the proportion of outside directors' shareholdings is positively associated to conservatism.</p> <p>- They also found that conservatism assisting directors in decreasing agency costs.</p> <p>- The effects board size is unrelated to the asymmetric timeliness of earnings.</p> <p>- They also found that there is no relationship between separation of CEO/chair and conservatism in all specifications.</p> |

Table 2.2 (Continued)

| No. | Author/s (year) | Sample | Board Independence | Board Size | CEO Duality | Board Skills (BFI, BTEN and BMULT) | Main results |
|-----|--------------------------------------|---|---|-------------|--------------|--|--|
| 2 | Beekes, Pope, and Young (2004) | 508 UK non- financial firms from 1993 to 1995. | The composition of the board of directors. | - | - | - | <ul style="list-style-type: none"> - Their results indicate that companies with a higher rate of non-executive directors are more probably to recognize bad news in a timelier fashion. - These findings suggest that board composition is an important factor in determining the quality of reported earnings of firms |
| 3 | Yunos (2011) | Malaysian listed firms from 2001 to 2007. | - | Board size. | Eco duality. | Board Tenure, financial expertise and multiple directorships. | <ul style="list-style-type: none"> - She found that longer tenure of directors was faster in recognizing good news. - She found also that longer tenure did not impact asymmetric timeliness. - A significant relationship between financial expertise and asymmetric timeliness signifies the importance of accounting knowledge for directors. - Multiple directorships have no significant influence on conservatism. |

Table 2.2 (Continued)

| No | Author/s (year) | Sample | Board of Directors Characteristics | | | | Main results |
|----|--|-----------------------------|------------------------------------|------------|-------------|--|---|
| | | | Board Independence | Board Size | CEO Duality | Board Skills (BFIX, BTEN and BMULT) | |
| 4 | Rutherford and Buchholtz (2007) | 149 U.S. listed firms | - | - | - | Board tenure and asymmetric information | - Found that longer tenure decreased asymmetric information within the companies as it led to frequent information exchange with the other committees in the companies. |

2.5.3 Audit Committee

There is no consensus on the definition of audit committee effectiveness. However, audit committee effectiveness is considered as the indication to judge whether an audit committee add credibility to the financial data reported by a company (Abbott & Parker, 2000; Bedard *et al.*, 2004; Klein, 2002a). Previous literatures have determined three regulatory responsibilities of audit committee (e.g., monitoring the external audit function, ensuring the impartiality of the financial reports and scrutinizing the process of internal audit), then the audit committee will be viewed as effective (DeZoort, Hermanson & Archambeault, 2002; Vera-Munoz 2005).

Xie *et al.* (2003) found that the effectiveness of audit committee occurs when the committee is well functioned, active and good structured. They also showed that if large percentage of the audit committee is composed of outside members with financial and corporate backgrounds and independent, it is expected that the audit committee will be more effective. Klein (2002b) showed that audit committee to be effective must be independent of management and thus, more able to monitor and control the earnings process of a company. Lennox and Park (2007) showed that the functions of audit committee would be more effective if members of the committee were independent of management.

Previous studies have discussed that audit committees effectiveness are more likely to enhance earnings quality (Karamanou & Vafeas, 2005; Klein, 2002a, 2002b; Lennox & Park, 2007; Stewart & Munro, 2007; Turley & Zaman, 2007;

Xie *et al.*, 2003; Vafeas, 2005). Precisely and Klein (2002b) showed that the effectiveness of audit committees are more likely to limit the opportunistic behavior of managers that might influence earnings quality directly, and thus overcome aggressive accounting policy choices used by firm management that could enhance less result of conservative earnings. Finally, audit committee with more effective in its function of adjudication, it may provide more systematic compromises among internal and external parties like the firm management and the external auditor (DeZoort, 1998; De Zoort & Salterio, 2001). Therefore, enhanced conflicts decision will lead to the promotion of the acceptance of earnings conservatism practices, where audit committee effectiveness captures overstatements in fulfilling its supervision responsibilities. Because of the audit committee role in improving the financial reports quality, it is predicted that audit committee effectiveness will entail conservative practices.

There is very limited empirical research that addresses the association between the audit committee effectiveness and accounting conservatism (Nimer *et al.*, 2012). However, previous studies provide evidence of the relationship between audit committees effectiveness and quality of earnings, thereby suggesting the likelihood of an audit committee/accounting conservatism linkage (Beasley & Salterio, 2001; Bryan, Liu & Tiras, 2004; DeFond, Hann & Hu, 2005; DeZoort *et al.*, 2002; Klein, 2002a). Audit committee is considered the subcommittee of the board of directors. The audit committee plays an important role in assisting the board to fulfill boards of corporate governance and other responsibilities in

other areas. Rezaee (2003) showed that a vigilant audit committee ensures that probability of fraud on financial reports has decreased. In Jordan, the Code of Corporate Governance for shareholding companies listed on the ASE has identified the duties of the audit committee that holds the task of monitoring and overseeing accounting and auditing activities in the firm (ASE, 2009). For example, an audit committee meets separately with auditors and senior financial managers to review the company's financial reports, internal controls and audit processes and selects the external auditor. Gay and Simnett (2007) defined an audit committee as a committee of directors responsible for liaising with the internal and external audit functions and overseeing external financial reporting. The audit committee performs many of the main functions; while the main responsibility of an audit committee is to oversee the process of financial reporting (Klein, 2002a).

Audit committees are also considered as a key institution in the context of corporate governance because they help the boards to fulfill their fiduciary and financial responsibilities to shareholders. Through the audit committees, directors create a direct line of communication among themselves and external, internal auditors (Abdullatif, 2010). The need of the audit committee was seen as ensuring the accuracy of financial reports (Buchalter & Yokomoto, 2003).

The recent numerous firm collapses drove investors, regulators and scholars to realize that audit committee is the topmost significant element of the corporate governance structure of the firm and since then, there has been an increased

attention shifted towards the firms' audit committees as the entity that is responsible for improving reported earnings quality (Abdullatif, 2010). The audit committees development in the U.K., Canada, Australia, Malaysia among other countries have stressed the role of audit committee in ensuring high quality and firm financial reporting that is reliable.

Audit committee did not receive much attention by researchers and regulators, despite the important role of audit committees in various fields (Collier & Gregory, 2000; Abdullatif, 2010). The collapse of the largest firm, Enron Corporation, in the U.S. history in 2001 urged superior firm accountability from investors and regulators alike. Consequently, the U.S. Congress established a new legislation known as the Sarbanes-Oxley Act that mandates all public companies to set up audit committees. The Act also stipulates the audit committees responsibilities and composition (Congress of the United States of America, 2002). Shortly after, other nations like Canada, the U.K. and Australia also acknowledged the audit committee's oversight responsibilities in similar terms as stipulated in SOX¹. The established regulatory bodies in the above countries are the LSE, the Toronto Stock Exchange, British Financial Reporting Council, Canadian Securities Administrators and the ASX.

In Jordan, establishing audit committees became mandatory by the Jordanian government in 1998 for firms filing with the Jordan Securities Commission, in

¹The established regulatory bodies in the above countries are the LSE, the British Financial Reporting Council, the Toronto Stock Exchange, Canadian Securities Administrators and the ASX.

an attempt to enhance corporate governance in Jordan. This was partly due to some local firm failures such as Shamayleh Gate, in order to improve the level of foreign investment, thus enhances its involvement in international trade (ASE, 2009; Abdullatif, 2010).

In Jordan, Nimer *et al.* (2012) found that the performance of the audit committees in Jordanian listed firms seem to be poor and ineffective due to the constraints on audit committees' members' work and also the weak independency of their members as their results have shown. They also showed that most of the audit committees' members have close relationships with the board of directors and the top management of the firms. Their findings were not surprising due to ownership structure in Jordanian firms is the family business which provides additional evidence to these findings. Accordingly, it is clear that Jordanian companies pay their attention to the legal viewpoints such as the audit committees' procedures, structures, and instructions neglecting the substance of these committees' work, which is controlling and monitoring the management performance to protect investors' equity especially small investors. This task would never be accomplished as long as the audit committee's members were not completely independents. (Al -Sa'eed, 2011; Nimer *et al.*, 2012).

Previous studies related to the audit committee effectiveness have focused on some of the audit committee characteristics and its impact on the accounting conservatism (Abbott & Parker. 2000; Sultana, 2012; Vafeas, 2005). For

example, the empirical findings indicate that audit committees comprised by entirely or majorities of independent directors are successful in enhancing the quality of reported earnings (Abbott, Peters & Raghunandan, 2003b; Klein, 2002a; Vafeas, 2005). Previous evidences also showed that audit committees included by entirely or majorities of independent directors help to improve the external audit function (Abbott & Parker, 2000; Abbott, Parker, Peters & Rama, 2007; Carcello & Neal, 2000) and improve the practices of corporate governance within companies (Beasley & Salterio, 2001; Chen & Zhou, 2007; Klein, 2002a).

Lim (2011) showed no relationship between independence of audit committee and accounting conservatism. Davidson *et al.* (2005) observed a negative relationship among audit committees comprised of majority of non-executive directors and earnings management. However, Sultana (2012) examined the relationship between audit committee effectiveness and conservatism of Australian publicly listed companies for the period 2004 to 2008. She found that there is no significant relationship between conservatism and the independence of the audit committee. Krishnan and Visvanathan (2008) found that independence of audit committee did not influence accounting conservatism for U.S. companies.

The following table (Table 2.3) illustrates the major previous studies that linked between audit committee and accounting conservatism.

Table 2.3

Summary of Major Previous Studies that Examining Audit Committee Effectiveness and Accounting Conservatism

| No. | Author/s (year) | Sample | Audit Committee | Main Results |
|------------|----------------------------|--|--|---|
| 1 | Lim (2011) | Australian firms' financial reporting | Audit committee independence and conservatism | Showed that there is no relation between independence of audit committee and accounting conservatism. |
| 2 | Sultana (2012) | 494 firm from Australian publicly listed firms from 2004 to 2008 | Audit committee effectiveness (independence, expertise, experience and diligence) and conservatism measured by Basu (1997) model and accrual-based loss recognition model (Ball and Shivakumar 2005) | <p>Found that there is no significant relation between conservatism and the independence of the audit committee.</p> <p>Found also that audit committee effectiveness is a likely determinant of the asymmetrical timeliness of loss recognition.</p> <p>Reported a statistically significant association between earnings conservatism and presence of an outside director on the audit committee with prior corporate governance experience.</p> <p>Found a statistically significant association between earnings conservatism and the sub-committee's diligence.</p> <p>Showed that at least one director with financial expertise in audit committee are more likely to recognize losses in a timely manner.</p> |

Table 2.3 (Continued)

| No. | Author/s (year) | Sample | Audit Committee | Main Results |
|-----|---------------------------------------|--|--|--|
| 3 | Krishnan and Visvanathan (2008) | 929 U.S. firms from 2000 to 2002. | The Independence of audit committee and conservatism and accounting and financial expertise | -Found that independence of audit committee did not influence accounting conservatism. - They found that accounting financial expertise has a significant positive relationship with a book- to-market ratio of conservatism. -The findings suggested also that accounting financial expertise has a broader influence on financial reporting beyond accounting conservatism. |
| 4 | Lisic, Neal and Zhang (2011) | 1,916 firm during fiscal years 2004 to 2005 | Financial expertise and earning quality. | -They conclude that the financial expertise effectiveness on the audit committees in improving the quality of earnings is in fact contingent on the power of CEO. |
| 5 | McMullen and Raghunandan (1996) | 51 U.S. firm during 1986 to 1989 | Outside directors in audit committee, financial expertise and number of audit committee meeting and earning quality. | -They conclude that firms with audit committees which are comprised solely of outside directors and meet at least three or four times a year and have at least one financial expert have less financial reporting problems. |

Table 2.3 (Continued)

| No. | Author/s (year) | Sample | Audit Committee | Main results |
|-----|--------------------------|---|---|--|
| 6 | Piot and Janin (2007) | 120 Index companies listed in French stock market from 1999- 2001 | Audit committee existence and earnings management | <p>-They found that the presence of an audit committee (but not the committee's independence) curbs upward earnings management.</p> <p>-They found also that the audit committee acts as a device to control the more egregious (i.e. income-increasing) forms of earnings management,</p> <p>-Audit committees are associated with a greater conservatism of reported earnings.</p> |

2.5.4 Auditor Quality

Previous studies reported that auditor quality depends on the relevance of the auditor's report in investigating in the contractual relations and reporting on violations (Krishnan, 2003; Rusmin, 2010). Bartov, Gul and Tsui (2000) suggested that higher quality auditors prefer to report irregularities and errors and are unwilling to accept questionable accounting policies. Therefore, it is reported that auditors with high quality are expected to be more able to detect the practice of earnings management (Rusmin, 2010). It is argued also that the practice of earnings management erodes confidence of investors in the quality of financial reporting (Jackson & Pitman, 2001). On the other hand, previous studies also raised concerns about information asymmetry and agency costs problems due to the separation of ownership and control (Berle & Means, 1932). Many researchers (e.g. Bonazzi *et al.*, 2007; Mustapha & Ahmad, 2011) working under the framework of agency theory have sought to focus the main monitoring mechanisms that are considered as a key to ensure greater compatibility of the interests of shareholders (the owner) and firm management (the agent).

It is generally recognized that the external auditor is considered one of the chief corporate governance mechanisms in order to ensure great principal/agent compatibility of interests through providing external verification of the reliability of the company's financial reports (Ferguson, Francis & Stokes, 2003). Whilst it is clear interests of shareholders to involve an external auditor, it is also argued by agency theorists that it is in the interests of firm

management. For example, Firth (1997) argued that firm management's abilities will be hampered without the engagement of an external auditor because a weak external audit will likely increase the capital cost, impose harsh restrictions on management's actions and restrict access to capital. External auditors also play an important role in influencing disclosure practices and policies at both the regulators level and the level of company (Apostolou & Nanopoulos, 2009).

The value and role of external auditor has become strongly rooted in the main legislative statutes of the majority of countries worldwide. In the U.S., the need for an external auditor becomes mandated in the U.S. Securities Act. Whilst the significant role of the external auditor is widely embedded of legislative statutes, Imhoff (2003) amongst others reported that during the past decades what creditors and investors do observe all too often lately are instances where it appears that the audit committees and/or the auditor were not effective. These are the cases of misstatements or material errors, material omissions and fraud (non-compliance with mandatory disclosure). These views, such as that of Imhoff (2003) focus a growing recognition that the external auditor quality is a pivotal feature in determining the gross value of the audit function. In Jordan, the need for an external audit becomes very necessary in firms according to the JSC Act. The Code of Corporate Governance (2009) also has highlighted on the role of external auditor in ensuring the quality and reliability of financial reports. This code also explained that it is necessary to discuss matters related to the work of the external auditor, observations, and reservations, pursuing the

level of responsiveness of the firm's management to them, and submitting recommendations to the board of directors accordingly.

Auditor quality has been one of the most significant issues influencing the auditing profession (Vanstraelen, 2000). In addition, it is also an attribute and service highly valued by equity market participants (Franz, Crawford & Johnson, 1998). It is perceived that auditor with high quality decrease the uncertainty related with financial reports in the views of other contracting parties not engaged in the preparation of such reports (Wallace, 2004). In addition, auditor quality is more likely to decrease the contractual costs and increases the level of audit quality (Vanstraelen, 2000).

Despite a set of definitions, these definitions have become generally accepted and are widely recognized as the seminal determination encapsulating auditor quality (DeAngelo, 1981a, 1981b; Greco, 2011). Bartov *et al.* (2000) suggested that auditor quality implies that the probability of auditors to report irregularities and errors and they are unwilling to accept questionable accounting policies that may harm the contract among firm management and investors. Therefore, it is reported that auditors with high quality are expected to be more able to detect the practice of earnings management.

There are two main factors related to the auditor quality that have gained significant attention in the literature, and that are relevant to this study; (i) auditor independence and (ii) auditor brand name. Details in the following sub-

sections describe the previous literatures related to the two mentioned factors and relevant influence on the earning quality.

2.5.4.1 Independence

Auditor independence considered as a cornerstone of the audit function and it has length history in the literature (e.g. Basoudis, Geiger, De Lange & Adams, 2012; DeFond, Wong & Li, 1999; Mautz & Sharaf, 1961; Simunic, 1984; Zhang, Zhou & Zhou, 2007). Many recent audit failures have been attributed to the weakness of auditor independence (e.g, Ernst & Young vs. PeopleSoft 2003). Academician and regulators have gone through many studies designed in order to restore investor confidence, and to enhance the quality of financial reports through ensuring the auditor independence (e.g, Dopuch, King & Schwartz, 2003; Mayhew & Pike, 2004).

Prior literature has time and again categorized independence of auditor into two main categories. DeAngelo (1981a) and Ramsay (2001) divided the independence of the auditor into independence in appearance and independence in fact. A widespread belief is that if independence of auditor is perceived to be impaired, financial reports' users require a cost-of-capital premium for risk of information related with the disability to depend on the audit function (Johnstone, Sutton & Warfield, 2001). Nevertheless, a damage of auditor independence would be expensive to the auditor, where the slight perspective of independence weakness by appearance can also be just as harmful (Olazabal and Almer, 2001).

Financial dependence of the external auditor on his client arises when audit services provided to the client are crucial for the business of auditors. This, in turn, would influence the capacity of the auditor to stay independent, i.e., the propensity of auditor to challenge an accounting decisions of client may be compromised. In response to big competition in the business market for external auditing, audit firms have changed their business model by putting more emphasis on non-audit services (NAS) such as financial consulting, financial system design and tax-related services, which are more profitable (Kinney, Palmrose & Scholz, 2004). Levitt (2000) reported that this might have compromised auditor independence. To solve these concerns, Raghun, Read and Whisenant (2003) assessed whether by providing NAS will lead to greater restated financial reports. Based on a sample of 110 firms that restated financial reports filed with the SEC during 2000 and 2001, they found that the NAS did not have an inappropriate impact on the audit function that lead to more restatements. In an attempt to enhance the credibility of financial reports and protect investors, the Sarbanes-Oxley Act of 2002 (SOX) and following SEC regulation have also restricted the scope of services that are provided by the audit firms.

Recent studies have used non-audit services NAS as a measure of auditor independence. For example, Frankel, Johnson and Nelson (2002) and Ashbaugh, LaFond and Mayhew (2003) have examined non-audit fees and audit fees to abnormal accruals, which serve as a measure of the quality of financial reports. Previous studies defined NAS as all services provided by the

external auditor under participation with the group outside the scope of the audit, such as services may be compliance related services (tax and accounting services) and Management Advisory Services (Ashbaugh *et al.*, 2003; Frankel *et al.*, 2002).

Most previous studies have concentrated on studying whether providing of NAS has an influence on auditor independence (Alleyne, Devonish & Alleyne, 2006; Beattie, Brandt & Fearnley, 1999; Babatunde & Kolawole, 2012; Carey, Subramaniam & Ching, 2006; Gendron & Suddaby, 2004; Iyer & Reckers, 2007; Knapp, 1985; Teoh & Lim, 1996). They reported that providing NAS creates economic bonds that threaten independence of auditors. In addition, previous studies suggested that providing NAS by an auditor could decrease the quality of reported earnings (Chung & Kallapur, 2003; Frankel *et al.*, 2002; Gul, Tsui & Dhaliwal, 2006). Flynn (2009) argued that a big amount of non-audit fees cause the creation of an economic bond among the auditor and client that could harm audit quality and hence earnings credibility. He also reported that providing of NAS increases the auditors' dependence on the client. Auditors might be willing to sacrifice their independence to maintain their clients who pay big non-audit fees. Therefore, NAS could jeopardize the independence of auditors that lead to lower quality of earnings.

Aside from earnings management, another attention of researchers when comparing the influence of NAS on independence of auditor, and therein the quality of earnings is the frequency and degree of earnings restatements. For

example, Raghunandan *et al.* (2003) examined whether the NAS provided by auditors lead to greater restated financial reports. They found that the level of non-audit fees did not result in an unsuitable impact from incumbent auditors on the audit function leading to more restatements. Kinney *et al.* (2004) found insignificant findings between: (1) non-audit fees and internal audit services; and (2). non-audit fees and design of financial information system and implementation. However, they (Kinney *et al.* 2004) showed evidence that indeterminate non-audit fee levels were positively related with restatements.

Jenkins and Krawczyk (2011) suggested that an expectations gap might exist among general public and members of the accounting profession with respect to their perceptions of the impact of NAS on the independence of auditor. Given the crucial nature of independence of auditor in the audit function, such an expectations gap may be harmful to the public's confidence in the financial reporting process.

2.5.4.2 Brand Name

Reputation capital, established by brand name is addressed in prior studies as a crucial attribute that underlies the audit function quality. Proponents of deep pockets and reputation hypothesis view of audit quality proposed that audit firms that are brand leaders in the industry, motivates to guarantee high level of auditing standards. To begin with DeAngelo (1981a, 1981b) and Dye (1993) contended that audit firms that possess a highly recognized brand name are

more likely to heighten the litigation risk owing to the fact that the litigating party may realize that such audit firms are more carefully to steer clear of harmful political costs that adversely affects their reputation capital. This view is consistent with the perspective of reputation hypothesis. Such audit firms may be considered as financially successfully and are therefore capable of utilizing their resources to protect against legal action – a view advocated by the principles of the deep pockets hypothesis (DeAngelo, 1981a).

Numerous previous studies have documented that a price of brand name premium exists for Big 6 auditors (Francis, Maydew & Sparks, 1999; Krishnan, 2003). Therefore, a firm will trade off the costs of employing a Big 6 auditor with the expected costs of not employing such an auditor. While it is a logical response for clients who want to buy higher audits quality to use firm brand name as a proxy for audit quality, previous evidence is strongly supportive that audits of Big 4 audit firms are of higher quality (Francis, 2004). Deis and Giroux (1992) noted that brand name may be a useful proxy for signaling audit quality variations between size of audit firm groups, but it does not reflect variations within-group.

Several researchers have attempted to investigate the relationship between brand name and the major issues of financial accounting like earnings quality. Among them, Becker *et al.* (1998) examined if the level of earnings management of firms audited by the Big-5 vary from companies audited by the non-Big-5. They revealed that non-Big 5 clients that attempt to smooth

downwards of earnings display large higher income decreasing discretionary accruals compared to Big-5 clients. They concluded that auditor's brand name protects the reputation of capital by being unwilling to agree to questionable accounting system and display irregularities and errors. Their findings were consistent with later studies by Reynolds and Francis (2000), who reported that auditors with major brand names have better capability of discovering earnings management practices because they are well-informed. On the other hand, other studies like Chen, Lin and Zhou (2005) revealed that auditors with high quality determined by either Big-5 or non-Big-5 decreased profiteer behavior of firm management compared to their low quality counterparts.

According to prior studies like Reynolds and Francis (2000), and Behn, Choi and Kang (2008), audit firms having big brand names are more encouraged to confine earnings management and to decrease profiteer behavior by firm management. Similarly, Francis *et al.* (1999) revealed that a high level accrual company that is subject to senior profiteer behavior of management would prefer to employ an audit firm with a brand name because the reputation capital of such a brand name would add emphasis to the reliability of the reported earnings. They also showed that high-accrual companies utilized Big-5 auditors more often while lower rate of discretionary accruals were revealed rather than high ones in companies employing non-Big 5 audit firms. In sum, the financial report users relate auditor's brand name with credibility of information, limited earnings management and earnings credibility (Behn *et al.*, 2008; Dopuch & Simunic, 1982; Francis *et al.*, 1999). Following table summarises these studies

Table 2.4

Summary of Major Previous Studies that Examining Auditor Quality and Accounting Conservatism

| No. | Author/s (year) | Sample | Auditor Independence | Auditor brand name | Main Results |
|------------|---------------------------------|---|--|-------------------------------|---|
| 1 | Frankel, John and Nelson (2002) | 3,074 US Firms from February 2001 to June 2001 | Providing NAS by auditor and earnings management | - | They present evidence that non-audit fees are positively associated with small earnings surprises and the magnitude of discretionary accruals, Audit fees are negatively associated with these earnings management indicator. They also found evidence of a negative association between non-audit fees and share values on the date the fees were disclosed. |
| 3 | Chung and Kallapur, 2003 | 1871 U.S. firm in 2000 | Providing NAS by auditor and earning quality. | - | No statistically significant association between abnormal accruals and client importance in subsets of the samples partitioned by proxies for these factors. No statistically significant association between abnormal accruals and any of the client importance measures. |
| 4 | Flynn (2009) | 33,163 firm from 1984 to 1998. | - | - | -Showed that the big amount of non-audit fees cause the creation of an economic bond among the auditor and client that could harm audit quality and hence earnings credibility. |
| 5 | Babatunde and Kolawole, 2012. | The sample 180 knowledgeable investors in Lagos State | Providing NAS and auditor independence. | - | -They reported that providing of NAS creates economic bonds that threaten independence of auditors. They also confirmed that the providing non-audit service by auditors considered one of the most important and most common factors that threaten the independence of the auditor. |

Table 2.4 (Continued)

| | | | | | |
|----|--|--|---|--|---|
| 6 | Becker, DeFond, Jiambalvo and Subramanyam (1998) | 10,881 US Firms from 1989 to 1992 | - | Auditors brand name (i.e. Big 6 auditors). | Found that companies hiring Non-Big 6 auditors report significantly greater discretionary accruals than companies hiring Big 6 auditor. |
| 7 | Chen, Lin and Zhou (2005) | 365 Taiwan Firms from 1999 to 2002 | - | Auditors brand name (as defined by Big 5 versus Non-Big 5). | -Found that auditors brand name as defined by Big 5 versus Non-Big 5, are more likely to constrain the opportunistic behavior of firm management than non-big 5. |
| 8 | Chen, Wu and Zhou (2006) | 2,324 Taiwan firms from 1998 to 2002 | - | Auditors brand name measured by Big 5 auditors and discretionary accruals. | Big auditors brand name measured by Big 5 auditors are related with lower discretionary accruals, consistent with auditors' brand name reputation constraining earnings management. |
| 9 | Piot and Janin (2007). | 120 firm in French stock market FSE from 1999 to 2001. | - | Big 5 auditors and earning management. | - Found that Big 5 audited companies do not differ from others in terms of absolute and signed abnormal accruals. - Insignificant comparison tests suggest that the Big Five are not more conservative than other audit firms. |
| 12 | Jenkins, Kane and Velury (2006) | 2,436 U.S. firm from 1990 to 1999. | - | - | -Auditors specialist were only partially effective in constraining the reduce in discretionary accruals and enhance the quality of earnings. |
| 13 | Krishnan (2004) | 4,422 U.S. firms from 1989 to 1998. | - | - | -Found that the earnings audited by specialist auditors are timelier in reflecting bad news than earnings audited by non-specialist auditors. |

2.5.5. Company Attributes

Previous studies indicate the presence of several variables may explain and affect the level of accounting conservatism. Most studies reported the presence of a mixed relationship between size of company and debt contract as a most common company attributes on the level of conservatism (Das & Zhang, 2003; Nikolaev, 2010).

2.5.5.1 Company Size

Size of company is one of the main company attributes that is considered to influence the level of accounting conservatism (Mehrani, Sani & Hallaj, 2010). Large companies are often argued to have lower level of earning management and thus higher level of conservatism. The reasons are: first, large size of companies are often associated with having more accounting staff, more resources and advanced accounting information systems compared to their smaller counterparts. In addition, large companies often have strong corporate governance (Al-Sahli, 2009; Hamdan, 2010). Second, larger companies are more in the eyes of the audience. Specifically, large companies are likely to be followed by a large number of analysts who usually expect reliable information to confirm and revise their expectations (Al-Tahat, 2010). Therefore, Beasley *et al.* (2000) reported that larger companies are more likely to design and maintain more effective and sophisticated internal control systems in comparison to smaller companies, hence decreasing the likelihood of manipulating earnings by management.

Burgstahler and Dichev (1997) observed that company size plays varying roles in earnings changes or managing earnings. Das and Zhang (2003) provide evidence that small companies manipulate earnings in order to report one more cent of earnings per share by rounding up. Lee and Choi (2002) and Siregar and Utama (2008) reported that company size can effect a company's tendency to manage earnings, and that smaller companies are more likely to manage earnings to avoid reporting losses than larger companies. On the other hand, many arguments favor larger company sizes in attaining higher performance. Large companies are more probable to exploit economies of scale and enjoy higher level of negotiation power over their suppliers and clients (Singh & Whittington, 1975; Serrasqueiro, Macas & Nunes, 2008). Diaz and Sanchez (2008) suggested that SMEs in Spain were more efficient than large companies lending support to earlier studies that determined an inverse relationship between company size and performance.

The empirical evidences on influence of company size on accounting conservatism are mixed. Yunos *et al.* (2010) used total asset as a measure of company size. They found that there is a positive relationship between company size and asymmetric timeliness. This suggests that larger companies employ more accounting conservatism. Amir, Guan and Livne (2009) found that large companies are more visible to the government, and public regulators, thus incurring a political cost that may drive to more conservatism, while Pae and Easton (2004) reported that company size does not have a significant influence on the degree of earnings conservatism and balance sheet

conservatism. Lafond and Watts (2008) argue that larger firms have less information asymmetry than smaller firms, thereby, reducing the demand for conservatism. Sultana (2012) found a significant negative association between the asymmetric timeliness of accruals and firm size. Khan and Watts (2009) argue that larger companies have lower contracting demands for conservatism due to lower information asymmetry for large companies. Hamdan and Abzakh (2011) examined the relationship between the size of company and level of conservatism in Kuwait listed companies. They found that the financial reports of small companies were conservative, but Al-Sahli (2009) did not find any association between company size and level of accounting conservatism in Saudi listed companies. In Bahrain, Hamdan (2011) found that big companies adopt accounting conservatism policies to avoid political costs. Mehrani et al. (2010) also found that there is no significant difference among big and small companies in providing both timelier and more conservative earnings.

Previous literature showed that there is lack of studies that address the influence of company size on the level of accounting conservatism particularly in Jordan (Hamdan, 2010; 2011). In addition, most studies used company size as a control variable (e.g., Abed *et al.*, 2012; Li, 2010; Yunos *et al.*, 2010). However, this study filled this gap by examining the direct relationship between company size and the level of conservatism in Jordanian companies.

2.5.5.2 Debt Contracts

Debt contract is an agreement in which a company agree to repay funds to a lender (Nikolaev, 2010; Vasvari, 2006). Debt contracts are generally understood to have contractual advantages that protect bondholders from activities that transfer their wealth to the shareholders, such as risk shifting investments and excessive dividend payments (Smith & Warner 1979). Accounting conservatism is also assumed to reduce the agency costs of debt arising out of the bondholder-shareholder conflict by allowing bondholders to better control the downside risks arising of investment strategies. Accounting conservatism does so by requiring timely recognition of loss on the income statement and by valuing the company's assets on the balance sheet at what more closely represents their liquidation values (Callen, Chen, Dou & Xin, 2010).

There is inconclusive empirical evidence concerning such relationship. Nikolaev (2010) reported a positive association between number of covenants and conservatism while Vasvari (2006) revealed that accounting conservatism lowered the number of covenants. On the other hand, no relationship was found between the two variables by Begley, Chamberlain and Kim (2009), Frankel and Litov (2007). Zhang (2008) revealed several benefits of conservatism practices in favor of lenders as it accelerates violations of debt covenant and hence provides indication of default risk in a timely manner. Meanwhile, Callen *et al.* (2010) demonstrated that borrowers practicing a higher level of

accounting conservatism and tight covenants primarily receive lower interest rates compared to those with low level of conservatism and loose covenants.

Directors are motivated to satisfy the need for timeliness of losses recognition for many reasons. First, a good reputation is significant to a company's limiting of the debt cost and accessing public debt markets (Diamond, 1991). Second, the litigation threat may impact the timely recognition of loss (Basu, 1997; Qiang, 2007). Considering that accounting figures help contracting needs, as stated by Watts and Zimmerman (1986), the using of covenants in firms should thus result in an enhanced need for the timely acknowledgement of losses in earnings. In this context, bondholders are more likely to provide greater motivations for such recognition and its auditors particularly when the debt contract hinges on accounting-based covenants. Moreover, debt contracts often need an external auditor to confirm its adherence to the indenture covenants, which could possible expose the auditor to threats of litigation. Therefore, auditors are more likely to be careful and to have higher level of conservatism in the face of such covenants in accounting-based

In the context of Saudi Arabian listed companies, Al-Sahli (2009) found the lack of association between debt contract and the accounting conservatism level. Similarly, in Jordan, Hamdan (2012a) found no association between debt contract and accounting conservatism during the preparation of Jordanian companies' financial reports. Contrastingly, Hamdan (2011) showed that debt

contracts influenced financial statements of conservatism in Kuwaiti firms. In other words, he found that firms with lower levels of debts practiced more conservatism in their financial reporting compared to those with higher ones. With regards to the conservative accounting function in enhancing the effectiveness of debt contracts, prior studies (Ball and Shivakumar, 2005; Ball *et al.*, 2008; and Watts, 2003a) confirmed that conservatism helps in enhancing the debt contracts adequacy via enhancing the accounting figures capacity for future prediction. Furthermore, conservative accounting ensures stricter strategies for the debtors in reporting the financial profits and hence reducing dividends as this presents the firm with the best technique to address its liabilities. On the other hand, according to Gigler, Kanodia, Sapiro and Venugopalan (2009), conservatism reduces debt contracts efficiency by changing the accounting content and hence reducing the potential for future predictions.

Table 2.5 presents a brief summarized overview of prominent studies examining the impact of company attributes on conservative accounting.

Table 2.5

Summary of Major Previous Studies that Examining Company Attributes and Accounting Conservatism

| No. | Author/s (year) | Sample | Company Attributes | | | Main Results |
|-----|--------------------------------|--|--|------------------------------------|--------|--|
| | | | Company Size | Debt Contract | Others | |
| 1 | Yunos, Smith and Ismail (2010) | 300 Malaysian listed firms from 2001 to 2007 | Company size and conservatism | Leverage and conservatism | - | -They found that there is a positive relationship between company size and asymmetric timeliness. This suggests that larger companies employ more accounting conservatism. - The negative effect of leverage on asymmetric timeliness is contradict with the contention that debt holder prefer conservatism. |
| 2 | Lafond and Watts (2008) | 20,389 firm in NYSE and AMEX from 1983 to 2001 | Company size and information asymmetry | Leverage and information asymmetry | | -Found that larger firms have less information asymmetry than smaller firms. -Found also that firms with higher leverage report more conservative earnings |
| 3 | Sultana (2012) | 494 Australian firms from 2004 to 2008 | Company size asymmetric timeliness | Leverage and asymmetric timeliness | - | - Significant negative association between the asymmetric timeliness of accruals and firm size and leverage. |
| 4 | Khan and Watts (2009) | 115,516 firm from 1963 to 2005 | Company size and conservatism | Debt contract and conservatism. | - | -Showed that larger companies have lower contracting demands for conservatism due to lower information asymmetry for large companies. Found also that higher contracting demand for conservatism from more leverage firms. |

Table 2.5(Continued)

| No. | Author/s (year) | Sample | Company Attributes | | | Main Results |
|-----|---------------------------------|--|---|--|--------|---|
| | | | Company Size | Debt Contract | Others | |
| 5 | Hamdan and Abzakh (2011) | 225 firm in Kuwait listed companies in 2009. | Company size and accounting conservatism measured by Book-to-Market Approach and Basu (1997). | Debt contract and accounting conservatism measured by Book-to-Market Approach and Basu (1997). | - | -They found that the financial reports of small companies were conservative. - Reported that firms with lower debts were more conservative than those of higher ones. |
| 6 | Al-Sahli (2009) | 76 firm in Saudi listed firms in 2005. | Company size and asymmetry timeliness as a measure for conservatism | - | - | -Did not found any association between company size and level of accounting conservatism in Saudi listed companies. -Found also no association between debt contract and the level of conservatism |
| 7 | Hamdan (2012a) | 114 Jordanian firms from 2002 to 2006 | Company size and earning quality | Debt contract and earning quality | - | - Found evidence that company size, debt contracts have effect on earnings quality. |
| 8 | Mehrani, Sani and Hallaj (2010) | 85 listed firms in Tehran from 2000 to 2005. | Company size and accounting conservatism. | Debt contract and accounting conservatism | - | - The findings reveal that firm size and conservatism are in a positive relationship. - The results also showed that debt ratio is negatively related to the conservatism. |

Table 2.5(Continued)

| No. | Author/s (year) | Sample | Company Attributes | | | Main Results |
|-----|------------------------------------|---|--|---|--------|---|
| | | | Company Size | Debt Contract | Others | |
| | | | - | Debt contract and accounting conservatism | - | -Found that there is a positive relationship between number of covenants and accounting conservatism in a sample of public debt contracts. |
| 10 | Vasvari (2006) | 1,204 US Firms from 1993 to 2004 | Company size and information asymmetry | Debt contract and accounting conservatism | - | -Found that conservatism decrease the number of financial covenants. -Found also that large firms have a less information asymmetry. |
| 11 | Begley, Chamberlain and Kim (2009) | 533 firms from 1975-1979; 1989-1993; 1999-2002. | - | Debt contract and accounting conservatism | - | -Failed to find a clear relationship between covenants and accounting conservatism |
| 12 | Zhang (2008) | 515 U.S. firms from 1999 to 2000 | - | Debt contract and accounting conservatism | - | -Showed that conservatism benefits lenders because it accelerates debt covenant violations, and consequently, provides a timelier indication of default risk. |

Table 2.5(Continued)

| No. | Author/s (year) | Sample | Company Attributes | | | Main Results |
|-----|----------------------------------|---|--------------------|---|--------|---|
| | | | Company Size | Debt Contract | Others | |
| 13 | Callen, Chen, Dou and Xin (2010) | 2,908 loan deals and 1,278 borrowers from 2000 to 2007. | - | Debt contract and accounting conservatism | - | Debt contract and accounting conservatism |

2.6 Chapter Summary

The results of previous researches have provided that strong governance mechanisms are related with the existence of independent directors on the board, board members with more skill and separation between the roles of CEO and chairman. An existence audit committee to control the financial reporting process. Evidence showed that strong board characteristics are related with quality financial information and thus better firms' performance. Given that accounting conservatism practice is an effective mechanism; it could assist the board of directors and audit committee to overcome the agency conflict. Therefore, it is expected that strong characteristics of board of directors and an existence audit committee lead to more conservative reporting. There is limited evidence on the direct influence of ownership structure over accrual conservatism. Other studies examined ownership structure and earnings quality (Ben-Nasr, Boubakri & Cosset, 2009), and financial policy and firm performance (Ellili, 2011) and informativeness of accounting earnings (Fan & Wong, 2002). Most, if not all, previous studies examine the managerial, institutional ownership and accounting conservatism using Basu (1997) model or book-market measurement with limited attention on the accrual basis as proxy of conservatism (LaFond & Roychowdhury, 2008; Ramalingegowda & Yu, 2012). Accordingly, and based on the recommendations of previous studies (e.g. Yunos, Smith & Ismail, 2010; Ramalingegowda & Yu, 2012), this study sought to fill this gap in the literature by examining the direct influence of ownership structure (institutional, foreign, family and managerial ownership) and accounting conservatism using accrual based.

CHAPTER THREE

RESEARCH FRAMEWORK AND METHODOLOGY

3.0 Introduction

Previous chapter has elaborated the relevant literatures relating to accounting conservatism and its relationship with corporate governance and the role of conservatism in ensuring the quality of financial reports. Before elaborating the methodological issues, this chapter provides the theoretical framework that becomes the basis of this study and the development of hypotheses. Cavana, Delahaye, and Sekaran (2001) reported that a theoretical framework is a basis on which the overall research project is based. To achieve the study objectives, this study seeks to use annual reports of Jordanian firms to test the association between the corporate governance mechanisms and accounting conservatism.

The current chapter demonstrates the theoretical framework of the study and provides research hypotheses to be tested. This study contains five main hypotheses to be examined in the relationship between ownership structure, board characteristics, audit committee, auditor quality and company related attributes on accounting conservatism.

3.1 Research Framework

The theoretical framework was deduced from the objectives of the current study to explore the relationship between the mechanisms of corporate governance and company related attributes on the accounting conservatism. This study also concerned about the

current status of corporate governance of Jordanian firms which remains at a relatively underdeveloped stage as reported by the World Bank (2004) as well as by Al-Akra *et al.* (2009), Hamdan (2011) and Abed *et al.* (2012). Additionally, its also affects on the accounting conservatism practices and the quality of earning and thus on the financial report quality eventually (Hamdan, 2011, 2012). In addition, Abed *et al.* (2012), Hamdan (2010, 2012a) and Hamdan *et al.* (2012) documented that the accounting conservatism level in Jordanian firms is very low, and they reported that such result was attributed amongst others to the poor of corporate governance practices.

The following model is developed based on several major theories. These theories were used in the context of corporate governance in order to contribute in offering comprehensive insights and a deeper understanding of the objectives of this study. Regarding to the corporate governance's context and under the agency theory, companies should be managed in the interest of the public as whole and under social responsibility in order to limit the conflict that arise among the managers and shareholders (Lee, 2009). Positive accounting theory is related with the contractual view of the firm where accounting is employed as an instrument in order to facilitate the formation and fulfillment of the contracts by limiting the contractual costs that generates from the agency conflict (Jensen & Meckling, 1976). Resource dependence theory was used to suggest effective structures of corporate governance within companies that lead to the generation more of resources like board of directors; these resources are all considered as board capital (Hillman & Dalziel, 2003). Signaling theory suggests that companies with superior transparency of information provide better signal of corporate governance and

thus better corporate performance (Chiang, 2005). The general attitude of this theory is that the senior managers motivate the personal motivations and trying to do the right thing to the firms, these personal motivations such as being successful and achievement at work which mean self-actualization not by external motivations such as financial remunerations (Donaldson & Davis 1991).

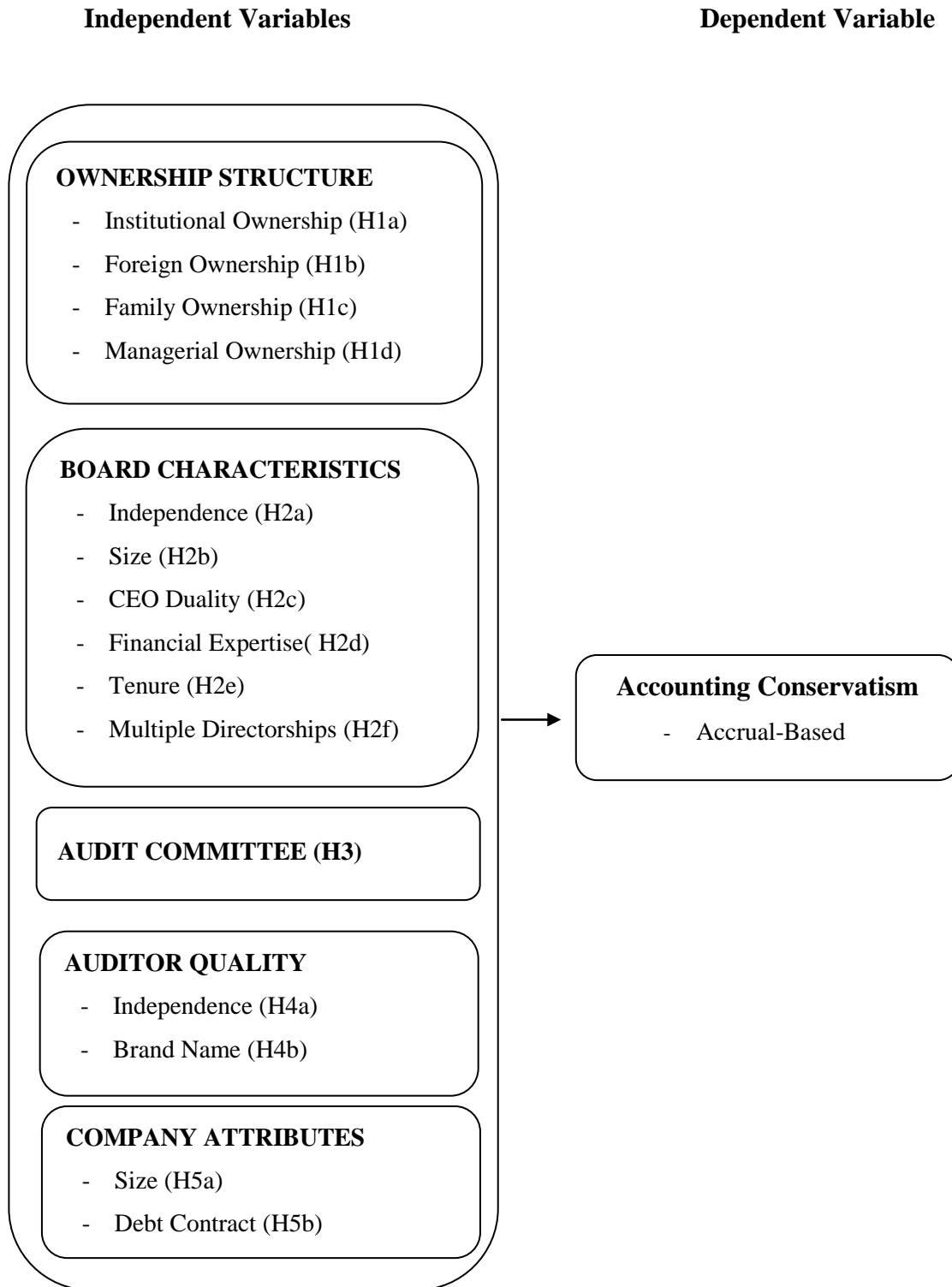


Figure 3.1
Framework of the Study

3.2 Hypotheses Development

This section consists of five main hypotheses testing the relationship between corporate governance and accounting conservatism. These relationships are explained below:

3.2.1 Ownership Structure

This study examines ownership structure as classified into institutional, foreign, family and managerial ownership and its association with accounting conservatism.

3.2.1.1 Institutional Ownership

Kholief (2008) reported that ownership concentration limits agency problems particularly in the case of institutional shareholders. Thus the greater rate of shares owned by institutions is associated negatively with the existence of manipulation in the financial reports. The demand for greater conservatism was highlighted in two recent researches that found greater conservatism between companies facing higher agency troubles. On the one hand, LaFond and Roychowdhury (2008) examined the proportion of firms that were held by firm managers to examine the separation of control and ownership that often results in agency troubles among investors and managers. They found that conservatism is higher with lower percentage of managerial ownership. On the one hand, LaFond and Watts (2008) found that there is a positive association among conservatism and information asymmetry and that any changes on the level of information asymmetry results in changes on the accounting conservatism level but not other way around. However, the question that has yet to be answers is which equity investors are demanding for more conservatism. It is expected that investors from institutions are more probable to demand more conservatism. Nevertheless, Bartov *et al.* (2000) and Chakravarty (2001)

reported that institutional investors are characterized by some studies as sophisticated and as policy-setters in capital markets. Hence, if governance benefits are presented by conservative financial reporting, institutional investors have a high probability of valuing and understanding these benefits and consequently, institutional investors demand greater degrees of conservatism.

In Jordan, this relationship was tested by Al-Najjar (2010) and Al-Fayoumi et al. (2010) and the two studies produced contradicting results. Therefore, the argument of this study is in line with the agency theory assumption that was supported by Al-Najjar (2010). So, the suggested hypothesis is formulated as follows:

H1a: There is a positive relationship between Institutions ownership and accounting conservatism.

3.2.1.2 Foreign Ownership

Abor and Biekpe (2007) documented that the existence of foreign ownership limits the agency cost particularly in small countries. Previous studies suggested that foreign investors seek to allocate their investments to the companies that have a low level of information asymmetry than those companies that have high level of information asymmetry. The size of shares held by foreign investors should be negatively associated to the level of asymmetry of information. Therefore, foreigner investors are seeking to invest of firms that have rich information and have a low information asymmetry (Anonymous, 1996; Fan & Wong, 2002). LaFond and Watts (2008) reported that the level asymmetry of information among inside and outside investors has a positive

relationship to the level of conservatism. They also found that conservatism decreases the incentives of managers and their ability to manage accounting figures and so reducing the level of asymmetry of information and the deadweight losses that asymmetry of information creates. This will increase equity and firm values. Mohandi and Odeh (2010) reported that firms with higher proportion of foreign ownership have a positive relationship with quality of financial report in Jordan. In short, problems of information asymmetry among shareholders and managers make more use of financial reporting in communicating and contracting (Ball & Shivakumar, 2005).

Thus, Agency Theory and the result of Mohandi and Odeh's (2010) found that foreign ownership enhances quality of financial statements in Jordan. Therefore, the suggested hypothesis is as follows:

H1b: There is a positive relationship between foreign ownership and accounting conservatism.

3.2.1.3 Family Ownership

Agency theory indicates that family firms are likely to underperform since family owners may desire to maximize their utility, or certain family members, over the economic value of the firm (Jensen & Meckling, 1976; Schulze et al., 2001). Previous studies suggest that family ownership influences the supply and demand of financial reporting quality in two main standpoints. Specifically, the entrenchment effect urges companies (financial report suppliers) to manage the earnings. This is aligned with the idea that family companies are not as efficient as their counterpart companies as they form motivations to control the

major shareholders in order to requisition wealth from the minority shareholders form motivations to control the major shareholders in order to requisition wealth from the minority shareholders (Shleifer & Vishny, 1997), and they often occupy higher positions on the both of top management team and board of director. On the other hand, Fan and Wong (2002) showed that ownership concentrated reduces the flow of financial information to outside investors, however Francis, Schipper and Vincent (2005) reported that asymmetry of information limits the level of transparency of financial disclosures. As a result, family owners have both the opportunity and the incentive to practice earnings manipulation to their advantage. Therefore, the entrenchment effect expects that firms that owned by families is related with the supply of lower level of earnings quality which means lower level of conservatism.

The alignment effect stating that ownership concentration urges higher monitoring of controlling shareholders (Demsetz & Lehn, 1985; Shleifer & Vishny, 1997) allow family firms to make instantaneous decisions and to create loyalty among employees (Weber *et al.*, 2003) and this protects the family name. Moreover, family firms are more probable to ignore short-term interest from earnings management as they plan to pass on their business to their descendants. This indicates that family firms are not as vulnerable to opportunistic behavior in terms of disclosing earnings as this would likely damage family reputation, their business and wealth as well as the long-term firm performance eventually. Family firms prefer high level of earning quality and in turn, high level of conservatism as prior literature evidenced that financial earnings are of higher level of quality if the firms reported their earnings are highly conservative (Ball *et al.*, 2000; Ball

et al., 2003). Based on the theoretical discussion that mentioned above, the following hypothesis is proposed;

H1c: *There is a positive relationship between family ownership and accounting conservatism.*

3.2.1.4 Managerial Ownership

Accounting conservatism is expected to mitigate the agency problem between managers and shareholders and reduce the agency costs of firms (Shuto & Takada, 2010). Firm managers usually have more information on the firm than other parties, and they have only a limited tenure and liability. In such a situation, managers have an incentive to provide a biased upward estimate of future cash flows to maximize their own interest, which creates deadweight losses. For instance, firm managers may be able to receive large bonuses through overstating future cash flows and net assets. Such an opportunistic behavior by managers generates deadweight losses and may lead to negative net present value investments (Shuto & Takada, 2010).

On the other hand and based on the prior studies, a negative relationship is expected among managerial ownership and accounting conservatism. For instance, Ball (2001) shed a light on agency issues producing demand for higher conservatism under the premise that managers take on higher personal costs by leaving their losing investments rather than by continuing to oversee profitable investments. In other words, abandoning projects that are producing negative cash flows in the future can probable decrease the present reported income, and manager's wealth through, reappointment, bonuses,

promotion, prestige and reputation. Other researchers expected that the demand for higher conservatism stemming from shareholders-managers agency issues negatively differs with managerial ownership (e.g. Barclay, Gode and Kothari, 2005; LaFond and Roychowdhury, 2008). Based on the agency theory, the managerial ownership can decrease the managers' incentives to utilize their position in order to exploit the shareholders' wealth. Fama and Jensen (1983) who criticized the hypothesis of the convergence of interests and confirmed that managerial ownership is negatively related with the agency relationship (among the shareholders and managers), managerial ownership is also considered a major source of agency costs. Moreover, they confirm that the managerial ownership entrenches the current manager and shows the managerial opportunism. In addition, the managerial entrenchment hypothesis confirms that a high rate of managerial ownership enhances the ability of the managers to make important decisions that do not increase the firm value but their job security and improve their own wealth (Morck et al., 1988). Hence, the following hypothesis is suggested:

H1d: There is a negative relationship between managerial ownership and accounting conservatism.

3.2.2 Board Characteristics

Six characteristics of board of directors are examined in this study, namely independence, size, CEO duality, financial expertise, tenure and multiple directorships.

3.2.2.1 Board Independence

Both of the resource dependence theory and agency theory highlight the significance of presence independent directors on the board in order to monitor the corporate management effectively (Fama & Jensen, 1983). In addition, empirical and theoretical analyses reported that outside members on the corporate board serve a vital function in the disciplining and monitoring of senior managers which affect firm performance (Ghosh & Sirmans, 2003). Lara *et al.* (2007) and Rodriguez (2010) suggested that the existence of independent members on the board of directors help to ensures independence of board from the management. Pfeffer and Salancik (2003) suggested that existence of independent members on the boards would improve the flow of data, and thus protect the corporate resources and decrease the level of uncertainty. Beasley (1996) found that companies with no fraud have a higher percentage of independent members on their boards, and reduced fraud on financial reports. Peasnell, Pope and Young (2006) reported that independent directors in UK companies decreased rate of earnings management.

Beekes *et al.* (2004) examined the association between independence of board members and accounting conservatism using Basu (1997) measurement. They found a positive association between independence of board members and accounting conservatism in UK firms. Previous studies documented that the relationship among board independence and accounting conservatism is positive (Ahmed & Duellman, 2007). Agency theory documented that, the greater the number of independent directors, limits the manipulation of earnings (Hashim & Devi, 2008). On the other hand, Barako, Hancock, and Izan (2006) reported that independent directors play a vital role as a reliable mechanism to

diffuse agency conflicts among contracted parties. They are viewed as offering the necessary contribution to improve board effectiveness. The hypothesis is as follows:

H2a: There is a positive relationship between board independent and accounting conservatism.

3.2.2.2 Board Size

Agency theory suggests that larger size of boards associated positively with the quality of financial reporting. This view is supported by Peasnell, Pope, and Young (2005) and Klein (1996). They explained that larger number of directors on the board allow a better monitoring of the management, which leads to limit accounting discretionary and improve the quality of financial reports.

Previous studies showed mixed views about the effects of board size. Hermalin and Weisbach (2003) used a sample of U.S. firms and showed that the association between size of board and firm value was in negative direction. Mak and Li (2001) reported that large boards are related with lower firm performance. In contrast, Vafeas (2000) found evidence that small size of board of directors led to higher level of earnings returns. Previous researches suggested that large size of board is related with weak governance ability and low firm performance (Mak & Li, 2001; Cheng, 2008; Guest, 2009). Jensen (1993) showed that small size of boards is more effective than large size of board of directors due to the obstacles in coordination of tasks. Lipton and Lorsch (1992) documented that large size of boards make a "free rider" problem, as well as slow the process of decision-making. On the other hand, the members of board are less likely to

criticize decisions of top managers, where each board member might rely on others to monitor management.

In contrast, Yermack (1996) reported that the association between size of board and market performance is significant. Peasnell *et al.* (2000b) and Xie *et al.* (2003) showed that the relationship between large size of board and earnings management is in negative direction. Haddad *et al.* (2011) reported that board size has significant relationships with firm performance of Jordanian listed companies. In addition, Coles, Daniel and Naveen (2008) found that many members on the board were beneficial to complex companies because they have greater advisory needs, higher financial leverage, and a larger degree of diversification. Dalton and Dalton (2005) suggested that a large size of board provides a wider range of expertise and knowledge. Al-Zoubi (2012) examined the size of board of directors and earning management in sample of Jordanian listed firms. He found that the relationship was negative. Yu (2008) showed that small size of boards of directors seems more likely fail to detect earning manipulation. According to the agency theory, board size has a positive relationship with the quality financial reporting. This study hypothesises as follows:

H2b: There is a positive relationship between board size and accounting conservatism.

3.2.2.3 CEO Duality

Agency theory suggests that the separation of duties between CEO and chairman may lead to an effective monitoring over the management function (Jensen, 1993). Ashbaugh, Collins and LaFond (2006) tied the separation between CEO and chairman to higher debt

ratings, and to lower probability of an implementation procedure (Dechow *et al.*, 1996). Klein (1998) found that the separation between chairman/CEO leads to enhance the effectiveness of the board because executive directors are more aware about the company's issues than the other independent members. Daily and Dalton (1997) showed two perspectives to explain the separating or combining the roles of CEO and chairman, either for effective monitoring or strong leadership structure. They further acknowledged that financial communities and practitioners prefer the separate structure. Driven by the previous evidence, this study assumes that the combining role of CEO and chairman will lead to less conservatism. In addition, Jordanian Corporate Governance Code forces the Jordanian firms to separate the role of CEO and Chairperson. According to the agency theory and Jordanian Code of Corporate Governance, this study hypothesises as follows:

H2c: There is a positive relationship between CEO duality and accounting conservatism.

3.2.2.4 Board Skill (Financial Expertise, Tenure and Multiple Directorships)

Previous studies studied three types of skills contributing to effective governance, namely financial expertise, tenure and multiple directorships (Kiel & Nicholson, 2006; Vafeas, 2003; Lanfranconi & Robertson, 2002). Directors, who have financial and accounting knowledge would have greater understanding about the process of preparing the financial reports; and the power to make decisions that may enhance the information quality (Agrawal & Chadha, 2005). Board tenure refers to the cumulative knowledge of the company through directors' longer service on the company's board (Rutherford & Buchholtz, 2007). Multiple directorships refer to experience of directors obtained from

their involvement on the boards of other companies, which enhance their knowledge in solving diverse problems (Schnake & Williams, 2008).

Empirical researches documented that directors who are expert in accounting and financial fields have a better monitoring skill. Thus, they will be more effective in improving the quality of the financial reports (Lanfranconi & Robertson, 2002; McMullen & Raghunandan, 1996; Rose & Rose, 2008). Therefore, longer tenure reduced the occurrence of a financial distress status (Chang, 2009) and decreased earnings management practices (e.g. Bedard *et al.*, 2004; Peasnell *et al.*, 2005).

In regards to multiple directorships, previous studies reported that there is a lack of empirical evidence that support the advantages or disadvantages of multiple directorships. For instance, Lipton and Lorsch (1992) showed that multiple directorships could negatively affect the directors capable to control and monitor the management as they are exhausted and distracted by the affairs of other organizations. In contrast, there is a prevalent view of supporting multiple directorships as a one of the companies' mechanisms to co-opt external resources (Kiel & Nicholson, 2006). As for quality hypothesis which considers multiple directorships as a proxy for high level of director quality (Fama & Jensen, 1983; Latif, Kamardin, Mohd & Adam, 2013). Directors who have multiple directorships by virtue of more networks are expected to generate more benefits by helping to bring in needed suppliers, customers and resources to the firms. These directors would have more knowledge and experience about firm's operations; therefore they are more able of offering better strategic and managerial decisions, as Booth and Deli (1996). Saleh *et al.* (2005) documented that directors with multiple

directorships are effective in detecting the practices earnings management. Saleh, Iskandar and Rahmat (2005) found that multiple directorships were effective in decreasing earnings management only in companies with adverse unmanaged earnings. On the other hand, Jaafar and El-Shawa (2009) showed that board size and multiple directorships each have significant positive effect on Jordanian corporate performance. This result supports the resource dependence hypothesis that companies benefit from employing directors with multiple directorships and from having a large size of board, through the expertise and knowledge of board members, and the opportunities they can provide for establishing networks with other companies and the external environment. Based on the abovementioned evidences, it's clear that multiple directorships improve information sharing on legal actions against other firms, thus avoid the same pitfall and litigation.

On the other hand, the evidence suggests that financial expertise, longer tenure and multiple directorships are attributes of strong governance, to assist in their monitoring role of the financial reporting process. Additionally, the directorships on the boards of other companies would improve the directors' knowledge that leads to more demand of conservatism. There is a prevalent view of supporting multiple directorships as a one of the companies' mechanisms to co-opt external resources (Kiel & Nicholson, 2006). In addition, it was argued that multiple directorships improve information sharing on legal actions against other firms, thus avoid the same pitfall and litigation. Based on theoretical arguments, the board of directors with such skills will monitor the top management,

internal control system, and ensure the quality of financial reports (Fama & Jensen, 1983). Based on above, the suggested hypotheses are as follows:

H2d: There is a positive relationship between financial expertise on the board and accounting conservatism.

H2e: There is a positive relationship between directors' tenure and accounting conservatism.

H2f: There is a positive relationship between directors with multiple directorships and accounting conservatism.

3.2.3 Audit Committee

Agency theory postulates that the audit committee has to monitor the works and activities of top management, the internal control system and ensure the quality of financial reporting (Fama & Jensen, 1983). Zahirul-Islam (2010) showed that an audit committee is a key instrument to decrease the problems of management incentive such as manipulating financial reports to achieve higher bonuses. This is because the effective audit committees enhance the credibility and quality of financial statements. Goodwin and Seow (2002) reported that the presence of an effective audit committee reduces errors in financial reports and promote the possibility of detection the management fraud. Song and Windram (2004) reported weak evidence on the relationship between the financial literacy amongst the members of audit committee and meeting frequency with the effectiveness of audit committee. Al-Shareif (2008) found that relationship among independent audit committee and quality of earnings in Jordanian firms is in a positive direction. Ismail *et al.* (2008) found that multiple directorships between the members of

audit committee positively related with the quality of financial reports. Meca and Ballesta (2009) found that audit committee independent is an effective instrument in reducing earnings management. Wan-Hussin and Haji-Abdullah (2009) studied the relationship among audit committee and the financial reports quality in the firms listed in Malaysia. They reported that the relationship between existence of a large audit committee and the quality of financial report is positive. In addition, Ismail *et al.* (2009) found that the relationship between size of audit committee and the quality of earnings is in a positive direction. Lin and Hwang (2010) found that earnings management has a negative relationship with expertise, independence and the meeting of audit committee. Contrariwise, Wenyaoy and Qin (2008) studied the relationship between earnings management and audit committee. They concluded that existence of audit committee did not decrease income-increasing earnings management.

Rainsbury *et al.* (2009) studied the association among the quality of audit committee and the quality of financial reporting. They reported no significant association among the audit committee quality and financial reporting quality. They noted that this surprising finding refers that the advantages of audit committee with high level of quality may be less expected by decision makers and regulators. Al-Khabash and Al-Thuneibat (2008) reported that poor of the mechanisms of corporate governance like the absence of an audit committee related significantly and positively with illegitimate earnings management. This result supports the agency theory, where in the presence of an audit committee; it will improve the quality of financial reports.

In Jordan, Al-khabash and Al-Thuneibat (2008) found that the absence of audit committee correlated positively with earning management, which confirms agency theory's assertion that is the presence of an audit committee enhances the quality of financial statements. Accordingly, the next hypothesis is formulated as follows:

H3: There is a positive relationship between the presences of audit committee and accounting conservatism.

3.2.4 Auditor Quality

It is generally recognized that the external auditor is considered one of the chief corporate governance mechanisms in order to ensure great principal/agent compatibility of interests through providing external verification of the reliability of the company's financial reports (Ferguson *et al.*, 2003).

3.2.4.1 Independence

Auditor independence is primarily demanded by external stakeholders in order to decrease agency costs (Watts, 2003a). Auditors on the other hand, prefer conservative practices because of reputational effects, regulatory/litigation threats (SEC) and professional scrutiny from the Public Companies Accounting Oversight Board, PCAOB). Additionally, the ability of auditors to practice conservatism positively relates to their economic independence.

While reputation concerns are high on top of the list of all auditors, large auditors are more concerned because market participants consider them to be of higher quality (Yu

and Wang, 2008; Blay and Geiger, 2012). Hence, to protect their reputation and market share, large auditors are greatly motivated to promote conservative accounting compared to their smaller counterparts when they are both independent (Yu and Wang, 2008). In a related study, Amir et al. (2009) revealed a positive relationship among auditor independence and timely loss recognition. Thus, the following hypothesis is proposed according to the above argument;

H4a: There is a positive relationship between auditor independence and accounting conservatism.

3.2.4.2 Brand Name

According to Naser (1998), big audit firm perform better job as to portray a better reputation. This result is consistent with the agency theory. Numerous previous studies have documented that a price of brand name premium exists for Big 6 auditors (Chen *et al.*, 2005; Francis & Stokes, 1986; Palmrose, 1988). Reynolds and Francis (2000) found that auditors with prominent brand names were better capacity to discover earnings management due to in-depth knowledge. Chen *et al.* (2005) showed that auditors with higher quality as determined by Big 5 and Non-Big 5 reduced the opportunistic behavior of firm management more significantly than low auditor's quality.

Dietrich, Harries and Muller (2001) reported that the reliability of conservative estimations is higher when the company is monitored by external auditors especially the Big 6 audit firms. Bauwhede, Willekens, and Gaeremynck (2003) found that hiring one of the Big 6 auditors reduces the earnings management. Geiger and Rama (2006) showed

that the big audit firms provide a high quality report in terms of producing lower misstatements compared with the non-big audit firms. Hayyani (2008) found that big audit firms are better in predicting failure in firms in Jordan. Bauwhede and Willekens (2003) found that the association among audit firm size and earnings management practices was in a negative direction. Similarly, Teitel and Machuga (2010) provided clear evidence on the association among the audit quality and quality of earnings. They found firms that employ a high quality auditor show a high quality of earnings. However, Moroney and Dowling (2005) found no association among audit firm size and auditor performance level.

In Jordan, Shanikat and Abbadi (2011) indicated that the audit profession in Jordan is dominated by big audit firms and few smaller national audit firms. Hence, they concluded that, in general, audit firms in Jordan are of low quality. Hayyani (2008) argues that big audit firms are better in providing reports of higher quality. Therefore, the hypothesis is proposed as follows:

***H4b:** There is a positive relationship between auditor brand name and accounting conservatism.*

3.2.5 Company Attributes

This study examines two of the company attributes, namely company size and debt contract.

3.2.5.1 Company Size

Previous studies argued that large companies have lower level of earning management. Large size of companies implies having more accounting staff, more resources and advanced accounting information systems compared to their smaller counterparts (Mehrani *et al.*, 2010). In addition, large companies often have strong corporate governance (Al-Sahli, 2009; Hamdan, 2010). Siregar and Utama (2008) reported that small corporate is more potentially to manage their earnings to avoid reporting losses than large firms. Diaz and Sanchez (2008) suggested that SMEs were more efficient than large companies. Yunos *et al.* (2010) found that the relationship between company size and asymmetric timeliness was positive. This indicates that larger firms employ more conservatism. Sultana (2012) found a significant negative relationship among the asymmetric timeliness of accruals and firm size. Hamdan and Abzakh (2011) found that small firm size employ high conservatism level in their financial reports than financial reports than large firms. We conclude from previous evidences (Sultana, 2012; Yunos *et al.*, 2010; Hamdan & Abzakh, 2011; Hamdan, 2010) that firm size has an effect on the accounting conservatism practices. These evidences lead to the following hypothesis:

H5a: There is a positive relationship between company size and accounting conservatism.

3.2.5.2 Debt Contract

Inconclusive empirical evidence has been shown concerning the relationship between debt contract and conservatism. For instance, a positive relationship was found by Nikolaev (2010) between number of covenants and conservatism whereas Hamdan

(2011) revealed that debt contracts influenced financial reports of conservatism in the context of Kuwait listed firms. On the other hand, conservatism was reported by Vasvari (2006) to decrease financial covenants – a relationship that was not conclusively reached by Begley *et al.* (2009).

In a related study, Callen *et al.* (2010) revealed that borrowers employing high level of conservatisms and tight covenants basically experience lower rates of interest compared to borrowers with low level conservatism coupled with loose covenants. According to Watts and Zimmerman (1986), auditors are more probable to be wary and hence spend greater levels of conservatism in the face of covenants in accounting-based. Other prior studies revealed that lenders benefit from conservatism as this precipitates violations of debt covenants and consequently, provides an indication of default risk in a timelier manner (Ball *et al.*, 2008; Ball & Shivakumar, 2005; Watts, 2003a) while other studies such as Gigler *et al.* (2009) showed that conservatism practice lowers the efficiency of such contrasts because it modifies the accounting content and in turn, reduces the possibility of future prediction. The above discussion leads the researcher to suggest the following hypothesis;

H5b: There is a positive relationship between debt contract and accounting conservatism.

3.3 Methodology

3.3.1 Research Design

This study used descriptive and causal type of research design in order to provide insight about the level of the corporate governance as well as the accounting conservatism level in Jordanian listed firms. Hair *et al.* (2010) reported that descriptive approach used to describe some situation or attributes by giving measures of a certain activity or event.

In order to examine the relationship between corporate governance (i.e. ownership structure, board characteristics, audit committee and auditor quality) and company related attributes (i.e. company size and debt contract) and the accounting conservatism in the financial reports in Jordanian listed companies, causal research is used. The collection of data to accomplish all objectives are derived through secondary data primarily obtained through published annual reports, Amman Stock Exchange's website as well as the respective company's website, for the years of 2009 to 2011.

3.3.2 Sample and Data Collection

3.3.2.1 Sample

The Jordanian firms are divided into three main sectors. These sectors are; financial, industrial and services sector, divided into 113, 72 and 58 firm respectively (ASE, 2013). Only two sectors (industrial and services sector) are chosen for the purposes of this study. These sectors make up of 130 firm or 53.5% of the Jordanian listed companies that contribute significantly to 73% of Jordanian GDP (Al-Akra, Ali & Marashdeh, 2009). This leads to 390 firm-year observations for the whole sample (130 firms multiplied by 3

years). However, annual reports that do not contain the necessary data were excluded from the study sample. The final sample of Jordanian listed companies that involved to the analyses process is (348) companies at a rate of 89.23% of the original population. This study did not encounter any biases in the data for this period (2009 to 2011); also since Jordan's economy is still suffering from recession and economy slow is due to multiple factors such as local corruption cases and security conditions and wars in the neighboring countries until now (Eid, 2013; Masood, 2014). Therefore, the results are still applicable as at to this period.

Financial sector was excluded from the sample of the study because it has different regulations and practices issued by the Central Bank of Jordan and the Insurance Commission. These regulations are also different from other sectors' regulations. In addition, Hamdan (2012) reported that the financial reports of banks sector in Amman Stock Exchange (ASE) are the most conservative. Therefore, this study argued that industrial and services sectors on Jordanian listed companies are suitable to test the relationship between corporate governance along with company attributes and accounting conservatism.

3.3.2.2 Data Collection

As mentioned above, data for the current study came from secondary data. All secondary data were hand-collected from the firms' annual reports. This data is used to determine corporate governance mechanisms as well as company attributes that influence accounting conservatism.

The current study was confined to use the data after the code of Corporate Governance for the Jordanian firms became compulsory in 2009. In addition, this study also used data from 2009 to 2011 for the Jordanian listed firms. The variables of corporate governance that are employed in the current study were confined to the ownership structure, board characteristics, audit committee and auditor quality, where these variables are considered the essence of monitoring techniques, along with company related attributes which are company size and debt contract are vital factors that contribute to determine the level of conservatism. As for accounting conservatism, the current study focused on one measure of accounting conservatism namely accrual-based (ACCR) introduced by Givoly and Hayn (2000) because this may be a better and more accurate measure of conservatism according to Hui, Matsunaga and Morse (2009).

3.3.3 Unit of Analysis

In the current study, the unit analysis that employed was Jordanian Listed Companies.

3.3.4 Method of Data Analysis

This study investigated the impact of corporate governance mechanisms on the accounting conservatism. In order to achieve this objective, the analysis of data was conducted through employing the Statistical Package for Social Science (SPSS) version 18. The current study employs two major of analysis methods namely, descriptive statistic and multivariate approach.

3.3.4.1 Descriptive Analysis

Descriptive analysis provides the mean and standard deviations for dependent and independent variables. This study uses descriptive statistics in order to transform the data into easy and meaningful to interpret. The output data describes about dispersion of the data of the selected companies.

3.3.4.2 Inferential Analysis

3.3.4.2.1 Correlation Analysis

Pearson correlation method was used to define the directions (positive or negative) and the strength of the variables. The variables tested with the use of correlation involve mechanisms of corporate governance and accounting conservatism. The higher the correlation coefficient, regardless of sign of coefficient, the stronger the linear relationship among the two variables is. A negative correlation means that as the values of one of the variables increase, the values of the other variable tend to decline (Correlation and simple linear regression, 2008). On the other hand, a positive correlation means that as the values of one of the variables increase, the values of the other variable tend to increase also. A small or 0 correlation means that the two variables do not have a linear relationship.

3.3.4.2.2 Multivariate Analysis

Multivariate analysis is used to analyze the relationship between two or more variables. This technique is more sophisticated and is able to provide such relationships. This study

uses the confidence level at 1 % and 5 % to test the significant of variables. If the value is very close to 1 that means that the relationship is very significant. Based on the literature, regression analysis is a proper technique to examine the relationship among the corporate governance mechanisms as independent variables and accounting conservatism as dependent variable. However, multiple regression analysis procedure weights each independent variable to achieve high prediction from a set of independent variables, which give the relative contribution of independent variables to the overall prediction. In addition, it provides the correlation coefficient between the independent variables. Therefore, final results show an individual contribution of each variable in providing the overall prediction as well as to interpret the association between each independent variable and dependent variable (Hair *et al*, 2010).

All of the data would undergo multicollinearity, homoscedasticity, independent error and normally distributed errors to ensure that the data is consistent to the regression's assumptions. Multicollinearity occurs if there is a high level of correlation among the independent variables according to Field (2001). This study employed two tests to check the multicollinearity. The first way is the by correlation matrix, the multicollinearity problem occur if the correlation among independent variables exceed 0.9 (Hair *et al.*, 2010; Tabachnick & Fidell, 2007). The second way to test the multicollinearity is by testing the Tolerance and variance inflation factor (VIF). The tolerance (TOL) should be above 0.10 and (VIF) should be less than 10 to indicate no multicollinearity between the independent variables.

The choice of statistical technique depends on the distribution and the nature of the data, hence making it necessary to test the normality (Mamid, 2008). Testing the normality of the data was done by checking skewness and kurtosis ratio. The data are considered reasonably normal if the kurtosis values are lower than 10 and skewness values are lower than 3 (Kline, 1998). The basic assumptions of the regression analyses were investigated and presented in Chapter Four of this study, where the results were explained by using tables and figures.

3.4 Operation Definitions and Measurement of Variables

As shown in the research hypotheses, this study has a number of corporate governance variables (ownership structure, board characteristics, audit committee, and auditor quality), company attributes (company size and debt contracts) and accounting conservatism. The following sections explain how these variables are measured.

3.4.1 Corporate Governance

In this study, corporate governance mechanisms are highlighted as the significant factors that influence the quality of the financial reports. The corporate governance mechanisms under study are as follows:

3.4.1.1 Ownership Structure

This study seeks to examine four types of ownership (institutional, foreign, family and managerial ownership). Governmental (state) ownership was excluded from this study, because Al-Fayoumi *et al.* (2010) reported that the proportion of government ownership

in Jordanian market is relatively small, and thus, they mentioned that the Jordanian firms in their entirety are private firms.

3.4.1.1.1 Institutional Ownership

Institutional ownership was measured as a ratio, natural number of shares held by institutional investors, such as banks or insurance companies. According to Al-Najjar (2010), institutional ownership is calculated by dividing the natural logarithm of the number of shares that are held by the institutions to the gross number of firm's shares.

3.4.1.1.2 Foreign Ownership

Foreign ownership is considered an additional dimension because of its importance in Jordanian environment as an emerging market (Alkhaldeh, 2012). According to Ali, Salleh and Hassan (2008) and Klai and Omri (2011), foreign ownership was calculated as the percentage of shares held by foreigners to total number of firm's shares.

3.4.1.1.3 Family Ownership

This study uses family ownership to reflect a significant aspect of ownership structure that explains the cultural environment of Jordan. According to Alkhaldeh (2012), family ownership was calculated as the percentage of shares held by families to gross number of firm's shares.

3.4.1.1.4 Managerial Ownership

Managerial ownership is often used to refer agency problems among firm managers and its shareholders (Shuto & Takada, 2010). Following the previous studies, managerial

ownership was calculated as the percentage of shares owned by directors on the board to the gross number of firm's shares (Teshima & Shuto, 2008; Shuto & Takada, 2010).

3.4.1.2 Board Characteristics

This study examines six characteristics of board, namely independence, size, CEO duality, financial expertise, tenure and multiple directorships.

3.4.1.2.1 Independence

Board independence was measured as the number of outside directors as a proportion of board size (Hayes, Mehran & Schaefer, 2004; Klein, 1998). In order for the board member to be “truly independent”, outside directors should not be connected with the immediate family of the members of the management” (Sanda, Garba & Mikailu, 2011). Outside directors are “directors that do not participate in the management of the firm presently or in the past, or that are not the relatives of management or controlling shareholders" (Choi, Park & Yoo, 2007). Therefore, this study utilizes this measurement for board independence.

3.4.1.2.2 Size

According to the prior studies, board size refers to the total number of board of director members. For example, Ahmed and Duellman (2007), Lam and Lee (2008) and Krishnan and Visvanathan (2008) used similar measurement for board size. This study uses the total number of board members to measure the board size because in the literature there are two competing views about the effects of board size (Ahmed & Duellman, 2007).

Therefore, this measurement is widely employed by previous studies (e.g. Ahmed & Duellman, 2007; Lam & Lee, 2008; Krishnan & Visvanathan, 2008).

3.4.1.2.3 CEO Duality

The duality occurs when the Chief Executive Officer CEO serves as the chairman of the same firm board. Dichotomous variable was used in this study, score 1 if the functions of the CEO and chairman were combined and 0 otherwise (Ahmed & Duellman, 2007).

3.4.1.2.4 Financial Expertise

Financial expertise was measured as the gross members of board of director with financial expertise on the firm board divided by the gross number of the board of director members (Bedard *et al.*, 2004; Saleh *et al.*, 2007). Financial expertise is the experience or qualifications in finance or accounting, including those directors who are the members of accounting or auditing professional bodies. This definition covers directors who are the current or previous chief financial officers, auditors and former accountants.

3.4.1.2.5 Tenure

Previous studies have computed board tenure as the gross number of years of service divided by the gross number of independent members on the board (e.g. Chtourou, Bedard & Courteau, 2001; Peasnell, Pope & Young, 2001; Rahman & Ali, 2006). This measurement also refers to the competence of the board (Chtourou *et al.*, 2001; Peasnell *et al.*, 2001). Therefore, this study utilizes this measurement for board tenure.

3.4.1.2.6 Multiple Directorships

According to the previous studies, multiple directorships was computed as a dummy variable equal to one if 50% or more of the board's members individually hold two or more directorships and 0 otherwise (Fich, & Shivdasani, 2006). Some of the previous studies have used average number of additional directorships as a measure of multiple directorships (Ahmed & Duellman, 2007). On the other hand, Fich and Shivdasani (2006) reported that an average number of directorships are a noisy proxy as the number of directorships is widely dispersed, and most firms did not provide a clear number of the directors' additional directorships.

3.4.1.3 Audit Committee

Audit committee was measured in the current study by the existence of audit committee in the firm, coded 1 if the firm has audit committee and coded 0 otherwise. This measurement was employed by previous studies such as Goodwin and Seow (2002), and Gulzar and Wang (2011). However, most Jordanian companies did not follow the requirements of corporate governance. For example, Abu-Haija (2012) found that only 48.22% of industrial companies in Jordan have an audit committee.

3.4.1.4 Auditor Quality

3.4.1.4.1 Auditor Independency

Non-audit fees NAS were used as indicator for the auditor independence. Dichotomous variable was used in this study; a score of 1 is awarded if the percentage of NAS to total fees paid to the external auditor during year is below 20% and 0 otherwise. This

measurement is supported by the literature (Myers, Myers & Omer, 2003; Choi & Doogar, 2005; Ghosh & Moon, 2005; Basioudis, Papakonstantinou & Geiger, 2008) in applying a 1:5 or (20%) ratio limit. That is, if the percentage of NAS to total fees is below 20%, then independence of auditor is not impaired and the quality of auditor is higher.

3.4.1.4.2 Brand Name

This study uses audit firm size to measure the auditor brand name. Therefore, dichotomous variable is used in this study is awarded a score of 1 in case of the external auditor is appointed by a Big-4 audit firm, and score 0 otherwise. This study uses the audit firm size to measure the auditor brand name for many reasons. First, there is a general perception that Big-4 audit firms are of a higher quality than Non-Big 4 audit firm, because Big-4 have more access to knowledge and resources than Non-Big 4 audit firms. Second, Big-4 audit firms are more potentially to employ higher quality standards to maintain reputational capital than Non-Big-4 audit firm (Balsam *et al.*, 2003; Francis, 2004; Caramanis & Lennox, 2008).

3.4.1.5 Company Attributes

This study examines two attributes of the company, namely company size and debt contract.

3.4.1.5.1 Company Size

This study follows the previous literature to measure the company size (Ismail & Chandler, 2005; Alsaeed, 2006). The gross assets of firm (a natural logarithm of gross assets) were used as a measurement of company size. In addition, such measure is commonly used in the literature (Alsaeed, 2006).

3.4.1.5.2 Debt Contract

In this study, debt contracts were measured by the financial leverage. Leverage is calculated as the percentage of total firm's debt/total firm's assets, this measurement was used as an index of the size of the firm's debt.

3.4.2 Measurements of Accounting Conservatism

This study uses one measurement of accounting conservatism; accrual-based which introduced by Givoly and Hayn (2000) and used also by Ahmed, Billings, Morton, and Stanford-Harris (2002) and Krishnan and Visvanathan (2008).

The justifications for using accrual-based to measure the conservatism, because it is likely to introduce less value of the measurement error compared with other measures. In other words, this may be a better and more accurate measure of conservatism according to Hui, Matsunaga and Morse (2009). They (Hui *et al.*, 2009) examined the sensitivity of three measures of conservatism which are total accrual proposed by Givoly and Hayn (2000), Basu (1997) model, and finally, they use aggregate measure by adding both of

above measures to develop aggregate measures of conservatism, and they documented that the accrual is better and more accurate measure of conservatism.

On the other hand, accrual-based measure captures the discretion of managers on accounting choices, which highly affected by conservatism demands, such as taxes, regulation, litigation and contracting, all of these explanations are discussed in more details in Chapter Two.

3.4.2.1 Accrual-Based Conservatism (ACCR)

Accruals occur when durations in which net income overrides operating cash flow is predicted to be followed by the durations with negative (positive) accruals (Givoly & Hayn, 2000). Companies with a stable state are expected to have stable accruals in the previous durations to cash flow from operation in the following durations. Therefore, a consistent dominance of negative accruals of firms over duration of time is refers to conservatism.

The accrual ACCR equals income before (extraordinary items and discontinued operations), plus depreciation expenses and minus operating cash flows and deflated by total assets. The value of accrual is averaged over a three-year period centered at year t , and multiplied by -1 and referred to as ACCR. The conjecture underlying this measure is that conservative reporting will lead to persistently negative accruals (Billings, Morton, & Stanford-Harris, 2002; Givoly & Hayn, 2000; Duellman, 2006).

We multiply the accrual value by -1 so it is increasing in the amount of negative accruals. In addition, the value of accrual is averaged over a three-year period because the periods less than three years would be less adequate to measure conservatism as persistently negative amount of accruals (Ahmed, *et al.*, 2002). The use of accruals before depreciation ignores any conservatism in a firm's depreciation calculation (Givoly & Hayn, 2000). The simple form is shown as follows:

$$Accruals = \frac{Income + Depreciation Expenses - Operating Cash Flows}{Total assets}$$

$$ACCR = (Accruals/3 years) *(-1)$$

Accrual-based measure as developed by (Givoly & Hayn, 2000) has chosen to measure accounting conservatism because there has not been a detected in the literature on any possible biases in this measure, as well as this measurement is more sophisticated than other measurements (Wang, 2009).

3.5 Chapter Summary

The first section of this chapter presents the framework of the current study. Five independent variables were identified, which are ownership structure, board characteristics, audit committee, auditor quality and company related attributes. The predicted effect of these variables on conservatism practices was illustrated under the hypotheses development section. There are five main hypotheses altogether; as for

corporate governance mechanisms, the first four hypotheses test the relationship between the (ownership structure, board characteristics, audit committee and auditor quality) and the conservatism and the final hypothesis tests the relationship between company attributes (company size and debt contract) and conservatism. The methodology used in the current study was presented in this chapter also. There is one type of data that was used in the current study namely, secondary data. Firms listed on Amman Stock Exchange, for the years of 2009 to 2011 were used as a study population.

CHAPTER FOUR

ANALYSIS AND FINDINGS

4.0 Introduction

This chapter shows the findings of the data analysis that are related to the topic under investigation: The mechanisms of corporate governance which are ownership structure, board characteristics, audit committee and auditor independence and company related attributes on the conservatism practices in Jordan. This chapter contained the eight sections; these sections are organised as follows: Section 4.1 shows the assumptions of regression analysis. The descriptive statistics of the variables is offered in section 4.2, while section 4.3 reviews and discusses the Pearson Correlation matrix of the variables. Section 4.4 presents the multiple regression analysis. Section 4.5 reviews the test of research hypotheses. Summary of hypotheses testing is presented in section 4.6. Additional analyses are offered in section 4.7. Finally, a summary of the current chapter is provided in the last section.

4.1 Regression Assumptions

A data analysis for the study model is based on the regression analysis. Thus, before the regression analyses are performed, the assumptions that related to the multiple regression analyses are checked. These assumptions are outliers, normality, linearity, multicollinearity, autocorrelation and homoscedasticity (Coakes & Steed, 2003; Hair, Black, Babin & Anderson, 2010).

4.1.1 Outliers Detecting

Outliers are cases with extreme values with respect to a single variable. It is common to define outliers as cases which are more than plus or minus three standard deviations from the mean of the variable (Tabachnick & Fidell, 2001). There are various methods to test outliers. This study employs two methods which are Mahalanobis Distance and standardised residuals which are widely used in previous studies to check for outliers. Accordingly, outliers problem occur if the Mahalanobis Distance values exceeds a critical value obtained from statistical tables (Tabachnick & Fidell, 2007). In the current study, it was found that the critical value of chi-square by using the number of independent variables as the degrees of freedom is 39.252 at alpha level of 0.001. In this study, the maximum value of Mahalanobis Distance value is 36.131 as shown in Table 4.1, which did not exceed the critical value. Thus, there is no problem of outliers in the current study.

Another test to examine the presence of outliers was done by looking whether cases have standardized residuals value greater than 3.0 or lower than -3.0. Based on Hair *et al.* (2010), in a normally distributed sample, it is acceptable for 1 percent of cases to fall outside this range. In the current study, the result shows that the cases did not fall outside the range.

In addition, to test whether cases have any major impact on the whole model, the value of Cook's Distance was checked and cases with value more than 1 are a potential problem (Tabachnick & Fidell, 2007). In this study, the results show that the maximum value of

Cook's Distance is 0.023. Thus, according to these statistics, the outliers' assumption is met. The result is shown in Table 4.1.

Table 4.1
Mahalanobis Distance Test and the Value of Cook's Distance

| | Minimu m | Maximu m | Mean | Std. Deviation | N |
|--------------------------------------|---------------------|---------------------|-------------|---------------------------|----------|
| Predicted Value | 127.23 | 267.05 | 184.97 | 21.970 | 348 |
| Std. Predicted Value | -2.629 | 3.736 | .000 | 1.000 | 348 |
| Standard Error of Predicted Value | 7.598 | 17.056 | 11.399 | 1.697 | 348 |
| Adjusted Predicted Value | 127.11 | 267.48 | 184.31 | 22.097 | 348 |
| Residual | -108.464 | 95.042 | .000 | 50.924 | 348 |
| Std. Residual | -2.080 | 1.823 | .000 | .977 | 348 |
| Stud. Residual | -2.108 | 1.889 | .006 | 1.001 | 348 |
| Deleted Residual | -111.366 | 102.236 | .668 | 53.494 | 348 |
| Stud. Deleted Residual | -2.119 | 1.896 | .006 | 1.002 | 348 |
| Mahal. Distance | 6.371 | 36.131 | 15.954 | 5.104 | 348 |
| Cook's Distance | .000 | .023 | .003 | .003 | 348 |
| Centered Leverage Value | .018 | .104 | .046 | .015 | 348 |

4.1.2 Normality

Normality means that the distribution of the residual (or error) is normally distributed. Normality is needed in order to test valid hypothesis (Hair *et al.*, 2010). Testing the normality of the data can be done by checking Skewness and Kurtosis ratios. The data are considered reasonably normal if the kurtosis values are lower than 10 and skewness values are lower than 3 (Kline, 1998). As shown in Table 4.2, all skewness values of all the variables are lower than 3 and the kurtosis values are lower than 10. In addition, various graphs based on predicted residuals were employed to test the normality

assumption such as the standardized normal probability plot and histogram of residuals as referred in Figure 4.1.

Table 4.2
Normality Test

| | N | Skewness | | Kurtosis | |
|---------|-----|-----------|------------|-----------|------------|
| | | Statistic | Std. Error | Statistic | Std. Error |
| Owinst | 348 | -.551 | .131 | .291 | .261 |
| Owforei | 348 | .100 | .131 | -.313 | .261 |
| Owfam | 348 | -.763 | .131 | -.199 | .261 |
| Owman | 348 | .337 | .131 | -.691 | .261 |
| Bind | 348 | -.375 | .131 | -.233 | .261 |
| Bsiz | 348 | -.438 | .131 | -.061 | .261 |
| Bceo | 348 | -.524 | .131 | -1.575 | .261 |
| Bfix | 348 | -.129 | .131 | -.496 | .261 |
| Bten | 348 | -.057 | .131 | -.575 | .261 |
| Bmult | 348 | -.013 | .131 | .089 | .261 |
| AC | 348 | -.231 | .131 | -1.766 | .261 |
| Auind | 348 | .437 | .131 | -1.819 | .261 |
| Aubra | 348 | -.600 | .131 | -1.312 | .261 |
| Csiz | 348 | .340 | .131 | -.291 | .261 |
| Cdeb | 348 | .483 | .131 | -.738 | .261 |
| Accrual | 348 | .273 | .131 | -.230 | .261 |

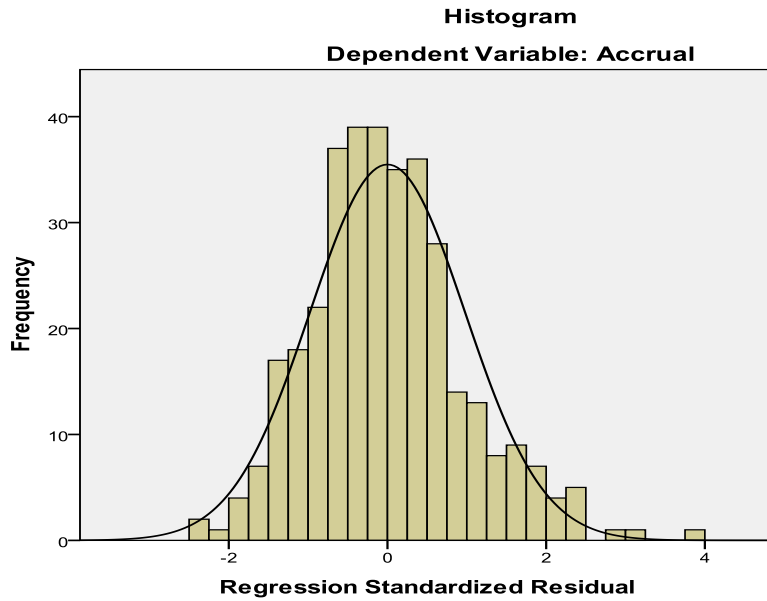


Figure 4.1
Histogram

4.1.3 Linearity

The purpose of testing linearity is to test the linear relationship among dependent and independent variables and because the term of correlation is based on a linear relationship, thus making it a stringent issue in regression analysis (Hair *et al.*, 2010).

To test the linearity among the independent and dependent variables, the standard deviation of the residuals with the standard deviation of the dependent variable must be compared (Hair *et al.*, 2010). Additionally, an examination of the scatter plots of residuals versus a predicted value (Figure 4.2) showed that the relationship among predicted and residuals values is not clear, which means no violation of linearity assumption.

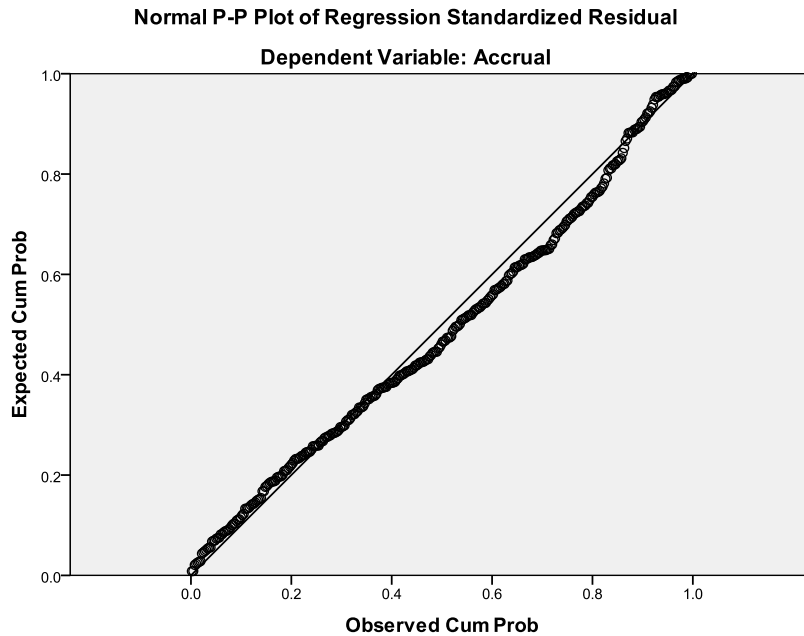


Figure 4.2
Normal P-P Plot of Regression Stand (DV: Accrual)

4.1.4 Multicollinearity

Multicollinearity means the inter-correlation of the independent variables (Tabachnick & Fidell, 2007). Hence, it could occur if there is high correlation between the independent variables in the regression model. There are two ways to test the multicollinearity. The first is to check the correlation between the independent variables. According to Hair *et al.* (2010) and Tabachnick and Fidell (2007), a multicollinearity problem occur if the correlation among independent variables exceed 0.9.

The Pearson Correlations shown in Table 4.3 indicated that the highest level of correlation was between audit committee (AC) and board CEO duality (BCEO) at 0.313 and between audit committee (AC) and board multiple directorships (BMULT) at

.288. The correlation on the other hand is between auditor independence (AUIND) and audit committee (AC) at 0.272.

The second way to test the multicollinearity is by testing the Tolerance and variance inflation factor (VIF). It is not necessarily to detect the Multicollinearity by looking to the correlations matrix between variables (Hamilton, 2009). The high VIF value refers to a high degree of collinearity or multicollinearity between the variables. According to Hair *et al.* (2010), the tolerance (TOL) should be above 0.10 and (VIF) should be less than 10 to indicate no multicollinearity between the independent variables. As reported in Table 4.4, there is no multicollinearity between the variables of this study. Table 4.4 shows that the values of VIF range from 1.059 to 1.384 and the values of tolerance range from 0.723 to 0.945. These results indicate that multicollinearity is not a problem in this study.

Table 4.3

Pearson Correlation Coefficients

| | Accrual | Owforei | Owfam | Owman | Bind | Bsiz | Bceo | Bfix | Bten | Bmult | AC | Auind | Aubra | Csiz | Cdeb | |
|----------------|----------------|----------------|--------------|--------------|-------------|-------------|-------------|-------------|-------------|--------------|-----------|--------------|--------------|-------------|-------------|---|
| Accrual | | | | | | | | | | | | | | | | |
| Owforei | .104 | | | | | | | | | | | | | | | |
| Owfam | .094 | -.061 | | | | | | | | | | | | | | |
| Owman | -.064 | -.033 | -.014 | | | | | | | | | | | | | |
| Bind | .264** | -.049 | -.064 | .083 | | | | | | | | | | | | |
| Bsiz | -.075 | -.064 | -.055 | -.118* | .091 | | | | | | | | | | | |
| Bceo | .125* | .054 | .026 | -.078 | -.045 | -.163** | | | | | | | | | | |
| Bfix | .208** | .086 | .044 | -.126* | .029 | .049 | .041 | | | | | | | | | |
| Bten | .194** | .035 | .091 | .049 | -.010 | -.055 | -.155** | .013 | | | | | | | | |
| Bmult | .169** | -.079 | -.036 | .021 | -.005 | .054 | .100 | -.018 | .151** | | | | | | | |
| AC | .282** | -.040 | .062 | .014 | -.078 | -.086 | .313** | .152** | .097 | .288** | | | | | | |
| Auind | .194** | -.070 | .108* | -.049 | .032 | .024 | .164** | -.045 | -.024 | .134* | .272** | | | | | |
| Aubra | -.183** | -.106* | .110* | .128* | -.220** | -.023 | .120* | -.198** | .052 | .089 | .056 | -.163** | | | | |
| Csiz | -.102 | -.112* | .021 | .094 | .043 | -.052 | -.044 | -.204** | -.006 | .019 | .097 | .046 | .048 | | | |
| Cdeb | -.066 | -.033 | .044 | .072 | .089 | .038 | -.071 | -.042 | .168** | -.013 | -.046 | .038 | .104 | .054 | | 1 |

Table 4.4
Testing for Multicollinearity

| Variable | Tolerance | VIF |
|-----------------|------------------|------------|
| Owinst | .919 | 1.088 |
| Owforei | .945 | 1.059 |
| Owfam | .943 | 1.061 |
| Owman | .919 | 1.088 |
| Bind | .900 | 1.111 |
| Bsiz | .917 | 1.090 |
| Bceo | .775 | 1.290 |
| Bfix | .850 | 1.177 |
| Bten | .878 | 1.139 |
| Bmult | .867 | 1.153 |
| AC | .723 | 1.384 |
| Auind | .831 | 1.204 |
| Aubra | .795 | 1.257 |
| Csiz | .912 | 1.097 |
| Cdeb | .929 | 1.076 |

4.1.5 Autocorrelation

Autocorrelation, also called serial-correlation, this test refers to the correlation of error components across time periods (Kazmier, 1996). This term violates the classical assumption of regression analysis. Wooldridge (2003) reported that autocorrelation test is a reasonable feature of error term in time series analysis. Autocorrelation test is employed in order to check if the sample data set is generated from random processes. Kazmier (1996) stated that the value Durbin-Watson (DW) can range from 0 to 4. If DW value is less than 1.4, it refers to a strong positive series problem (autocorrelation problem), while a value bigger than 2.6 refers to a strong negative series problem of autocorrelation.

As shown in Table 4.5, the value of DW is 1.861, which means that there is no problem of autocorrelation between sample data.

Table 4.5
Autocorrelation Test

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|--------------|-------------------|-----------------|--------------------------|-----------------------------------|----------------------|
| 1 | .557 ^a | .310 | .279 | .13580496 | 1.861 |

4.1.6 Heteroscedasticity

To check the existence of heteroscedasticity, residuals were plotted against the predicted value to determine whether the error terms have constant variances. The distribution of residuals can be shown from the Scatter plot Graph as offered in Figure 4.3.

According to the results of the test for heteroscedasticity, it can be seen from Figure 4.3 that the scatter of our data does not form a certain style and data is scattered around the null number. The scatter plot graphs refer that the data used in this study (full sample) are considered free from heteroscedasticity (Hair *et al.*, 2010).

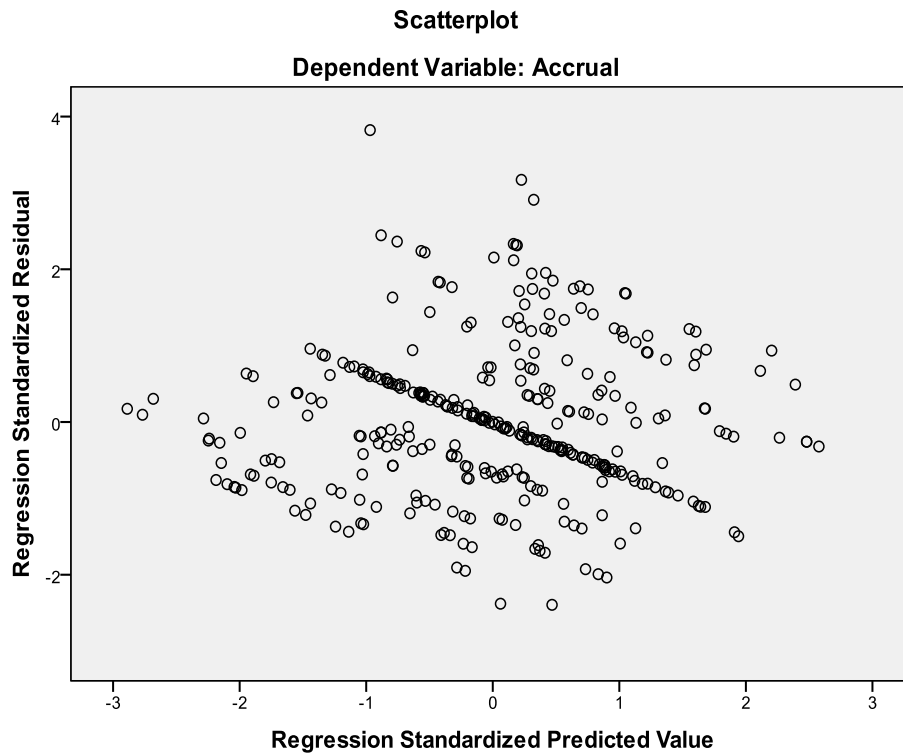


Figure 4.3
Scatter Plot (DV: Accrual)

4.2 Descriptive Statistics

Table 4.6 shows descriptive analysis for 348 firm-year observations that met the necessary data for years of 2009 to 2011. The average value of the ACCR is $-.002$. This value is lower than the average value of accrual conservatism at 0.010 and $-.004$ which reported by Ahmed and Duellman (2007) and Ahmed, Billings, Morton and Stanford-Hars (2002) respectively. This contradiction might have driven to various institutional factors, such as the structure of ownership; as Jordanian firms' ownership structure is highly concentrated to large shareholders in contrast to vastly held ownership structure in US. This ratio implies that the level of conservatism amongst Jordanian firms is low.

The descriptive statistics reported that the mean of institutional ownership (OWINST) was 83.4%. This value was compared with the results in other countries. For example, Ramalingegowda and Yu (2012) who examined U.S firms reported a mean institutional ownership of 60.9% while Alfaraih, Alanezi and Almujaed (2012) who examine Kuwaiti firms found an average of 55%. The agency theory reported that the higher the percentage of institutional investors or greater concentrated ownership, the greater the monitoring function of these investors, and thus the greater the opportunity for better financial performance (Alkhaldeh, 2012).

The mean value of foreign ownership (OWFORE) is 41.8% with a maximum value of 83%. The mean value is medium. Zeitun and Tian (2007) reported a mean value for the foreign ownership in Jordanian firms was at 58.38%. Ali, Salleh and Hassan (2008) found the mean at 53.99% in Malaysia. Jiang and Kim (2004) found 10.89% as an average of foreign owners in Japanese firms with maximum value 53.95%. This result indicates approximately half of companies' shares are owned by foreigners, which may give them the opportunity to monitor these companies closely in the future and take part in decision-making (Zureigat, 2011).

The average of family ownership (OWFAM) in the current study is 28.7%. This result is higher than result of Chen and Hsu's (2009) who reported that 21.92% as an average of family owners in Taiwanese firms. Such finding means that family firms seek carefully to monitor the opportunistic activities of managers, thereby are efficient in their business and investment (Chen & Hsu, 2009).

The mean value of managerial ownership (OWMAN) is 48%. This result is almost close to Gharaibeh, Zurigat and Al-Harabsheh (2013) who examined Jordanian firms and found the average at 47.2%. This value indicates that almost half of the Jordanian firms are owned by managers. Average value of OWMAN found in this study (and compared with other Jordanian studies) is quite high than those values that are reported by studies in other countries. For example, LaFond and Roychowdhury (2008) who examined U.S companies and found a mean of managerial ownership of 4.5%. Such finding creates concerns whether the managers may employ their controlling power for personal benefits as argued by Yeo *et al.* (2002). Fama and Jensen (1983) have confirmed that managerial ownership can negatively affect the agency relationship (among the shareholders and managers) and managerial ownership is considered a major source of significant agency costs. Some researchers predicted that the demand for more conservatism practices emerging from agency problems among shareholders and managers differs negatively with managerial ownership (Barclay, Gode & Kothari, 2005; LaFond & Roychowdhury, 2008).

Regarding to the board characteristics, the mean value of board independence (BIND) is 63.4% which indicated that most of Jordanian firms had complied with the requirements of the Jordanian Corporate Governance Code to have an independent directors in their boards to assure the availability of objective decisions. The average board size (BSIZ) is 9.083 members with a standard deviation of 2.57 are compatible with Lipton and Lorsch (1992) who suggested that the members of boards should be ten people, and they preferred size of eight or nine. Our result is similar to Jaafar and El-

Shawa (2009) who reported that the average board size is 8.58 members in Jordanian firms.

Approximately 62.9% of the sample has a chairman of the board who is the current CEO. This value is considered large and we can assume that the combining role of CEO and chairman is one reason for less level of conservatism (Daily & Dalton, 1997) and they agreed with the agency theory in preferring the separation of roles between CEO and chairman. In respect of financial expertise, an average 23.9% of the board of director members had financial expertise (BFI). The zero minimum value for the BFI indicated that there were companies which did not have financial expertise on their boards. An analysis of the sample firms showed that 5 firm-year observations (1.4%) did not have financial expertise. The average tenure of independent directors on the board (BTEN) was almost 8.401 years; the longest period was almost 14.4 years.

The average number of directors who have multiple directorships (BMULT) was 57.7%. This ratio is almost similar to Jaafar and El-Shawa (2009) who reported that the average multiple directorships in Jordanian listed firms was 46.03%. This value (57.7) is considered high compared with Ahn, Jiraporn and Kim (2011) who found the average at 11.76% in U.S firms, On the other hand, Latif, Kamardin, Mohd and Adam (2013) reported that the average directorship in public and non-public listed Malaysian companies was 34.3%. Multiple directorships are an attribute of strong governance. Additionally, the directorships on the boards of other companies would improve the directors' knowledge that leads to more demand of conservatism. Jaafar and El-Shawa

(2009) argued that multiple directorships have a positive and significant effect on Jordanian firm performance. This result is consistent with the assumption that companies benefit from appointing directors with multiple directorships, through the expertise and knowledge of board members, and the opportunities they can provide for establishing networks with other companies and the external environment.

The average of Jordanian firms which have audit committee (AC) was 55.5%. This indicates that the presence of an audit committee can be perceived as suggesting higher quality control and should have a major effect on reducing the likelihood of financial report fraud. This result is near to Abu-Haija (2012) who found that 48.22% of industrial companies in Jordan have an audit committee. Beasley (1996) reported that 63% of the non-fraud firms in U.S. have an audit committee while 41% of the fraud firms have an audit committee. Our result suggests that there is a lack of commitment in applying the governance rules that require companies to establish an audit committee, where 150 or 43.1% of Jordanian companies did not have an audit committee.

The average of auditor independence (AUIND) was 39.4%. It is higher than Amir, Guah and Liven (2009) who examined U.S. firms and found that 29% of the external auditors were independent. Meanwhile, Rapani (2011) found an average of 59.06% in Malaysian Public Listed Firms from 2003 to 2007. This level (39.4%) means that there is a violation of auditor independence which negatively affects the quality of financial reporting (Olazabal & Almer, 2001). The average of auditor brand name (AUBRA) is 64.4% with a standard deviation of 0.4117. This means that 64.4% of the financial reports of the

Jordanian firms have been audited by the big firm (Big 4 or local firms with international affiliations). Rapani (2011) showed the average of auditor brand name at 59.06% in Malaysian firms. Company size (CSIZE) has an average at 16.742%, this ratio is similar to Al-Najjar and Taylort (2008) who reported that the average of Jordanian firms was 16.15. The average of the company debt contract (CDEBT) was 48.4%. This ratio is slightly higher than the ratio that found by Jaafar and El-Shawa (2009) who reported that the average debt contract in Jordanian listed firms was 37%. The reason for this difference is due to the difference in the study period, where their study was between of 2002 to 2005.

Based on the above mentioned review regarding to the descriptive statistics for the variables of the study, we conclude some important points. As for the level of conservatism in Jordanian firms, as shown in Table 4.6 the average value of accrual was -.002 with minimum and maximum -0.321 and 0.450 respectively. These values indicate that the level of conservatism practices in Jordanian firms is low.

The minimum value of board independence was .10, which means that some companies contained an insufficient proportion of independent members in their Boards. On the other hand, Some of companies were have minimum 3 members or maximum 14 members in their board of directors, while the requirements of corporate governance in Jordan has defined number of board members, should be at least five to thirteen members (JSC, 2009). In addition, 62.9% of the companies have a duality of roles between the CEO/chairman, where the rules of corporate governance in Jordan require the separation

of these roles. As for financial expertise, the descriptive statistics shows that there is a complete absence of financial expertise among the members of the board of directors for some of Jordanian companies. Regarding to the audit committee, Table 4.6 shows that 44.5% of Jordanian companies do not have an audit committee. Accordingly, we conclude from the previous review that there are violations for the most requirements of corporate governance, and that the level of application of the rules of corporate governance in the Jordanian companies still weak.

Table 4.6
Descriptive statistics

| Variable | N | Minimu m | Maximu m | Mean | Std. Deviation |
|-----------------|----------|---------------------|---------------------|-------------|-----------------------|
| Accrual | 348 | -.321 | 0.450 | -.002 | .1600 |
| Owinst | 348 | 0.673 | 0.933 | .834 | .0480 |
| Owforei | 348 | 0.020 | 0.820 | .418 | .1736 |
| Owfam | 348 | 0.000 | 0.440 | .287 | .1126 |
| Owman | 348 | 0.090 | 0.850 | .480 | .1853 |
| Bind | 348 | .100 | 1.000 | .634 | .2054 |
| Bsiz | 348 | 3.000 | 14.000 | 9.083 | 2.5726 |
| Bceo | 348 | 0.000 | 1.000 | .629 | .4474 |
| Bfix | 348 | 0.000 | 0.440 | .239 | .0982 |
| Bten | 348 | 2.050 | 14.400 | 8.401 | 2.8773 |
| Bmult | 348 | 0.000 | 1.000 | .577 | .1831 |
| AC | 348 | 0.000 | 1.000 | .555 | .4517 |
| Auind | 348 | 0.000 | 1.000 | .394 | .4893 |
| Aubra | 348 | 0.000 | 1.000 | .644 | .4117 |
| Csiz | 348 | 12.120 | 22.600 | 16.742 | 2.4944 |
| Cdeb | 348 | 0.186 | 0.900 | .484 | .1954 |

4.3 Correlation Analysis

Hair *et al.* (2010) indicate that correlation interprets the importance and strength of non-random relationship between two variables. This study employs bivariate correlation and calculates Pearson's correlation coefficient with their significance levels. The strength of relationship ranges from -1.00 to 1.00, the value of (1) refers a perfect positive relationship while the negative value of (-1) refers a perfect negative relationship. A correlation value of zero refers no relationship among the variables.

In more details, Table 4.3 demonstrates the correlations coefficients among dependent and independent variables. The coefficients for institutional (OWINST), foreign (OWFOREI) and family (OWFAM) ownership are consistent with the expectation that they demand better governance employed higher conservatism. On the other hand, the negative coefficient of managerial ownership (OWMAN) is consistent with the previous studies which mentioned that managerial ownership demands low level of conservatism.

The correlation coefficient between each board characteristics and conservatism is generally positive (except board size) as shown in Table 4.3. Board size has negative relationship with conservatism. On the other hand, the presence of an audit committee (AC) also has a positive relationship with conservatism.

Consistent with the expectation, auditor independence (AUIND) has a positive coefficient with conservatism. As contrasted with our expectations, auditor brand name (AUBRA) has a negative relationship with demand of conservatism. This result is consistent with Charles Piot and Janin (2007) who reported that the Big 5 audit firms are

not more conservative than other audit firms. On the other hand Moroney and Dowling (2005) found no association between audit firm size and the level of auditor performance.

Company size has a negative relationship with conservatism. As contrasted with our expectations also, the debt contract has a negative coefficient with conservatism; this result is similar to Sultana (2012) who found significant negative relationship between debt contract and conservatism in Australian firms. In addition, the Pearson Correlation Coefficients between the variables in Table 4.3 are lower than 0.90 based on Hair *et al.* (2010). This suggests that multicollinearity problem is not existence in the regression results.

4.4 Multiple Regression Analysis

The initial model before embarking on data collection was as follows:

$$\begin{aligned}
 ACCR_{it} = & \beta_0 + \beta_1 OWINST_{it} + \beta_2 OWFOREI_{it} + \beta_3 OWFAM_{it} + \beta_4 OWMAN_{it} + \beta_5 \\
 & BIND_{it} + \beta_6 BSIZ_{it} + \beta_7 BCEO_{it} + \beta_8 BFIX_{it} + \beta_9 BTEN_{it} + \beta_{10} \\
 & BMULT_{it} + \beta_{11} ACID_{it} + \beta_{12} ACFE_{it} + \beta_{13} ACDIL_{it} + \beta_{14} AUIND_{it} + \\
 & \beta_{15} AUBRAN_{it} + \beta_{16} CSIZE_{it} + \beta_{17} CDEBT_{it} + \varepsilon_{it}.
 \end{aligned}$$

Appendix A illustrates the definitions for the abbreviations that mentioned above. It is worth mentioning that during the data collection stage, there were lack of companies' disclosures regarding to the Audit Committee (for example the members, and their experience and number of meetings), which led to the use alternative measurement of audit committee by using binary variable (1 if company has audit committee and 0 otherwise). Consequently, the current regression model which employ to examine the

influence of ownership structure (H1a- H1d), board characteristics (H2a-H2f), audit committee (H3), auditor quality (H4a-H4b) and company attributes (H5a-H5b) on accounting conservatism (ACCR) is as follows:

$$ACCR_{it} = \beta_0 + \beta_1 OWINST_{it} + \beta_2 OWFOREI_{it} + \beta_3 OWFAM_{it} + \beta_4 OWMAN_{it} + \beta_5 BIND_{it} + \beta_6 BSIZ_{it} + \beta_7 BCEO_{it} + \beta_8 BFIX_{it} + \beta_9 BTEN_{it} + \beta_{10} BMULT_{it} + \beta_{11} AC_{it} + \beta_{12} AUIND_{it} + \beta_{13} AUBRAN_{it} + \beta_{14} CSIZE_{it} + \beta_{15} CDEBT_{it} + \varepsilon_{it}.$$

Where:

Table 4.7

Variables Description and Expected Direction for the research Model

| Symbols of variables | Description and Measurement | Predicted Direction | Relevant Hypotheses |
|------------------------------|---|----------------------------|----------------------------|
| Dependent Variable | | | |
| ACCR | Accounting Conservatism = [(income +depreciation expenses– operating cash flows)] ÷Total assets. ACCR = (Accruals / 3 years) X (-1). | | |
| Independent Variables | | | |
| Ownership Structure | | | |
| OWINST | Institutional ownership measured as ratio, “by dividing the number of shares held by the institutions to the total number of firm's shares. | + | H1a |
| OWFOREI | Foreign ownership measured as the percentage of shares held by foreigners to total number of firm's shares. | + | H1b |

Table 4.7 (Continued)

| Symbols of variables | Description and Measurement | Predicted Direction | Relevant Hypotheses |
|-----------------------------|---|----------------------------|----------------------------|
| OWFAM | Family ownership measured as the percentage of shares held by families to total number of firm's shares. | + | H1c |
| OWMAN | Managerial ownership calculated as the percentage of shares held by directors on the board to the total number of firm's shares. | - | H1d |
| BIND | Board independence measured proportion of independent directors to total directors on board. | + | H2a |
| BSIZ | Board size is the natural logarithm of total number of board members. | + | H2b |
| BCEO | Dummy variable = 1 if CEO/Chairman roles combine; 0 if separate. | + | H2c |
| BFIX | Board financial expertise measured as a percentage of board members with financial expertise to total directors on board. | + | H2d |
| BTEN | Board tenure measured as average years the independent directors served on the firm's board. | + | H2e |
| BMULT | Board multiple directorships calculated as a dummy variable equal to one if 50% or more of the board's members individually hold two or more directorships and 0 otherwise. | + | H2f |
| AC | Audit Committee measured as dummy variable = 1 if company has audit committee and 0 otherwise. | + | H3 |
| Auditor Quality | | | |
| AUIND | Auditor independence measured by non-audit fee/total fee ratio. | + | H4a |
| AUBRAN | Auditor brand name measured as dummy variable = 1 if the external auditor engaged by Big 4 firm, and 0 otherwise. | + | H4b |

Table 4.7 (Continued)

| Symbols of variables | Description and Measurement | Predicted Direction | Relevant Hypotheses |
|-----------------------------|--|----------------------------|----------------------------|
| Company Attributes | | | |
| Csize | Company size measured by log of total assets. | + | H5a |
| CDEBT | Debt Contract measured by Noncurrent liabilities/total assets. | + | H5b |

4.5 Hypotheses Testing

As mentioned in Chapter One, the objectives of the current study are to examine the relationship between corporate governance mechanisms (ownership structure, board characteristics, audit committee and auditor quality) and company attributes on accounting conservatism.

In attempting to fulfil the objectives of the study, hypotheses were developed and offered in Chapter Three. Table 4.8 shows the results of multiple regression analysis between the corporate governance mechanisms and accounting conservatism.

Table 4.8
OLS Regression Results

| Variables | Relevant Hypotheses | Expected Signs | Standardize d | | |
|-------------|-----------------------|----------------------|---------------|---------|-------|
| | | | Coefficients | T | Sig. |
| | | | Beta | | |
| Owinst | H1a | + | .128 | 2.689 | .008 |
| Owforei | H1b | + | .101 | 2.150 | .032 |
| Owfam | H1c | + | .090 | 1.909 | .057 |
| Owman | H1d | - | -.045 | -.946 | .345 |
| Bind | H2a | + | .280 | 5.834 | .000 |
| Bsiz | H2b | + | -.079 | -1.671 | .096 |
| Bceo | H2c | + | .069 | 1.338 | .182 |
| Bfix | H2d | + | .105 | 2.119 | .035 |
| Bten | H2e | + | .167 | 3.427 | .001 |
| Bmult | H2f | + | .086 | 1.759 | .079 |
| AC | H3 | + | .189 | 3.520 | .000 |
| Auind | H4a | + | .109 | 2.177 | .030 |
| Aubra | H4b | + | -.093 | -1.814 | .071 |
| Csiz | H5a | + | -.085 | -1.776 | .077 |
| Cdeb | H5b | + | -.091 | -1.926 | .055 |
| DV= Accrual | R ² = .310 | Adj R ² = | F-Ratio = | Sig F = | N=348 |
| | | .279 | 9.959 | 0.000 | |

Table 4.8 shows the model is significant ($F = 9.959$) ($\text{Sig } F = 0.000$). The model explained 27.9% of the variation in the accrual conservatism (Adjusted R^2 27.9%). This adjusted R^2 is higher than the R^2 that reported by Shuto and Takada (2010) and Ahmed and Duellman (2007) at 14% and 12.96% respectively. The following section provides the results of the relationship among the variables under study as hypothesised in Chapter Three.

4.5.1 Ownership Structure and Accounting Conservatism

Table 4.8 shows the results of the relationship between ownership structures (institutional, foreign, family and managerial ownership) and accounting conservatism in Jordanian listed companies (H1a to H1d).

Hypothesis 1a (H1a)

As seen from Table 4.8, the institutional ownership (OWINST) has a positive direction as predicted and it is significant at 5 % ($t = 2.689$, $P = .008$). The evidence shows that the institutional ownership contributes positively to the accruals. Klai and Omri (2011) reported that institutional ownership has a positive relationship with the financial disclosure quality. This refers that the institutional ownership enhance the level of financial report quality and control the actions of management in terms of providing users with reliable financial information that assists them in their important decision making. According to the abovementioned result, hypothesis H1a is accepted.

Hypothesis 1b (H1b)

This study expected a positive relationship between foreign ownership and accounting conservatism. As shown from Table 4.8, the foreign ownership (OWFOREI) has a positive direction as predicted and it is significant at 5 % ($t = 2.150$, $P = .032$). The evidence shows that the foreign ownership contributes positively to the accruals. This finding is consistent with the previous studies. For example, Mohandi and Odeh (2010) who reported that firms with higher proportion of foreign ownership have a positive relationship with quality of financial report in Jordan. Therefore, according to the agency

theory that stated that foreign ownership has a positive influence on the quality of financial reports. Thus, hypothesis H1b is supported.

Hypothesis 1c (H1c)

This study expected a positive relationship between family ownership and accounting conservatism. According to the results in Table 4.8, the family ownership (OWFAM) has a positive direction as predicted, but contrary to our expectation, this relationship is not significant ($t= 1.909$, $P=.057$). The evidence shows that the family ownership has a positive contribution to the accruals. The direction of this relationship is supported by the alignment effect, which states that family owners are more probable to abandon the short-term benefits that arising from earnings management because they seek to pass their own business to their future generations. Accordingly, that means that family owners are less likely to engage in opportunistic behaviour in managing the earnings, and the long-term performance of firm. In short, they prefer high level of earning quality and thus high level of conservatism because previous literatures provided many evidences that earnings are of higher level of quality when reported earnings are more conservative (Ball *et al.*, 2000; Ball *et al.*, 2003). In summary, this insignificant relationship is inconsistent with our expectations, and thus, hypothesis H1c is not accepted.

Hypothesis 1d (H1d)

This study expected a negative relationship between managerial ownership and accounting conservatism. As seen from Table 4.8, the direction of the relationship between managerial ownership (OWMAN) and accruals is negative as predicted but not

significant ($t = -.946$, $P = .345$). This shows that the managerial ownership has a negative contribution to the accruals. This result is consistent with previous researchers who found that the demand for high level of conservatism emerging from agency problems among shareholders and managers differs negatively with managerial ownership (Barclay, Gode & Kothari, 2005; LaFond & Roychowdhury, 2008). However, contrary to our expectations, this relationship is not statistically significant. Thus, hypothesis H1d is not supported.

4.5.2 Board Characteristics and Accounting Conservatism

The six hypotheses were formulated relating to the association between Board Characteristics which are Independence, size, CEO duality, financial expertise, board tenure and board multiple directorships and accounting conservatism. In order to determine which board's Characteristics are significant, Table 4.8 was also used to display the significant and coefficients of the board's characteristics dimensions.

Hypothesis 2a (H2a)

This study expected a positive relationship between board independence and accounting conservatism. As shown in Table 4.8, board independence (BIND) has positive and significant relationship with accruals ($t = 5.834$, $P = .000$). The result suggests that board independence contributes positively to the accruals conservatism. This result is consistent with Pfeffer and Salancik (2003) who suggested that independent members on the boards could protect the resources of firms and decrease uncertainty as a result from promoting

the flow of information among the company and outside parties. Hence, hypothesis H2a is accepted.

Hypothesis 2b (H2b)

The current hypothesis suggests that there is a positive relationship between large board size (BSIZ) and accrual conservatism. Table 4.8 shows unexpected result, which suggests that the large board size has a negative and not significant effect on the accrual conservatism ($t = -1.671$, $P = .096$). This result is consistent with the results of previous studies. For example, Mak and Li (2001), Cheng (2008) and Guest (2009) who reported that large boards' size are related with weak governance and low firm performance. In addition, Lipton and Lorsch (1992) found that large board slows decision making as well as each board member might rely on others to monitor management due to the difficulties in tasks coordination. In addition, Ahmed and Duellman (2007) found that the relationship between board size and accounting conservatism was not significant in U.S. firms. Thus, hypothesis H2b is not supported.

Hypothesis 2c (H2c)

This study assumes that there is a positive relationship between the separation of roles between CEO/chairman and accounting conservatism. Table 4.8 shows that there is a positive and not significant association between CEO duality and accruals ($t = 1.338$, $P = .182$). Much evidence suggests that joint leadership structure weakened companies' governance and led to the manipulation of earnings (Dechow *et al.*, 1995; Klein, 2002). Klein (1998) found that the separation between chairman/CEO leads to enhance the

effectiveness of the board because executive directors are more aware about the company's issues than the other independent members. Agency theory suggests that the separation of duties between CEO and chairman may lead to an effective monitoring over the board process (Jensen, 1993). Our result is supported by Ahmed and Duellman (2007) and Chang (2009) who found that CEO duality was not significant with accounting conservatism and corporate performance. Thus, hypothesis H2c is rejected.

Hypothesis 2d (H2d)

This study assumes a positive relationship between financial expertise and accrual conservatism. Table 4.8 shows that the direction of the relationship between financial expertise and accrual conservatism is positive and significant ($t = 2.119$, $P = .035$). This result is consistent with our expectation, and this relationship signifies the importance of accounting and financial knowledge for directors in order to control manipulation or insure transparent financial information. This finding supports prior studies that reported that financial expertise enhance the financial reports quality (Abbott *et al.*, 2004; Agrawal & Chadha, 2005; Bedard *et al.*, 2004) and improved governance by the demand of quality audit (Yatim, Kent & Clarkson, 2006). Dickins, Hillison & Platau (2009) found that financial analysts preferred financial expertise over the non-financial expertise. Consequently, higher percentage of financial expertise on the board members leads to stronger governance. Thus, hypothesis H2d is accepted.

Hypothesis 2e (H2e)

This study predicts a positive relationship between directors' tenure and accounting conservatism. Table 4.8 shows that the length tenure (BTEN) has a positive direction and significant at 5 % as predicted ($t = 3.427$, $P = .001$). This result is consistent with Anderson and Bizjak (2003) who reported that longer tenure of the board members associated with more experience, competence and commitment, because it provides a director with important expertise and knowledge about the company and its business environment. Thus, hypothesis H2e is accepted.

Hypothesis 2f (H2f)

This study predicts positive relationship between directors with multiple directorships and accounting conservatism. Table 4.8 shows that there is a positive direction between multiple directorships and accruals, as well as not significant at 5% ($t = 1.759$, $P = .079$). This result is consistent with the finding of Lipton and Lorsch (1992) who showed that multiple directorships could negatively affect the directors capable to control and monitor the management as they are exhausted and distracted by the affairs of other organisations. Our result is also consistent with the busyness hypothesis as provided by Lipton and Lorsch (1992). They argued that busyness hypothesis implies that managers with multiple directorships are busy to participate in other committees and attended too many committee meetings. Thus, this result supports the previous result. However, contrary to our expectations, this relationship is not statistically significant. Therefore, hypothesis H2f is rejected.

4.5.3 Audit Committee and Accounting Conservatism

This study assumes a positive relationship between the presences of an audit committee in the company with accounting conservatism. Table 4.8 shows that there is a positive direction between presence of audit committees and accruals, as well as significant at 5% ($t = 3.520$, $P = .000$). Abu Haija (2012) found that the presence of audit committee negatively correlate with the manipulation in financial reports in Jordan. This result supports agency theory which assume that the existence of audit committee improve the financial reporting quality. In addition, this result is consistent with some previous studies such as Al-Thuneibat (2009), Goodwin and Seow (2002) and Wan Hussein and Abdullah (2009). For example, in Jordan, Al-Thuneibat (2009) showed that the absence of audit committee enhances illegitimate earnings management. Goodwin and Seow (2002) also reported that audit committee has a negative association with the existence of errors in financial reports and positively to management fraud detection. Wan-Hussein and Abdullah (2009) reported that big size of audit committee is related positively to the financial reporting quality in Malaysia. Thus, based on the above mentioned result, this study accepts hypothesis H3.

4.5.4 Auditor Quality and Accounting Conservatism

Two hypotheses were formulated relating to the relationship between auditor quality and conservatism. Table 4.8 displays the result of regression test between auditor quality and conservatism using accruals as a measurement of the accounting conservatism.

Hypothesis 4a (H4a)

In order to determine which auditor quality elements are significant, Table 4.8 is used to display the statistically significant and coefficients of the auditor quality elements. Auditor independence is expected to be positively associated with accruals. Table 4.8 illustrates that there is a positive direction between auditor independence and accruals, as well as significant at 5% ($t = 2.177$, $P = .030$). This result is consistent with the previous research which found that the auditor independence is responsible for the restoration of investor confidence and ensures the quality of financial reporting (e.g. Dopuch, King & Schwartz, 2003; Mayhew & Pike, 2004). Accordingly, hypothesis H4a is supported.

Hypothesis 4b (H4b)

Auditor brand name is expected to be positively associated with accounting conservatism. Table 4.8 also shows that there is a negative direction between auditor brand name and accruals, as well as not significant ($t = -1.814$, $P = .071$). This unexpected result is consistent with Charles Piot and Janin (2007) who reported that the Big 5 audit firms are not more conservative than other audit firms. In addition, Moroney and Dowling (2005) found no relationship between the size of audit firm and the level of auditor performance. Song and Wong (2005) reported that big audit firms usually tend to get significantly higher fees; these fees may include non audit services NAS. Flynn (2009) argued that a big amount of non-audit fees leads to create an economic bond among the auditors and their clients that may harm audit quality and hence the credibility of earnings. He also reported that providing of NAS increases the financial dependence of auditors on their

clients. Accordingly, big audit firm may employ less level of conservatism. Thus, hypothesis H4b is rejected.

4.5.5 Company Attributes and Accounting Conservatism

Two hypotheses were formulated relating to the relationship between company attributes and conservatism. Table 4.8 displays the result of regression test between company attributes and conservatism using accruals as a measurement of the accounting conservatism.

Hypothesis 5a (H5a)

Regarding to the company size, the results are not consistent with our predictions. Table 4.8 shows that company size has a negative direction and not significant with the accounting conservatism ($t = -1.776$ and $P = .077$). This result is supported by previous studies. For instance, Pae and Easton (2004) reported that company size does not have a significant influence on the degree of earnings conservatism and balance sheet conservatism. Lafond and Watts (2008) argue that larger firms have less information asymmetry than smaller firms, thereby, reducing the demand for conservatism. Sultana (2012) found a significant negative association between the asymmetric timeliness of accruals and firm size. In addition, Hamdan and Abzakh (2011) examined the relationship between the size of company and level of conservatism in Kuwait listed companies. They found that the financial reports of small companies were conservative. Thus, hypothesis H5a is rejected.

Hypothesis 5b (H5b)

Debt contract is expected to be positively associated with accounting conservatism Table 4.8 also shows that the relationship among debt contract and accruals is negative and not significant ($t = -1.926$ and $P = .055$). This result is consistent with Begley, Chamberlain and Kim (2009) who found no relationship between debt contract and conservatism. Al-Sahli (2009) found lack of association between debt contract and the accounting conservatism level in Saudi listed firms. Similarly, in Jordan context, Hamdan (2012a) found no association between debt contract and accounting conservatism during the preparation of Jordanian companies' financial reports. On the other hand, Gigler, Kanodia, Sapra and Venugopalan (2009) reported that conservatism reduces debt contracts efficiency by changing the accounting content and hence reducing the potential for future predictions. Hence, hypothesis H5b is rejected.

Table 4.9
Summary of Regression Analysis of Study Model

| Independent Variable | Expected Sign | Actual Sign | Coefficient | Standard Error | t- value | P- value |
|-----------------------------|----------------------|--------------------|--------------------|-----------------------|-----------------|-----------------|
| Ownership Structure | | | | | | |
| Institutional Ownership | + | + | .128 | .159 | 2.689 | .008 |
| Foreign Ownership | + | + | .101 | .043 | 2.150 | .032 |
| Family Ownership | + | + | .090 | .67 | 1.909 | .057 |
| Managerial Ownership | - | - | -.045 | .041 | -.946 | .345 |

Table 4.9 (Continued)

| Board characteristics | <i>Expected Sign</i> | <i>Actual Sign</i> | <i>Coefficient</i> | <i>Standard Error</i> | <i>t- value</i> | <i>P- value</i> |
|------------------------------|----------------------|--------------------|--------------------|-----------------------|-----------------|-----------------|
| Board Independence | + | + | .280 | .037 | 5.834 | .000 |
| Board Size | + | - | -.079 | .003 | -1.671 | .096 |
| Board CEO Duality | + | + | .069 | .019 | 1.338 | .182 |
| Financial Expertise | + | + | .105 | .080 | 2.119 | .035 |
| Board Tenure | + | + | .167 | .003 | 3.427 | .001 |
| Board Multiple Directorships | + | + | .086 | .043 | 1.759 | .079 |
| Audit Committee | | | | | | |
| Auditor Quality | | | | | | |
| Independence | + | + | .109 | .016 | 2.177 | .030 |
| Brand Name | + | - | -.093 | .020 | -1.814 | .071 |
| Company Attributes | | | | | | |
| Size | + | - | -.085 | .003 | -1.776 | .077 |
| Debt Contract | + | - | -.091 | .039 | -1.926 | .055 |

4.6 Summary of Hypotheses Testing

Table 4.10 summarises the results of hypotheses testing of the study.

Table 4.10

Results Summary of Hypothesis 1 to Hypothesis 5

| Number | Hypothesis | Results |
|---------------|--|----------------------|
| H1a | Institutions ownership has a positive relationship with accounting conservatism. | Supported |
| H1b | The relationship between foreign ownership and accounting conservatism in a positive direction. | Supported |
| H1c | The relationship between family ownership and accounting conservatism in a positive direction. | Not Supported |
| H1d | The relationship between managerial ownership and accounting conservatism in a negative direction. | Not Supported |
| H2a | The relationship between board independent and accounting conservatism in a positive direction. | Supported |
| H2b | The relationship between large board size and accounting conservatism in a positive direction | Not Supported |
| H2c | There is a positive relationship between the separation between CEO/ chairman and accounting conservatism. | Not Supported |
| H2d | The relationship between financial expertise on the board and accounting conservatism in a positive direction. | Supported |
| H2e | The relationship between directors' tenure and accounting conservatism in a positive direction. | Supported |

Table 4.10 (Continued)

| Number | Hypothesis | Results |
|---------------|--|----------------------|
| H2f | The relationship between directors with multiple directorships and accounting conservatism in a positive direction | Not Supported |
| H3 | The relationship between the presences of audit committee accounting conservatism in a positive direction. | Supported |
| H4a | The relationship between auditor independence and accounting conservatism in a positive direction. | Supported |
| H4b | The relationship between auditor brand name and accounting conservatism in a positive direction. | Not Supported |
| H5a | The relationship between company size and accounting conservatism in a positive direction. | Not Supported |
| H5b | The relationship between debt contract and accounting conservatism in a positive direction. | Not Supported |

4.7 Robustness Tests

Several of additional robustness tests were performed to confirm the credibility of the initial results. Dummy variable was used as an alternative measure. In this section, we re-examined institutional ownership (OWINST), managerial ownership (OWMAN), board independence (BIND), board size (BSIZ) company size (CSIZE) and debt contract (CDEBT).

4.7.1 Institutional Ownership Measured Using Binary Variables

This study reported in the initial analysis that institutional ownership (OWINST) was significantly related to accrual conservatism. This study repeated the regression analysis where institutional ownership was measured as a dummy variable, labeled as Dum_inst. This study employs alternative measurement for institutional ownership according to Al-Gharaibeh, Zurigat and Al-Harahsheh (2013) who used dummy variable equal 1 if the percentage of institutional ownership higher than the mean and 0 otherwise. The regression of the new model is:

$$\begin{aligned} \text{ACCR } it = & \beta_0 + \beta_1 \text{DUM_INST}it + \beta_2 \text{OWFOREI } it + \beta_3 \text{OWFAM } it + \beta_4 \text{OWMAN } it + \\ & \beta_5 \text{BIND } it + \beta_6 \text{BSIZ } it + \beta_7 \text{BCEO } it + \beta_8 \text{BFIX } it + \beta_9 \text{BTEN } it + \beta_{10} \\ & \text{BMULT } it + \beta_{11} \text{AC } it + \beta_{12} \text{AUIND } it + \beta_{13} \text{AUBRAN } it + \beta_{14} \text{CSIZE } it + \\ & \beta_{15} \text{CDEBT } it + \varepsilon it \end{aligned}$$

Where:

Table 4.11

Variables Description and Expected Direction for the research Model

| Symbols of Variables | Description and Measurement | Predicted Direction | Relevant Hypotheses |
|-----------------------------|---|----------------------------|----------------------------|
| Dependent Variable | | | |
| ACCR | Accounting Conservatism = [(income +depreciation expenses– operating cash flows)] ÷Total assets. ACCR = (Accruals / 3 years) X (-1). | | |

Table 4.11 (Continued)

| Independent Variables | Description and Measurement | Predicted Direction | Relevant Hypotheses |
|------------------------------|---|----------------------------|----------------------------|
| Ownership Structure | | | |
| DUM_INST | Institutional ownership measured as dummy variable equal 1 if the percentage of institutional ownership higher than the mean and 0 otherwise. | + | H1a |
| OWFOREI | Foreign ownership measured as the percentage of shares held by foreigners to total number of firm's shares. | + | H1b |
| OWFAM | Family ownership measured as the percentage of shares held by families to total number of firm's shares. | + | H1c |
| OWMAN | Managerial ownership calculated as dummy variable equal 1 if the percentage of institutional ownership higher than the mean and 0 otherwise | - | H1d |
| Board Characteristics | | | |
| BIND | Board independence measured proportion of independent directors to total directors on board. | + | H2a |
| BSIZ | Board size is the natural logarithm of total number of board members. | + | H2b |
| BCEO | Dummy variable = 1 if CEO/Chairman roles combine; 0 if separate. | + | H2c |
| BFIX | Board financial expertise measured as a percentage of board members with financial expertise to total directors on board. | + | H2d |
| BTEN | Board tenure measured as average years the independent directors served on the firm's board. | + | H2e |

Table 4.11 (Continued)

| Independent Variables | Description and Measurement | Predicted Direction | Relevant Hypotheses |
|------------------------------|---|----------------------------|----------------------------|
| BMULT | Board multiple directorships calculated as a dummy variable equal to one if 50% or more of the board's members individually hold two or more directorships and 0 otherwise. | + | H2f |
| AC | Audit Committee measured as dummy variable = 1 if company has audit committee and 0 otherwise. | + | H3 |
| Auditor Quality | | | |
| AUIND | Auditor independence measured by non-audit fee/total fee ratio. | + | H4a |
| AUBRA | Auditor independency measured by Big-4 | + | H4b |
| Company Attributes | | | |
| CSIZE | Company size measured by log of total assets. | + | H5a |
| CDEBT | Debt Contract measured by Noncurrent liabilities/total assets. | + | H5b |

Table 4.12

Multiple Regression Results: Institutional Ownership Measured Using Binary Variables

| | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|----------------|------------------------------------|-------------------|----------------------------------|----------|-------------|
| | B | Std. Error | Beta | | |
| DUM_INS | .037 | .016 | .113 | 2.351 | .019 |
| T | | | | | |
| Owforei | .088 | .043 | .096 | 2.032 | .043 |
| Owfam | .121 | .067 | .085 | 1.812 | .071 |
| Owman | -.042 | .041 | -.049 | -1.022 | .307 |
| Bind | .223 | .037 | .287 | 5.977 | .000 |
| Bsiz | -.005 | .003 | -.082 | -1.725 | .085 |

Table 4.12 (Continued)

| | B | Std. Error | Beta | T | Sig. |
|---------|-----------------------|----------------------|-------------|----------|-------------|
| Bceo | .025 | .019 | .069 | 1.320 | .188 |
| Bfix | .176 | .081 | .108 | 2.188 | .029 |
| Bten | .009 | .003 | .168 | 3.453 | .001 |
| Bmult | .073 | .043 | .083 | 1.695 | .091 |
| AC | .067 | .019 | .189 | 3.505 | .001 |
| Auind | .036 | .016 | .112 | 2.225 | .027 |
| Aubra | -.034 | .020 | -.087 | -1.686 | .093 |
| Csiz | -.005 | .003 | -.081 | -1.679 | .094 |
| Cdeb | -.077 | .039 | -.094 | -1.976 | .049 |
| DV= | R ² = .307 | Adj R ² = | F-Ratio = | Sig F | N=348 |
| Accrual | | .276 | 9.797 | =.000 | |

As reported in Table 4.12, the model is significant ($F = 9.797$) ($\text{Sig } F = 0.000$). The model explained 27.6% of the variation in the accruals (Adjusted R^2 0.276). This result confirms the initial evidence which stated that institutional ownership is significant factor influencing accrual conservatism. As shown in Table 4.12, the coefficient of institutional ownership was positive and significant ($t=2.351$, $P=.019$).

4.7.2 Managerial Ownership Measured Using Binary Variables

The additional analysis uses alternative measurement for managerial ownership. According to according to Al-Gharaibeh, Zurigat and Al-Harabsheh (2013), dummy variable (Dum_man) equals 1 when the proportion of managerial ownership higher than the mean and 0 otherwise. The regression of the new model is:

$$\begin{aligned}
 \text{ACCR}_{it} = & \beta_0 + \beta_1 \text{OWIND}_{it} + \beta_2 \text{OWFOREI}_{it} + \beta_3 \text{OWFAM}_{it} + \beta_4 \text{DUM_MAN}_{it} + \beta_5 \\
 & \text{BIND}_{it} + \beta_6 \text{BSIZ}_{it} + \beta_7 \text{BCEO}_{it} + \beta_8 \text{BFIX}_{it} + \beta_9 \text{BTEN}_{it} + \beta_{10} \text{BMULT}_{it} + \\
 & \beta_{11} \text{AC}_{it} + \beta_{12} \text{AUIND}_{it} + \beta_{13} \text{AUBRAN}_{it} + \beta_{14} \text{CSIZE}_{it} + \beta_{15} \text{CDEBT}_{it} + \mathcal{E}_{it}
 \end{aligned}$$

Table 4.13

Multiple Regression Results: Institutional Managerial Measured Using Binary Variables

| | Unstandardized | | Standardize | | |
|---------------|-----------------------|----------------------|-------------|--------|-------|
| | Coefficients | | d | | |
| | B | Std. Error | Beta | T | Sig. |
| (Constant) | -.607 | .156 | | -3.903 | .000 |
| Owinst | .436 | .158 | .131 | 2.754 | .006 |
| Owforei | .092 | .043 | .100 | 2.136 | .033 |
| Owfam | .128 | .067 | .090 | 1.909 | .057 |
| DUM_MA | -.006 | .016 | -.019 | -.388 | .698 |
| N | | | | | |
| Bind | .215 | .037 | .276 | 5.764 | .000 |
| Bsiz | -.005 | .003 | -.077 | -1.599 | .111 |
| Bceo | .025 | .019 | .071 | 1.351 | .178 |
| Bfix | .172 | .081 | .106 | 2.121 | .035 |
| Bten | .009 | .003 | .165 | 3.389 | .001 |
| Bmult | .075 | .043 | .086 | 1.748 | .081 |
| AC | .067 | .019 | .188 | 3.489 | .001 |
| Auind | .036 | .016 | .110 | 2.202 | .028 |
| Aubra | -.037 | .020 | -.096 | -1.861 | .064 |
| Csiz | -.006 | .003 | -.086 | -1.805 | .072 |
| Cdeb | -.076 | .039 | -.093 | -1.959 | .051 |
| DV= | R ² = .309 | Adj R ² = | F-Ratio = | Sig F | N=348 |
| Accrual | | .278 | 9.887 | =.000 | |

As reported in Table 4.13, the model is significant ($F = 9.887$) ($\text{Sig } F = 0.000$). The model explained 27.8% of the variation in the accruals (Adjusted R^2 0.278). The result shown in Table 4.13 confirms the initial result which stated that managerial ownership has a negative and not significant relationship with the accrual conservatism ($t = -.388$, $P = .698$).

4.7.3 Board Independence Measured Using Binary Variables

Alternative measure of board independence was used to confirm the credibility of the initial results. This study repeated the regression model with dummy variable for board independence DUM_BIND which equal 1 if percentage of board independence is higher the median of board independence of the sample, and 0 otherwise. The new regression mode is as follows:

$$ACCR_{it} = \beta_0 + \beta_1 OWIND_{it} + \beta_2 OWFOREI_{it} + \beta_3 OWFAM_{it} + \beta_4 OWMAN_{it} + \beta_5 DUM_BIND_{it} + \beta_6 BSIZ_{it} + \beta_7 BCEO_{it} + \beta_8 BFIX_{it} + \beta_9 BTEN_{it} + \beta_{10} BMULT_{it} + \beta_{11} AC_{it} + \beta_{12} AUIND_{it} + \beta_{13} AUBRAN_{it} + \beta_{14} CSIZE_{it} + \beta_{15} CDEBT_{it} + \varepsilon_{it}$$

Table 4.14

Multiple Regression Results: Board Independence Measured Using Binary Variables

| | Unstandardized Coefficients | | Standardized Coefficients | | T | Sig. |
|---|-----------------------------|------------|---------------------------|--|--------|------|
| | B | Std. Error | Beta | | | |
| Owinst | .365 | .169 | .110 | | 2.162 | .031 |
| Owforei | .079 | .045 | .086 | | 1.778 | .076 |
| Owfam | .113 | .069 | .079 | | 1.635 | .103 |
| Owman | -.020 | .042 | -.023 | | -.465 | .642 |
| DUM_BIND | .052 | .016 | .162 | | 3.203 | .001 |
| Bsiz | -.004 | .003 | -.062 | | -1.255 | .210 |
| Bceo | .025 | .019 | .069 | | 1.287 | .199 |
| Bfix | .188 | .083 | .116 | | 2.262 | .024 |
| Bten | .010 | .003 | .174 | | 3.448 | .001 |
| Bmult | .081 | .044 | .093 | | 1.833 | .068 |
| AC | .060 | .020 | .170 | | 3.073 | .002 |
| Auind | .040 | .017 | .122 | | 2.352 | .019 |
| Aubra | -.048 | .020 | -.124 | | -2.354 | .019 |
| Csiz | -.005 | .003 | -.075 | | -1.512 | .132 |
| Cdeb | -.068 | .040 | -.083 | | -1.694 | .091 |
| DV= Accrual R ² = .262 Adj R ² = .229 F-Ratio = 7.874 Sig F =.000 N=348 | | | | | | |

As reported in Table 4.14, the model is significant ($F = 7.874$) ($\text{Sig } F = 0.000$). The model explained 22.9% of the variation in the accruals (Adjusted R^2 0.229). The initial analysis reported that board independence (BIND) was significantly related to accrual conservatism. The result in Table 4.14 shows consistency with the initial result that board independence (BIND) has a positive and significant relationship with accrual conservatism ($t=3.203$, $P=.001$). Therefore, this result confirms the initial evidences for hypothesis H2a that board independence in Jordanian listed firms tend to employ higher level of conservatism.

4.7.4 Board Size Measured Using Binary Variables

The relationship between board characteristics and accounting conservatism was analyzed by using alternative measurement for board size labelled Dum_BSIZ. This study repeated the regression model with dummy variable equal 1 if board size is higher than the median of board size of the sample and 0 otherwise. The following model was used to examine such relationship:

$$\begin{aligned}
 ACCR_{it} = & \beta_0 + \beta_1 OWIND_{it} + \beta_2 OWFOREI_{it} + \beta_3 OWFAM_{it} + \beta_4 OWMAN_{it} + \beta_5 \\
 & BIND_{it} + \beta_6 DUM_BSIZ_{it} + \beta_7 BCEO_{it} + \beta_8 BFIX_{it} + \beta_9 BTEN_{it} + \beta_{10} \\
 & BMULT_{it} + \beta_{11} AC_{it} + \beta_{12} AUIND_{it} + \beta_{13} AUBRAN_{it} + \beta_{14} CSIZE_{it} + \\
 & \beta_{15} CDEBT_{it} + \varepsilon_{it}
 \end{aligned}$$

Table 4.15
Multiple Regression Results: Board Size Measured Using Binary Variables

| | Unstandardized Coefficients | | Standardized | T | Sig. |
|-----------------|-----------------------------|------------|--------------|--------|------|
| | B | Std. Error | Coefficients | | |
| Owinst | .437 | .159 | .131 | 2.742 | .006 |
| Owforei | .095 | .043 | .103 | 2.182 | .030 |
| Owfam | .128 | .067 | .090 | 1.918 | .056 |
| Owman | -.037 | .041 | -.043 | -.893 | .372 |
| Bind | .216 | .038 | .278 | 5.759 | .000 |
| DUM_BSIZ | -.016 | .017 | -.048 | -.968 | .334 |
| Bceo | .028 | .018 | .077 | 1.491 | .137 |
| Bfix | .173 | .081 | .106 | 2.132 | .034 |
| Bten | .010 | .003 | .174 | 3.575 | .000 |
| Bmult | .071 | .043 | .081 | 1.649 | .100 |
| AC | .065 | .019 | .185 | 3.395 | .001 |
| Auind | .037 | .017 | .112 | 2.212 | .028 |
| Aubra | -.036 | .020 | -.093 | -1.809 | .071 |
| Csiz | -.005 | .003 | -.082 | -1.707 | .089 |
| Cdeb | -.079 | .039 | -.097 | -2.039 | .042 |

DV= Accrual R²= .306 Adj R²= .275 F-Ratio = 9.781 Sig F =.000 N=348

As reported in Table 4.15, the model is significant ($F = 9.781$) ($\text{Sig } F = 0.000$). The model explained 27.5% of the variation in the accruals (Adjusted $R^2 = 0.275$). Credibility of the initial results has confirmed through using alternative measurement for board size. The initial finding reported that board size has a negative and not significant relationship with accrual conservatism, Table 4.15 shows that board size measured by dummy variable has a negative and insignificant relationship with accrual conservatism ($t = -.968$, $P = .334$). Therefore, this result confirms the initial evidences for hypothesis H2b that large board size in Jordanian listed firms has no influence on the level of conservatism.

4.7.5 Company Size Measured Using Binary Variables

The measurement of company size is based only on a natural logarithm of total assets. However, it is also base on the dummy variable labeled (DUM_CSIZ) equal 1 if company size is higher than the mean of company size of the sample and 0 otherwise (Hamdan, 2012). Hence, the current study repeated the regression test through employing this alternative model. The regression of the new model is:

$$ACCR_{it} = \beta_0 + \beta_1 OWIND_{it} + \beta_2 OWFOREI_{it} + \beta_3 OWFAM_{it} + \beta_4 OWMAN_{it} + \beta_5 BIND_{it} + \beta_6 BSIZ_{it} + \beta_7 BCEO_{it} + \beta_8 BFIX_{it} + \beta_9 BTEN_{it} + \beta_{10} BMULT_{it} + \beta_{11} AC_{it} + \beta_{12} AUIND_{it} + \beta_{13} AUBRAN_{it} + \beta_{14} DUM_CSIZE_{it} + \beta_{15} CDEBT_{it} + \varepsilon_{it}$$

Table 4.16
Multiple Regression Results: Company Size Measured Using Binary Variables

| | Unstandardized Coefficients | | Standardized Coefficients | | |
|--|-----------------------------|------------|---------------------------|--------|------|
| | B | Std. Error | Beta | T | Sig. |
| Owinst | .451 | .158 | .135 | 2.854 | .005 |
| Owforei | .098 | .043 | .106 | 2.265 | .024 |
| Owfam | .126 | .067 | .089 | 1.893 | .059 |
| Owman | -.040 | .041 | -.047 | -.987 | .324 |
| Bind | .218 | .037 | .281 | 5.836 | .000 |
| Bsiz | -.005 | .003 | -.084 | -1.754 | .080 |
| Bceo | .025 | .019 | .069 | 1.334 | .183 |
| Bfix | .179 | .080 | .110 | 2.248 | .025 |
| Bten | .009 | .003 | .165 | 3.387 | .001 |
| Bmult | .078 | .043 | .090 | 1.831 | .068 |
| AC | .064 | .019 | .181 | 3.402 | .001 |
| Auind | .037 | .016 | .115 | 2.285 | .023 |
| Aubra | -.032 | .020 | -.083 | -1.621 | .106 |
| DUM_CSIZ | -.026 | .015 | -.082 | -1.726 | .085 |
| Cdeb | -.081 | .039 | -.099 | -2.083 | .038 |
| <hr/> DV= Accrual R ² = .310 Adj R ² = .279 F-Ratio = 9.942 Sig F =.000 N=348 | | | | | |

As reported in Table 4.16, the model is significant ($F = 9.942$) ($\text{Sig } F = 0.000$). The model explained 27.9% of the variation in the accruals ($\text{Adjusted } R^2 0.279$). Credibility of the initial results has confirmed through using alternative measurement for company size. The initial finding reported that company size has a negative and not significant relationship with accrual conservatism. Table 4.16 shows that company size measured by dummy variable has a negative and insignificant relationship with accrual conservatism ($t = -1.726$, $P = .085$). Therefore, this result confirms the initial evidences for hypothesis H5a that company size in Jordanian listed firms has no influence on the level of conservatism.

4.7.6 Debt Contract Measured Using Binary Variables

Regression analysis was also repeated to examine the sensitivity of employing alternative measurement of debt contract. Table 4.17 shows that by using alternate binary variables of debt contract (Dum_CDEB) which is equal 1 if debt contract is higher than the median of debt contract of the sample and 0 otherwise. The regression of the model is:

$$\begin{aligned} \text{ACCR } it = & \beta_0 + \beta_1 \text{OWIND } it + \beta_2 \text{OWFOREI } it + \beta_3 \text{OWFAM } it + \beta_4 \text{OWMAN } it + \beta_5 \\ & \text{BIND } it + \beta_6 \text{BSIZ } it + \beta_7 \text{BCEO } it + \beta_8 \text{BFIX } it + \beta_9 \text{BTEN } it + \beta_{10} \text{BMULT} \\ & it + \beta_{11} \text{AC } it + \beta_{12} \text{AUIND } it + \beta_{13} \text{AUBRAN } it + \beta_{14} \text{CSIZE } it + \\ & \beta_{15} \text{DUM_CDEB } it + \varepsilon it \end{aligned}$$

Table 4.17

Multiple Regression Results: Debt Contract Measured Using Binary Variables

| | Unstandardized | | Standardize | | Sig. |
|----------------|-----------------------|----------------------|--------------|---------------|-------------|
| | Coefficients | | d | | |
| | B | Std. Error | Beta | T | |
| (Constant) | -.621 | .159 | | -3.912 | .000 |
| Owinst | .438 | .160 | .131 | 2.747 | .006 |
| Owforei | .097 | .043 | .105 | 2.235 | .026 |
| Owfam | .125 | .067 | .088 | 1.877 | .061 |
| Owman | -.038 | .041 | -.045 | -.933 | .351 |
| Bind | .211 | .037 | .270 | 5.644 | .000 |
| Bsiz | -.005 | .003 | -.080 | -1.688 | .092 |
| Bceo | .025 | .019 | .071 | 1.372 | .171 |
| Bfix | .165 | .081 | .101 | 2.042 | .042 |
| Bten | .010 | .003 | .178 | 3.479 | .001 |
| Bmult | .079 | .043 | .090 | 1.839 | .067 |
| AC | .068 | .019 | .191 | 3.562 | .000 |
| Auind | .035 | .016 | .108 | 2.155 | .032 |
| Aubra | -.036 | .020 | -.092 | -1.795 | .074 |
| Csiz | -.006 | .003 | -.087 | -1.815 | .070 |
| DUM_CDE | -.025 | .016 | -.077 | -1.524 | .128 |
| B | | | | | |
| DV= | R ² = .307 | Adj R ² = | F-Ratio = | Sig F | N=348 |
| Accrual | | .276 | 9.826 | =.000 | |

As reported in Table 4.17, the model is significant ($F = 9.826$) ($\text{Sig } F = 0.000$). The model explained 27.6% of the variation in the accruals (Adjusted R^2 0.276). Credibility of the initial results has confirmed through using alternative measurement for debt contract. The initial analyses revealed that debt contract was reported to be negative and insignificant to the accrual conservatism. The results in Table 4.17 were consistent with the initial results that debt contract has a negative and insignificant relationship with conservatism ($t = -1.524$, $P = .128$). Therefore, this result confirms the initial evidences

for hypothesis H5b that debt contract has a negative and not statistically significant relationship with accrual conservatism.

4.8 Chapter Summary

This chapter displays the analysis of the hypotheses. Various methods of analyses were employed in order to test the research hypotheses. Descriptive analysis was used in order to describe the data of the current study. The hypotheses sought to test for a significant difference of four mechanisms of corporate governance that are ownership structure, board characteristics, audit committee and auditor quality as well as company related attributes. The accounting conservatism measurement used for the purpose of this study is accrual based.

Detecting the outlier observations and testing the multicollinearity problem were examined and also other regression assumptions which are normality, linearity, multicollinearity, autocorrelation and heteroscedasticity were tested before embarking the regression analysis. Generally, it can be confidently concluded that the current study does not suffer from serious outlier cases and there is no violation of multicollinearity assumption in the study and the normality of the error terms was assured.

Based on the suggestion of Hair *et al.* (2010), where the scatter plot shows no clear association among residual and predicted values, it evidences there are no problem of the linearity, heteroscedasticity and the independent of the residual. Finally, the findings of the current study acquired from Pearson correlation matrix and multiple regression analysis disclose that seven of fifteen hypotheses were accepted, while eight of research hypotheses were supported (see Table 4.10).

CHAPTER FIVE

DISCUSSION AND CONCLUSION

5.0 Introduction

The overall objective of the current study is to understand the relationships between corporate governance mechanisms and accounting conservatism among Jordanian listed firms. The current chapter presents a more elaborate discussion of the findings and provides greater insight into the influence of corporate governance mechanisms (ownership structure, board characteristics, audit committee, auditor quality) and company related attributes on the conservatism practices among listed firms in Jordan. To this end, the current chapter begins with the overview of the study followed by the discussions of the hypotheses related to the study model. The implication of the study from both practical and theoretical perspectives is also explained in depth. Finally, the limitations and suggestions for future studies, and the study conclusions are discussed.

5.1 Overview of the Study

The main purpose of the current study is to provide evidence regarding the influence of corporate governance mechanisms on the conservatism practices among Jordanian listed firms in Amman Stock Exchange. The current study addresses the problem that arises due to the conflict of interest among management and shareholders. In addition, the level of accounting conservatism in the financial reports issued by Jordanian firms is very low. Hamdan (2012a) and Abed *et al.* (2012) have reported that the weak application of this principle in Jordanian listed firms was attributed amongst others to the poor of corporate

governance practices. Several external and internal tools, commonly known as corporate governance has been suggested in order to control such problems. For instance, ownership structure, board characteristics, audit committee and auditor quality as well as company related attributes are established as a solution for such conflicts.

Therefore, in order to achieve the objectives of this study, five research questions are developed which are as follows: (1) Is there a relationship between the ownership structures (institutional, foreign, family and managerial ownership) and accounting conservatism of Jordanian listed firms? (2) Is there a relationship between the board characteristics (independence, size, CEO duality and skills) and accounting conservatism of Jordanian listed firms? (3) Is there a relationship between audit committee and accounting conservatism of Jordanian listed firms? (4) Is there a relationship between auditor quality (independence and brand name) and accounting conservatism of Jordanian listed firms? (5) Is there a relationship between company related attributes (company size and debt contracts) and accounting conservatism of Jordanian listed firms?

To answer these research questions, a theoretical framework and research hypotheses are developed. For the purpose of validating the framework and hypotheses, annual reports of Jordanian listed firms are used to collect the data starting from 2009 until 2011. In addition, five sets of general hypotheses were developed for such purpose, as discussed in the following sections.

In order to test the hypotheses of the current study, multiple regression analysis by using SPSS software version 18 was used to analysis the relationship between corporate

governance mechanisms (ownership structure, board characteristics, audit committee, auditor quality) and company related attributes on the conservatism practices among listed firms in Jordan. The accounting conservatism was measured by using accrual-based (Givoly & Hayn, 2000). The influence of fifteen internal and external corporate governance variables, four variables related to ownership structure, namely, Institutional Ownership (OWINST), Foreign Ownership (OWFOREI), Family Ownership (OWFAM), and Managerial Ownership (OWMAN). Six variables related to the board characteristics, namely, Independence (BIND), Size (BSIZ), CEO Duality (BCEO), Financial Expertise (BFIN), Tenure (BTEN), and Multiple Directorships (BMULT). One variable related to the audit committee which is the presence of an audit committee of the firm. Two variables related to auditor quality, namely, Independence (AUIN), and Brand Name (AUBRAN). Two variables also related to company attributes, namely, Company Size (CSIZE) and Debt Contract (CDEBT).

The findings of the current study are considered to be valuable for both practitioners and academics, as discussed in the following sections. Moreover, the limitations suffered by this study, as well as the suggestions for future studies are explained in more detail.

5.2 Discussions of Hypotheses

Five main hypotheses were developed in order to achieve the research objectives. Each main hypothesis was divided into sub-hypotheses. The following sections provide more details regarding the results of these hypotheses.

5.2.1 Ownership Structure

The results of regression test on the relationship between ownership structure and accounting conservatism revealed that ownership structure has a relationship with conservatism practices in Jordanian listed firms. However, the relationship varies depending on type of ownership structure of the Jordanian firms.

5.2.1.1 Institutional Ownership

Agency theory assumes that the concentration of ownership decrease agency cost (Kholief, 2008). The result of this study shows that relationship between institutional ownership and conservatism is significant in a positive direction.

This finding supports the results of Hashim and Devi (2008), Katz (2008) and Klai and Omri (2011). Katz (2008) found that firms that have private equity sponsorship have higher quality of earnings and engaged less level in earnings management. Hashim and Devi (2008) also found a positive association between institutional ownership and quality of earnings. In addition, Klai and Omri (2011) reported that institutional ownership is related positively with financial disclosure quality. These findings refer that the institutional ownership enhances the quality of financial reports and control the actions of management in terms of providing reliable information that helps the users in decision making.

5.2.1.2 Foreign Ownership

Positive relationship is expected between foreign ownership and level of accounting conservatism. The result of regression shows that the relationship between foreign

ownership and accruals is significant in a positive direction. Thus, hypothesis 1b is accepted. This result is consistent with Ball and Shivakumar (2005) and LaFond and Watts (2008) who found that foreign investors in stock markets prefer to invest companies with low level of information asymmetry to those with high level of information asymmetry. They also showed evidence that the level of information asymmetry among outside and inside investors is positively related to the level of conservatism. This is also in line with the agency theory that asserts that the existence of foreign ownership will minimize the presence of manipulation. The result is consistent with other researchers' results. Mohandi and Odeh (2010) found a positive relationship between foreign ownership and quality of financial statements in Jordanian banking sector.

Ball and Shivakumar (2005) showed also that foreign investors increase the demand for the conservatism policy which would limit the incentives of managers and their ability to manipulate financial figures and so decrease information asymmetry. The Jordanian government has issued and revised various important regulations and laws, such as Privatization Instructions and Banks Law in (2000) in order to encourage and attract the investment by non-Jordanians. One of the strategy objectives is to prompt efficiency; transparency and fairness in the market, as well as to insure a high level of earning quality through adopting a higher level of conservatism and reduces the information asymmetric between managers and shareholders (Hamdan, 2011; Hamdan, 2012a; Zureigat, 2011). Previous evidences support that the foreigner ownership derived the demand of conservatism practices (Ball & Shivakumar, 2005; LaFond & Watts, 2008), and financial report quality (Mohandi & Odeh, 2010).

5.2.1.3 Family Ownership

There is a positive direction between family ownership and accounting conservatism, but this relationship is not significant as shown from the regression result in Chapter Four (Table 4.8). This result is consistent with the alignment effect, which claimed that families are more probable to forgo short-term benefits from earnings management because of the incentives to pass on their business to future generations and to protect the reputation of family. Accordingly, that implies that family firms are less likely to involve in the opportunistic behaviour in reporting earnings because it potentially could damage the reputation of family, wealth, and the long-term performance of firm. Therefore, family firms have incentives more than non-family firms to report earnings of higher quality. Thus, family firms prefer to employ high level of earning quality and consequently high level of conservatism in financial reports. This is because previous literature have provided many evidences that earnings are of higher quality when reported earnings are more conservative (Ball *et al.*, 2000; Ball *et al.*, 2003; Ball & Shivakumar, 2005; Basu, 1997). As for the level of significance of such relationship, the result was surprising as shown in Table 4.8 in Chapter Four, which stated that this relationship is not statistically significant due to the higher level of P-value of family ownership (0.057) compared to 0.05 ($\alpha = 0.05$). This result is contrast to our expectations. As mentioned earlier that family business groups are prevalent form of the structure of ownership among Jordanian firms. These families have many listed and unlisted firms that operate in different sectors. These firms seem legally independent. They are related to each other because they are owned by same family. It is predicted that agency theory could not be usable over these groups, as the major shareholders and managers of these companies are

owned by the family that harm the entity theory as well as the Jordanian code of corporate governance as confirmed by Warrad *et al.* (2012).

5.2.1.4 Managerial Ownership

According to the agency theory, managerial ownership can reduce the incentives of managers to benefit from their position and to expropriate the wealth of shareholders. Fama and Jensen (1983) confirmed that managerial ownership has negative relationship with agency relationship (among the shareholders and managers) and managerial ownership is considered a key source of agency costs. Furthermore, they confirm that the managerial ownership entrenches the current manager and emerges the managerial opportunism. On the other hand, the hypothesis of "the managerial entrenchment" confirms that a high managerial ownership enhances the power of the managers to make decisions that do not maximize the firm value but their job security and improve their own interest (Morck *et al.*, 1988). LaFond and Roychowdhury (2008) found that accounting conservatism declines with managerial ownership. Consequently, and based on the result that mentioned in Chapter Four, no significant relationship between managerial ownership and conservatism. This result confirms the notion that individuals seek to maximize their own utilities at the cost of shareholders. In addition, the conflict arises from the possibility that the directors are maximizing their wealth, whereas shareholders tend to maximize their own profits (Reis & Stocken, 2007).

5.2.2 Board Characteristics

5.2.2.1 Independence

Supporting the agency theory, the current study found a positive and significant relationship between board independence and conservatism. As a higher ratio of independent directors lead to higher level of conservatism, this result supports the claim of Fama and Jensen (1983) and Pfeffer and Salancik (2003) that outside directors heavily improved the effectiveness of board and decreased uncertainty.

This finding is consistent also with Ahmed and Duellman's (2007) and Beekes *et al.*'s (2004) evidence on U.S and UK companies respectively. It is also consistent with the findings of other accounting studies, outside directors decreased financial reports fraud (Beasley, 1996), decreased abnormal accruals (Koh *et al.*, 2007), enhanced audit quality (Salleh *et al.*, 2006) and decreased earnings management (Peasnell *et al.*, 2006; Benkraiem, 2009). Therefore, board independence plays a vital role in monitoring management as argued in the agency theory.

It is worth noting that the Jordanian Corporate Governance Code (2009) stated that the board of director must contain at least three non-executive members, but many firms did not comply with the requirements of this Code, especially those with small size board. As presented in the descriptive statistics section in Chapter Four. It is clear that the minimum value of board independence was .10, which means that some companies contained an insufficient proportion of independent members in their boards.

5.2.2.2 Size

The Jordanian Code of Corporate Governance has defined the number of board members, which should be between five and thirteen (JSC, 2009). The result in this study showed that board size has a negative and not significant relationship with conservatism practices in Jordanian firms. This result is contrary to our expectation, where many of previous studies are consistent with our result. For example, Lipton and Lorsch (1992) who found that large board slows decision making as well as each board member might rely on others to monitor management due to the difficulties in tasks coordination. In addition, Mak and Li (2001), Cheng (2008) and Guest (2009) found that large size of boards is related with low governance and weak corporate performance. Ahmed and Duellman (2007) confirmed that there is no significant relationship between board size and accounting conservatism in U.S. firms. As shown in Table 4.8 in Chapter Four, no statistically significant relationship between board size and conservatism due to the higher level of P-value of board size (0.096) compared to 0.05 ($\alpha = 0.05$). This result is contrast to our expectations. Therefore, the hypothesis was rejected

Boards in most Jordanian firms are medium-sized. However, the Jordanian Corporate Governance Code (2009) refers that the size of board must be between five and thirteen. According to the descriptive statistics in Table 4.6, the maximum and minimum of board members were between 3 and 14 respectively. This result indicates that there are some violations of the requirements of the code of corporate governance in terms of the number of board members, but generally there are an ideal number of board members in most companies. This result supports the function of board size in monitoring and controlling the actions of management.

5.2.2.3 CEO Duality

The finding of this study shows that the relationship between CEO and conservatism is positive and not significant due to the higher level of P-value of CEO duality (0.182) compared to 0.05 ($\alpha = 0.05$). This result is contrast to our expectations. Many of previous studies reported that joint leadership structure weakened companies' governance and led to the manipulation of earnings (Dechow *et al.*, 1995; Klein, 2002). Our finding is supported by previous studies that found that CEO duality was not significant with corporate performance (Chang, 2009) and accounting conservatism (Ahmed & Duellman, 2007). The direction of this relationship is consistent with the previous studies which found a positive relationship between separation of roles and the presence of manipulation in financial reports in Jordan (Abu-Haija, 2012). Agency theory reported that duality will impair the supervisory function of the board. It also allows the CEO to engage in the opportunistic behavior because of his dominance over the board (Barako, Hancock & Izan, 2006). Accordingly, this study rejects the H2c hypothesis.

The Jordanian Corporate Governance Code (2009) stated that "It is not allowed for one person to hold the positions of chairman of the board of directors and any executive position in the company at the same time" (p. 7). However, about 63% of Jordanian firms still did not comply with this requirement.

5.2.2.4 Board Financial Expertise, Tenure and Multiple Directorships

The current study examined board financial expertise, board tenure, and multiple directorships, where the previous studies were considered such attributes as board skills (Agrawal & Chadha, 2005; Jaafar & El-Shawa, 2009; Peasnell *et al.*, 2005).

These results are supported by previous evidences. For example, Agrawal and Chadha (2005) who reported that directors with financial and accounting expertise would have deeper understanding about stages of preparing the financial statements; and the ability to make proper decisions that may enhance the information quality. On the other hand, Rutherford and Buchholtz (2007) found that board tenure refers to the cumulative expertise and knowledge of the company's issues through directors' longer service on the firm's board. Schnake and Williams (2008) documented that multiple directorships refer to directors' experience that obtained through their involvement on the boards of other firms, which contribute in their knowledge in solving various issues.

In general, previous evidences suggest that financial expertise, longer tenure and multiple directorships are indicators of strong governance; all these skills have a significant influence on the accounting conservatism demand (except board multiple directorships). Financial expertise and longer tenure would assist the monitoring function of directors regarding to the financial reporting process. Accordingly, such skills would improve the directors' knowledge that leads to more demand of conservatism.

5.2.3 Audit Committee

The result of this study shows that existence of audit committee is positively related with accounting conservatism. This finding supports agency theory which assumes that the existence of audit committee improves the quality of financial reporting. On the other hand, this result is in line with some previous studies such as Al-Thuneibat (2009), Wan-Hussein and Haji-Abdullah (2009); Goodwin and Seow (2002). For example, Wan-Hussein and Abdullah (2009) found that large size of audit committee is positively related with the financial reporting quality in Malaysia. Goodwin and Seow (2002) also reported that audit committee is related negatively with the existence of errors in financial reports and positively related with management fraud detection. In Jordan, Al-Thuneibat (2009) reported that the existence of audit committee enhances illegitimate earnings management in Jordanian firms. Abu Haija (2012) found that the presence of audit committee negatively correlate with the manipulation in financial reports in Jordanian firms.

5.2.4 Auditor Quality

5.2.4.1 Auditor Independence

Auditor independence is seen as a cornerstone of the audit function (e.g. Basoudis, Geiger, De Lange & Adams, 2012; DeFond, Wong & Li, 1999; Mautz & Sharaf, 1961; Simunic, 1984; Zhang, Zhou & Zhou, 2007). This study shows that there is a positive and significant relationship between auditor independence and accounting conservatism. This result is consistent with Bauwhede *et al.* (2003) who found that hiring auditor independence reduce earnings management in financial reports.

Amir, Guan and Livne (2009) found a stronger association between auditor independence and conservatism. This suggests that the litigation issues are best addressed by independent auditors, not on the basis of pre-emptive, but by recognize faster on losses that arise when negative events take place. Independence of auditor seems to play a vital role in conservative reporting in the environments with high litigations risk. They also provide evidence on the positive relationship between auditor independence and accounting conservative in companies that reach capital markets to raise funds relative to other companies.

5.2.4.2 Auditor Brand Name

The result shows that the relationship between auditor brand name and accounting conservatism is negative and not significant due to the higher p-value of auditor brand name (0.071) compared to 0.05 ($\alpha = 0.05$). This unexpected result is against the agency theory which assumes that big audit firms are better than small firms in preparing their job. This result is consistent with Moroney and Dowling (2005) who found no relationship between the size of audit firm and the level of auditor performance. Charles Piot and Janin (2007) reported that the Big 5 audit firms are not more conservative than other audit firms.

Song and Wong (2005) found that large audit firms tend to get significantly higher fees; these fees may include non audit services. Flynn (2009) argued that a big amount of non-audit fees cause the creation of an economic bond among the auditor and client that could harm audit quality and hence earnings credibility. He also reported that providing of NAS

increases the financial dependence of auditors on their clients. Accordingly, big audit firm may employ less level of conservatism. Thus, this study rejects hypothesis H4b.

5.2.5 Company Attributes

5.2.5.1 Company Size

The finding of this study shows that the relationship between company size and conservatism is negative and not significant. This result is on the contrary of our expectations, but it is supported by some previous studies which found similar results to the results of this study. For example, Hamdan and Abzakh (2011) examined the relationship between the size of company and level of conservatism in Kuwait listed companies. They found that the financial reports of small companies were conservative. Lafond and Watts (2008) concluded that larger firms have less information asymmetry than smaller firms, thereby, reducing the demand for conservatism. Sultana (2012) found a significant negative association between the asymmetric timeliness of accruals and company size. In addition, Pae and Easton (2004) reported that company size does not have a significant influence on the degree of earnings conservatism and balance sheet conservatism.

5.2.5.2 Debt Contract

Despite the empirical evidence regarding to the relationship between debt contracts and accounting conservatism is inconclusive, but this study shows that there is a negative and not significant relationship between debt contract and conservatism practices due to higher P-value of debt contract ($P = .055$) compared to 0.05 ($\alpha = 0.05$).

Our result is consistent with some of previous studies. For instance, Al-Sahli (2009) found lack of association between debt contract and the accounting conservatism level in Saudi listed firms. Begley, Chamberlain and Kim (2009) reported that there is no relationship between debt contract and conservatism. Similarly, in Jordan context, Hamdan (2012a) concluded that there is no association between debt contract and accounting conservatism during the preparation of Jordanian companies' financial reports. On the other hand, Gigler, Kanodia, Sapa and Venugopalan (2009) reported that conservatism changes the accounting content and hence reducing the potential for future predictions and reduces debt contracts efficiency. Hence, the current study rejects hypothesis H5b.

5.3 Implications of the Study

1. Implications for Theory

The results from the current study show valuable insights to the understanding of factors that may affect earnings conservatism in Jordan. Findings provide important conclusions for major stakeholders including: (i) investors and shareholders; (ii) regulators and policymakers; (iii) scholars and academics; and (iv) corporate management.

Results from this study showed that institutional, foreign ownership were significantly related with conservatism. Board independence, financial expertise and board tenure have a significant relationship also with conservatism. Audit committee, auditor independence also have a significant relationship with conservatism. On the other hand, family and managerial ownership have no significant relationship with accounting conservatism, The

relationship between board size, CEO duality, board multiple directorship, auditor brand name were not statistically significant. As for company attributes, company size and debt contract have no significant relationship with conservatism.

Previous literature provides empirical evidence about the advantages of conservatism practices for the users of financial accounting such as investors and shareholders. For example, Kung *et al.* (2008) reported that conservatism is an effective tool for constraining opportunistic behaviour of managers. Moreover, conservatism impairs firm managers who are seeking to manipulate earnings (Kung *et al.*, 2008; Watts, 2003a). Practices of accounting conservatism can act as a mechanism to minimise agency cost and reduce firm litigation cost (Huijgen & Lubberink, 2005), or provide a vital role in mitigating shareholder/bondholder conflicts during dividend policy debt costs (Ahmed *et al.*, 2002). The results provide important conclusions for major stakeholders as follows:

2. Shareholders and Investors

Whilst earnings conservatism may assist shareholders and investors, it is advisable if such users of accounting information are able to utilize from major signals in defining the likelihood a firm may engage in accounting conservatism practices. Such signals can assist in enabling shareholders and investors to better value a firm. As predicted by previous theoretical arguments, the external auditor quality and existence of audit committee may affect earnings conservatism. Then these could be major signals for investors and shareholders. However, as shown by the main results of this study, there is a clear association between these major signals and accounting conservatism.

Consequently, results from the current study suggest that the existence of audit committee and auditor independence are effective barometer by which investors and shareholders can effectively estimate the probability of Jordanian listed firm engaging in accounting conservatism practices that will lead to promote the quality of earnings. On the other hand, investors and shareholders, thus, will need to look to other potential signals.

3. Regulators and Policymakers

Jordanian capital market regulators and policymakers faced various criticisms due to poor corporate governance practices in the nation. In response to these criticisms, the Jordanian Code of Corporate Governance was introduced in 2003 with subsequent adjustments during the past decade. Thus, this code has moved from the voluntary application stage into mandatory stage. Since 1990s, corporate governance reform has been an increasingly important agenda item in Jordan's pursuit of sustainable and enhances economic growth. The creation of three new institutions, the JSC, the Amman Stock Exchange, and the Securities Depository Centre (SDC) has helped to an improvement in the regulatory environment. JSC is responsible for the supervising and regulating the equity market, the SDC is responsible for the safeguarding the rights of ownership and settling transactions, whilst the Amman Stock Exchange which is created in 1999, is responsible for the trading of public securities.

Previous theoretical research suggests enhancements in board characteristics, audit committee and auditor quality may lead to more conservatism practices. If the intention

of Jordanian capital market policymakers and regulators was to enhance conservatism practices through improved the characteristics of board of directors, audit committee and the quality of auditor, the results of this study suggest such an aim is highly optimistic.

Results offered in Chapter Four refer evidence of accounting conservatism within the Jordanian capital market across the observation window of the current study. Empirical results, however, are consistent to expectations in indicating that there is a relationship between corporate governance mechanisms which are ownership structure, board characteristics, audit committee and auditor quality as well as company attributes and accounting conservatism.

Based on this, Jordanian policymakers and regulators seek to set the requirements of corporate governance to affect conservatism practices in order to enhance the quality of earnings, further the quality of financial reports should focus on other mechanisms outside the scope of this study. If Jordanian regulators and policymakers seek to improve conservatism practices by the introduction of new requirements that affect board of director, audit committee and auditor quality, the results from the current study propose the costs of such new requirements are likely to exceed the benefits.

4. Scholars and Academics

Some previous studies (Ahmed & Duellman, 2007; Beekes *et al.*, 2004; Hamilton, Ruddock, Stokes & Taylor, 2005; LaFond & Watts, 2008; Lara *et al.*, 2009a; and Krishnan & Visvanathan, 2008; Ruddock *et al.*, 2006) present evidence that corporate governance mechanisms (i.e. audit committees, board of directors, auditor attributes and

ownership structure) play a vital role in enhancing accounting conservatism practices. Findings from the current study, however, provide evidence about the positive influence of some of corporate governance mechanisms (ownership structure, board characteristics, audit committee, auditor quality) on accounting conservatism. Findings of the current study, however, have implications for academics and scholars. Firstly, results from the current study cannot be generalised to other countries since this study focuses only on Jordan. When doing similar studies in the future using international framework, institutional factors of a country have to be taken into account since such factors may have major influence on the relationship between corporate governance mechanisms and accounting conservatism.

Previous literature shows the ownership structure, board of directors, external auditor and audit committee is considered as monitoring controls to set shareholders' and managers' interests, thus, minimising agency cost and reducing the ability of managers to act opportunistically (Abbott *et al.* 2000; Ahmed & Duellman 2007; Beasley & Salterio 2001; Bedard *et al.* 2004; Carcello *et al.* 2011; Cohen *et al.* 2004). The results of this study highlight the uncertainty on the extent of the monitoring role of audit committee in respect to conservatism practices. Therefore, scholars undertaking deep studies within the context of agency theory may need to consider other various audit committee characteristics such as the financial expertise of the audit committee members, audit committee meeting and independence, when examining accounting conservatism, and by association of quality of earnings.

5. Corporate Management

Results from the current study could help the corporate management in creating more awareness regarding to the importance of accounting conservatism in improving the credibility and quality the accounting information of firms. As argued earlier, accounting conservatism is considered as an important underlying attribute often used by the participants of capital market in order to benchmark the earnings quality of firm (Kung *et al.*, 2008). This study urges the corporate management to practice accounting conservatism in an attempt to make financial reports more useful and informative to shareholders and investors (Ball & Shivakumar, 2005). Moreover, it is recognised that accounting conservatism is an effective mechanism often used to constrain opportunistic behaviour of managers (Chen *et al.*, 2007; Kung *et al.*, 2008; Watts, 2003a) such as earnings manipulation.

Even though accounting conservatism serves as a natural deterrent to manipulation of earnings, it is the pivotal role of corporate governance mechanisms that create and enforce the principles. In this study, this is the function of board of director, audit committee and external auditor. The main results of this study suggest there is a significant relationship between corporate governance mechanisms on conservatism practices amongst Jordanian listed companies. Such findings may give corporate management a signal that other bodies in charge of the process of financial reporting within the Jordanian companies may not concerned with conservative accounting practices.

Based on the previous studies, the level of accounting conservatism in Jordanian firms was low (Hamdan, 2011; 2012). Consequently, corporate management of Jordanian firms may realise this as a unique opportunity in order to engage in aggressive accounting practices in order to maximise their self-interests. Adopting a more opportunistic behaviour would be a pessimistic outcome. Rather, results from the current study suggests there is an increased onus on management of corporate to act morally and ethically in the interests of shareholders through not seeking to manage earnings for personal profit due to the weak of corporate governance mechanisms in enhancing the practices of accounting conservatism.

5.4 Limitations of this Study

This study has contributed significantly to our understanding regarding to the relationship between corporate governance mechanisms and conservatism practices. Nevertheless, as with any research, the current study is subject to a number of limitations as listed below:

1. The sample in this study excludes the financial sector because it has special regulations issued by the regulated Central Bank of Jordan and the Insurance Commission. Hence, the results from this study cannot be generalised to such sector.
2. This study employed four important mechanisms of corporate governance namely; ownership structure, board characteristics, audit committee and auditor quality. It is possible that other external governance factors not included in this study also contributed to the practices of accounting conservatism.

3. Another limitation is the measurement of audit committee and auditor quality. For example, according to Balsam *et al.* (2003), auditor quality is considered as a multidimensional construct because it is inherently unobservable. Through using a limited number of audit quality attributes (such as independence and brand name), subsequently, could lead to various result if other related attributes of auditor quality are added. Due to the lack of disclosure on the Audit Committee's characteristics in the annual reports as required in the Code of Corporate Governance.
4. The fourth limitation of the current study is that it only covers a three year observation (from 2009 to 2011). Therefore, there is a limitation in generalising findings, especially pre 2009 and post 2011. This is because this study sought to examine the influence of corporate governance mechanisms in accounting conservatism, since the application of corporate governance has become mandatory in 2009 in Jordan. As explained earlier in this study, problems with availability of data prevented the process of data collection post 2011.
5. The current study employs data from an emerging country. While previous empirical studies provide evidence of accounting conservatism, such studies were conducted in developed countries, and in sophisticated economies. Theoretical arguments regarding accounting conservatism and the majority of factors that may impact accounting conservatism have been selected from sophisticated economies and developed countries. Due to such limitations, the current study relied on previous studies carried out in developed countries to build the research hypotheses.

6. Previous studies have reported the institutional factors of developed and developing economies may vary significantly. Consequently, adopting hypotheses for a developing economy such Jordan, based on opinions and views drawn from developed economy such U.S or UK may not be suitable. Consequently, outcomes from the current study need to be considered with some caution and vigilance, and results may not be as easily applicable to other emerging economy.

In general, it is found that all the independent variables explained 27.9% of the variance in accruals conservatism. This ratio indicates that 72.1% is unexplained. In other words, there are other substantial factors that are important in interpreting the accounting conservatism that have not been considered in this study. Consequently, future research should take this into account.

5.5 Suggestions for Future Research

Extension of this study is possible in the following fields:

1. Future research could be conducted employing a larger sample including financial sector. A larger sample would enhance the explanatory power of the outcome. Therefore, the conclusions of the studies will become more reliable when the studies are conducted on a larger sample.
2. In future studies, the study period should also be extended to be longer. Increasing the length of the study period would simplify monitoring a trend of conservatism practices. Fluctuations in the level of conservatism might seem big on a short period. However, when compared to the level development of conservatism

during a longer period, these fluctuations might be viewed as slight changes. Thus, using a study period of a few decades (e.g. 20 years) would enhance the accuracy of the study outcome.

3. The adequacy of various measurements to examine the level of accounting conservatism could also be investigated further in future studies. In the current study, one measurement is used which is accrual-based. Previous studies showed that using more than one measurements of conservatism would enhance the reliability of the conclusions. So, further studies are needed to define which measurement of conservatism is more adequate and proper than the other measure; especially in emerging markets.
4. This study sought to determine the underlying factors of the change in the level of conservatism by employing corporate governance mechanisms. Therefore, further research is necessary to search for other factors that have a significant influence on the level of conservatism, such as political influence, transparency and disclosure, anti-takeover provisions, shareholder's rights, audit committee independence, audit committee financial expertise, auditor specialization, and board meeting.
5. Further study should on the non-listed firms in Jordan and compared the results with the findings of the current study in order to highlight the differences between the two groups.

5.6 Conclusion

This study discovers the association between corporate governance mechanisms (ownership structure, board characteristics, audit committee and auditor quality) as well as company attributes and accounting conservatism. The results of the current study suggest that there are five variables that negatively influenced accrual conservatism. Those variables are managerial ownership, board size, auditor brand name, company size and debt contract. The remaining variables have positive influenced on accrual conservatism. Regarding to the level of significance, the results of the current study show that there are eight variables are not significantly related to accounting conservatism. Those variables are family and managerial ownership, board size, CEO duality, multiple directorships, auditor brand name, company size and debt contract. Seven variables are significantly related to accounting conservatism, these variables are institutional and foreign ownership, board independence, board financial expertise, board tenure, audit committee and auditor independence.

Overall, findings from the current study show valuable insights and understanding not only in respect to the linkage between corporate governance mechanisms/accounting conservatism, but also to the individual dynamics and importance of corporate governance and accounting conservatism, and quality of earning which lead to quality of financial reports.

Despite recognised limitations, findings from the current study have advantage in highlighting substantial insights with significant implications for different major financial accounting stakeholders (e.g. corporate management, regulators, investors and scholars,

and practitioners). In advancing the understanding and knowledge of corporate governance and accrual conservatism, this study also highlights majority of governance mechanisms for future benefit and further empirical studies.

In general, this study has contributed to the field of financial accounting, particularly accounting conservatism. This study is the first comprehensive study that examined the issue of accounting conservatism from the perspective of corporate governance in a developing country, Jordan. It is also hoped that the current study will open various avenues for more future studies on accounting conservatism not only in Jordan, but also in other countries where this field of study is lacking. Moreover, it opens up opportunities and provides avenues for more in-depth studies related to accounting conservatism.

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APPENDICES

APPENDIX A

Definitions for the Abbreviations of the Initial Model

Definitions for the Abbreviations of the Initial Model

| Symbol | Variables | Description and Measurement | Predicted Direction | Relevant Hypotheses |
|---------------|----------------------------|---|----------------------------|----------------------------|
| | Dependent Variable | | | |
| ACCR | Accounting Conservatism | ACCR= [(income +depreciation expenses– operating cash flows)] ÷Total assets. ACCR = (Accruals / 3 years) X (-1). | | |
| Symbol | Variables | Description and Measurement | Predicted Direction | Relevant Hypotheses |
| | Ownership Structure | | | |
| OWINST | Institutional Ownership | Institutional ownership measured as ratio, “by dividing the number of shares held by the institutions to the total number of firm's shares. | + | H1a |
| OWFOREI | Foreign Ownership | Foreign ownership measured as the percentage of shares held by foreigners to total number of firm's shares. | + | H1b |
| OWFAM | Family Ownership | Family ownership measured as the percentage of shares held by families to total number of firm's shares. | + | H1c |
| OWMAN | Managerial Ownership | Managerial ownership calculated as the percentage of shares held by directors on the board to the total number of firm's shares. | – | H1d |
| BIND | Independence | Board independence measured proportion of independent directors to total directors on board. | + | H2a |
| BSIZ | Size | Board size is the natural logarithm of total number of board members. | + | H2b |
| BCEO | CEO Duality | Dummy variable = 1 if CEO/Chairman roles combine;0 if separate. | + | H2c |
| BFIX | Financial Expertise | Percentage of board members with financial expertise to total directors on board. | + | H2d |
| BTEN | Tenure | Average years the independent directors served on the firm’s board. | + | H2e |

| Symbol | Variables | Description and Measurement | Predicted Direction | Relevant Hypotheses |
|---------------|------------------------------|--|----------------------------|----------------------------|
| BMULT | Multiple Directorships | Percentage of board members with more than two outside directorships to total directors on board. | + | H2f |
| | Audit Committee | Dummy variable = 1 if company has audit committee and 0 otherwise. | + | H3 |
| ACIND | Audit committee independence | The proportion of independent members in the audit committee | | |
| ACFE | Financial expertise | The total number of audit committee Members with financial expertise divided by the total number of audit committee members. | | |
| ACD | Diligence | Diligence, awarding a score of 1 if the audit committee meets at least four times or more in financial year; and 0 otherwise | | |
| | Auditor Quality | | | |
| AUIND | Independence | Measured by non-audit fee/total fee ratio. | + | H4a |
| AUBRAN | Brand Name | Dummy variable = 1 if the external auditor engaged by Big 4 firm, and 0 otherwise. | + | H4b |
| | Company Attributes | | | |
| CSIZE | Size | Company size measured by log of total assets. | + | H5a |
| CDEBT | Debt Contract | Noncurrent liabilities/total assets. | + | H5b |