An Accounting Model to Measure Profit Accounting Conservatism in the Industrial Jordanian Public Joint- Stock Companies Listed in Amman Stock Exchange during the Period 2008-2014

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GJMBR-D Classification: JEL Code: M41
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I. Introduction

The large effect of accounting reservation on the accounting information which is reflected on the taken decisions in light of such information resulted in an increase of the accounting research especially during the last decade. This accounting reservation is considered among the important principles that affect the consistency and accuracy of accounting information listed in the financial lists. However, there are various reasons that caused the interest of scholars in the accounting reservation, including the need to have more conservatism financial lists to insure the existence of profit management practices in the financial reports, the increase of debate about the use of the fair value in evaluating the assets which indicate to the need to disclose thereof when taking consultation decisions (Mohammed, 2011, 70).

In addition, the accounting conservatism is deemed as one of the important features that are generally accepted (GAAP) and it is still used and dominant in the accounting practices in the accepted accounting principles (GAAP). Such use is considered a prevailing feature in various countries. The importance of this principle stems from: its influence on the relationship between the current profits and the future cash expenditures, where future cash spending is stated on the top of the most conservatism financial reports (Jain & Rezaee, 2004, 11). As a matter of fact, accounting reservation faced a severe disagreement by the mutual project of the ideological accounting framework by (The Financial Accounting Standards Board/ US) and the International Accounting Standard Board, as this reservation results in a kind of bias in the accounting information that are included in the discloses accounting lists. This completely contradicts with some basic facts due to the existence of such information, most importantly: the correct representation, neutrality (that is considered one of the aspects of real representation) as well as the enhanced qualitative features (the applicability to make sure there of) (The Arab International Forum for Certified Accountants, 2013, 28-30). Contrary to that, the topic of accounting reservation has received a serious support by a good number of scholars as it provides benefits for the users of accounting information, especially through its role in increasing the efficiency of transactions concluded among various parties of the contradicting stakeholders in the company. Most importantly, debt contracts, incentives and administrative rewards, which decreases the severity of the problems resulting from adopting the theory of agency (represented in interest contradictions. In this regard, Basu's model (1997, 3-37) received acceptance among scholars as a means to measure accounting reservation. The basic idea of this model relies on the fact that the market is faster than the accounting system in responding to the good and bad news, as various information arrive to the markets from different resources. In return, this can be quickly...
reflected on the company's net assets; the competent market responds promptly to such information and reflects them on the prices prior to having the company's financial lists. The importance of this study stems from the increase of the financial capital markets in the economic, social and political roles on both the local and international levels. In addition, the importance of accounting information increases in such markets, as such information are used as a basis for taking consultation and security decisions to attract investors, shareholders, security providers, financial analysts, the state and other parties who use such information. Moreover, such importance increases due to the increase of the accounting reservation in the financial reports during the last years in the Jordanian joint – stock industrial companies. This study will apply the analytical descriptive methodology in data analysis and to conclude results, with the help of some models and statistical methods to conduct analytical studies. In addition, it will use statistical measures for the analysis of results. Based on the results, the paper will conclude the most important conclusions and necessary recommendations.

II. Problem of the Study

The main issue of the current accounting studies was represented in finding a benchmark to decide whether the values of the financial position has taken reservation into account or not?

In this context, most of research almost agree that Basu's model (1997) represents the keystone for most of studies relating with the concept of reservation and measuring it at the current time, despite the existence of other current studies that largely affected the accounting research in the field of accounting reservation (e.g. Bauwhede, 2007); (Hamdan, 2012). Basu's model focused on the informative content of the profits and the share market price, especially the features of Timeliness and Going-concern. According to the feature of the competent market (the least in its formula), share prices should reflect all relating available information about the company without any bias, and regardless whether such information contain good or bad news to embody the shares' intrinsic values. The problem of the study is represented in the attempt to answer the following question: What is the efficiency of Basu's model in measuring the profit's accounting conservatism in the Jordanian joint- stock industrial companies?

This can be examined through answering the following sub-questions:

1. What is the effect of market revenues in case of bad news compared with the good news on the accounting conservatism of the accounting profits in the Jordanian joint – stock industrial companies? 2) What is the effect of market revenues when the percentage of market value compared with the book value at the first period is high on the accounting conservatism of the profits in the Industrial Jordanian public joint – stock industrial companies? 3) What is the effect of the fair value for re-evaluating the net assets of the company on the accounting reservation of the profits in the Jordanian joint – stock industrial companies?

a) Significance of the study

The importance of the scientific studies is embodied in the reflections and benefits achieved in contribution of such studies in developing the field status. Accordingly, the current study can be divided into the following themes:

*First: the practical importance

In light of the increase of capital markets in the economic, social and political activities on the local and international levels, the importance of accounting information increases in such markets, with an increase in the degree of reservation in the financial reports during the last years. Therefore, we find interest in measuring this reservation in the Jordanian joint – stock industrial companies.

*Second: the theoretical and subjective importance

The current study takes its theoretical significance since it deals with current vital accounting topics and has serious effects on the performance of the profits in the Jordanian joint – stock industrial companies. Accordingly, the accounting Research in Capital Markets (CMR) currently represents the main trend towards local and international accounting research.

b) Objectives of the Study

The study aims at achieving the following:

1. Introducing the concept of accounting reservation and the models used to measure therefore.
3. Developing Basu’s Model by introducing new variables that represent the percentage of market value compared with the share book value and applying the fair value to re-evaluate the company’s net assets) so as to be an accepted standard that measures the level of the accounting conservatism.

c) The concept and definition of the accounting conservatism

Conservatism is considered among the concepts that affect accounting practices, especially in the measurement and disclosure processes. Accordingly, there were many attempts to define this concept. FASB, 1980, par. 93-95. 722 defined accounting conservatism as a delay in recognizing the revenues in case of non-certainty, and decrease instead
of exaggeration in evaluating the assets and profits during the current period, not to forget acknowledging the future potential losses. In addition, the Institute of Chartered Accountants of England and Wales (ICAEW, 2001, 1986) defined accounting conservatism as alert and caution on practicing personal judgments in making the necessary estimations under non-certain conditions. In such conditions, this task does not required the evaluator to increase or decrease the aspects of the financial lists based on personal judgments only, but based on evidence and accurate reliable information regarding such conditions, and therefore, the practice of accounting conservatism does not mainly rely on personal judgments in decreasing the assets, profits and increasing the debts and losses, but on reliable future potential circumstances. On the other hand, (Chung and Wynn, 2008, 135, 153) “in their study” defined accounting conservatism as a decrease in the company’s value of net assets and avoiding future risks and consequences resulting from lawsuits, and the presentation of more accurate data for all parties.

d) **Methods of Accounting Conservatism**

Accountants divide accounting conservatism into two methods, where the term method of accounting conservatism was different through the related studies, which means that various names were used to indicate to the methods of accounting conservatism by various accounting scholars.

e) **Conditional Accounting Conservatism**

This is also called “Income statement conservatism” (Chandra, 2011, 285, 314” and “Ex-post conservatism” (Pope & Walker, 2003, 53- 88), and the (News- Dependent” (Ball et al., 2000, 1-51), the (asymmetric income timelines) (Basu, 1997, 3-37). The conditional accounting conservatism was defined by (Ball and Sadka, 2005, 1-51) as: the value of the book decreases enough under in-suitable events, but such book values do not get higher again despite the occurrence of other appropriate events. Examples on such accounting policies are the method of costs or market, whichever is less for accounting in terms of the stock, and applying accounting procedures to acknowledge the sharp losses in the long-term asset values (the non-observed).

f) **Un-conditional Accounting Conservatism**

This can also be called as the “balance sheet conservatism” (Chandra, 2011, 285- 314), the “Ex-ante conservatism” (Pope and Walker, 2003, 53-87), the “independent news conservatism” (Ball et al., 2000, 1-51). Moreover, Pope and Walker, 2003, 53-87 defined the non-conditional accounting conservatism as the statement of a low book value for the rights of shareholders or that occurred due to the rapid acknowledgment of expenditures and postponing acknowledging the profits, which means a decrease in the book value for the rights of shareholders compared with the market value.

g) **Functions of Accounting Conservatism**

During the last ten years, there various accounting studies tended to study the accounting conservatism. This can be attributed to four main reasons (Lafond and Watts, 2008, 447-478) and (Watt, 2003, 207-221): 1) The large development in studying the contractual relationship that form the organization and its effects on the financial report; 2) The increase of asking for the production of more conservative financial lists to insure the practices of profit management in most parts of the financial report. 3) The huge development in the studies that examined the instruments for measuring many of the financial and accounting phenomenons regarding the status of financial lists. 4) The increase in arguments, especially in the United States of America, regarding the use of fair value in evaluating the assets.

h) **Measuring the accounting conservatism within the contexts of financial markets**

Within the framework of the development of accounting thought in the financial markets, the increasing research provided more and various measures and concepts, in reliance on the nature of the informative content of the financial figures that are discloses in the financial lists. These lists embody the nature of the applied accounting policies, the informative content of the share prices and changes that reflect the decisions of the investors and any information they used when taking their investment decisions. The accounting studies have embodies the effect of conservatism of the financial reports which are attributed to (Feltham and Ohlson, 1995, 731), who defined accounting conservatism based on the variation between the market value and the book value for the property rights. Under accounting conservatism, equality between the two values can never be achieved, and conservatism will result in making the book value less than its market value. Furthermore, (Zhang, 2000, 125-149) relied “in measuring the accounting conservatism” on the average percentage of the market value for the ownership rights to their book value, which are higher, the average of share prices compared to the profits. Moreover, Beaver and Ryan, 2000, 127-148 used the model of book value percentage to the market value upon preparing the financial lists. The same researchers (Beaver and Ryan, 2005, 269-309) used the market value compared to the book value as the increase on market value to more than (one) is an evidence on the practice of the concept of accounting conservatism, but the percentage of market value is still larger than the book value, with the elapse of time.
i) The effect of accounting conservatism on the accounting profits

The company’s compliance with the principle of the accounting conservatism provides it with many advantages. Various studies tended to link between the accounting conservatism and the quality of profits that depend on the continuous profits in the future; conservatism in disclosing profits by using accounting policies that may postpone acknowledging the revenues, will create continuous profits in the future through generating cash flows for the next period. In addition, research showed a good role for the accounting conservatism in improving the quality of profits (Penman and Zhang, 2002, 237-264). However, profits, regardless of the level of their quality are considered among the important inputs in taking investment decision, and can also be used to predict, speculate and evaluate the current and future performance of the business. In addition to that, the quality of profits express their ability to show the real profits and in predicting future profits (Chan et al., 2006, 32-37).

As for the (income smoothing), it is considered a pattern of profit management that aims at decreasing variation in the regular profits, and since the accounting policies are flexible and allow managers to amend the disclosed profits to introduce (Income Smoothing) (Tucker and Zarowin, 2006, 251-270). In fact, following an accepted level of accounting conservatism limits the effects of illegal profit management (Lara, 2014, 173-198), as accounting conservatism limits manipulation with profits and facilitates evaluating the company by the users of financial data.

III. Previous Studies

This part presents a number of Arabic and foreign previous studies that examined the topic of accounting conservatism.


This study aimed at examining the phenomenon of accounting reservation, specifically, the study focused on evaluating the relationship between the degree of accounting reservation at the company and the following factors; company’s profitability, type of business, company’s debts, establishing the Saudi Stock Market Commission. This study relies on testing the hypothesis of the study through the cross-sectional analysis and time intervals during the years 2001-2005. In addition, the study used the measure of accounting reservation that was proposed by Basu (1997). The population of the study consisted of all Saudi companies that are registered in the stock market at the end of the financial years 31/12/2005, whereas the sample consisted of (76) companies distributed on eight sectors, namely: banks, insurance, communication, electricity, industry, cement, services and agriculture. The sample was chosen after disqualifying the companies that have no complete data. The final sample consisted of (63) companies. The results showed lack of accounting reservation in the Saudi companies. Although the results show – in general- that there is no relationship between the size of company and the accounting reservation, it showed also that the large companies are less conservative than the small ones. The study recommended to encourage scientific studies that relate to the quality of accounting income in order to raise the level of awareness of the investors and regulators about the need to improve the means and standards of disclosure that are prevailing in the Kingdom of Saudi Arabia.

2. Al-Samarah (2009): conducted a study titled: The effect of accounting reservation and non-resemblance in information on the cost of funding in the Jordanian joint-stock companies: This study intended to show the role of the accounting reservation and its effect on the cost of capital through the variation of effect between the conditioned and non-conditioned the accounting reservation on the cost of debts and ownership. The population of the study consisted of (227) joint-stock companies distributed on four sectors enlisted on Amman Stock Exchange at the end of the year 2006. The sample consisted of (101) companies enlisted on Amman Stock Exchange, which represent (12) banks, (17) insurance companies, (27) service companies and (45) industrial companies. The period of the study lasted from the beginning of 2000 up to 200 6, as the number of view per variable amounted to (707). Basu’s (1997) model was used as a basic measure to predict the policy of accounting reservation. The other secondary measure was to predict accounting reservation through accruals. Based on the results of the analysis of the hypothesis, the study concluded to a number of results, namely: the Jordanian joint-stock companies – in general- use accounting reservation but with different degrees among various sectors. It was found that the level of accounting reservation in the industrial sector was the highest. Based on these results, the study recommended to conduct more studies in the future to examine the factors that define the ideal level of accounting reservation for each company. In addition, the study recommended focusing on the conditioned accounting reservation.

3. Kassab (2011): Conducted a study that aimed at examining the factors affecting accounting reservation through focus on four factors: the size of the company, percentage of debts, governance and...
variation of the accounting criteria used by the companies. The study used the percentage of market value to the book value of ownership rights (MTB) to measure the accounting reservation. The study was applied on 68 Saudi companies and 48 Egyptian companies during the year 2008. The study showed a reverse relationship between the size of the company and the level of accounting reservation, so that the level of the accounting reservation becomes lower with the increase of the company's size and vice versa. In addition, the study showed a positive relationship between the percentage of debts and the percentage of independent and non-executive members and the level of accounting reservation, with an increase in the level of accounting reservation in the companies that use national accounting criteria (Kingdom of Saudi Arabia) other than those used by Egypt.

4. Muhsin, 2013: conducted a study titled: Measuring the degree of accounting reservation in the joint-stock Saudi companies: an applied study. The study aimed at measuring the degree of accounting reservation in the Saudi joint-stock companies and to study the effect of a set of factors on the extent of applying this accounting method in the joint-stock companies. In addition, the study examined the establishment and development of this methodology as well as the applied implications in the financial lists and its various measurements. The study was applied on a sample of (38) Saudi joint-stock companies enlisted in the Saudi stock exchange, by using Basu's model (1997) during the period 2006 – 2010. The study used SPSS to conduct the variant inclination of the variables and to test the hypothesis relating to the factors affecting the degree of reservation. The results showed lack of accounting reservation used by the Saudi joint-stock companies. This can be justified due to the simple procedures and accounting criteria in the KSA, and the lack of lawsuits that relate to accounting. In addition, the study did not show a vital effect for the factors of the size of the company, nature of industry and size of debts on the degree of accounting reservation that is applied, as well as that the 2008 international crisis did not affect vitally on the degree of applied accounting reservation. Despite that, the results showed some indicators that the small companies are more conservative than the big ones, and the less indebted companies than the more indebted companies. The same applies after the financial crisis as the companies were more conservative than before. Moreover, the study showed that the agricultural sector – in such an exceptional way- apply accounting reservation methodology than the other sectors.

5. Basu, 1997, conducted a study titled: "The Conservatism Principle and the Asymmetric Timeliness of Earnings". The study aimed at measuring the accounting reservation through measuring the speed that reflects accounting profits in case of good and bad news. It was supposed according to the competent market hypothesis, at least in its medium formula, that the prices or revenues of shares shall respond to the surprise held by the accounting profit in a non-biased way (which means to respond positively with the good news held by the accounting profit the same way as with the negative news). The study relied on assuming the existence of a reverse slope relationship between the accounting profit and the share revenues, where the accounting profit is the dependent variable whereas the share revenues are the independent variable. With the use of the positive revenues as an alternative for proxy of the good news, and using the negative revenues of shares as an alternative measure for the bad news, the study relied on four perspectives. First: states that profits are faster and more responsive to the bad news compared with the good news featured by the effect of slow profits. Second: the link between the profits and revenues are relatively stronger than the link between revenue and the cash flow in terms of the bad news compared with the good ones. Third: the high un-expected profits tend to be more continuous and the low un-expected profits tend to be temporary. The variation of continuity can be noted through the time chain of profits. In addition, good news leave continuous effects on the profits, where such profits are low in the period that takes place directly after the bad news. Forth: the non-ordinary profit per one (USD) of the unexpected revenues is less in case of disclosing the losses, than the case when disclosing the profits. The response of share price in the market reflects the news about the current and future profits.

6. The study of Beatty et al., 2008, titled: Conservation and Debt. This study aimed at examining the relationship between using the non-resemblance in the agreements and expansion in applying accounting conservancy in the financial lists (the borrowers). The sample included (1456) companies during the period (1996-2004). The study examined the relationship between expansion in the accounting conservancy in the accounts of debt contracts and the level of accounting conservancy in the lenders financial reports. Market and non-market measures were used to measure accounting conservancy, which strengthened the results of the study. Market measures were used through the percentage of book value on the market value and Basu's model (1997), as well as the non-market measures (measuring the relationship between cash flow and the financial dues) and the relationship
between change in the profits and the change in the previous profits. The study concluded that the company which has low percentage of the book value for the market value per year (which inter in the contracts) "has an accounting conservancy", might have a high non-similar treatment for profit and loss in their contracts. In addition, through Basu's model (1997) there was no large similarities in terms of treating the profits and losses of the contracts that have an appropriate timing to acknowledge losses. As for the non-market measures, the study found that the companies which have high percentage of income included in the accounts of their debt contracts show a more positive relationship between the dues and cash flow, when they disclose negative cash flow. Similarly, it was found that the companies that have high percentage of income included in the accounts of their contract debts show a more negative relationship between the change in the net income for the current period and a change in the net income for the previous period, when the change in the net income for the previous period is negative. On the other hand, the study showed that the companies that expand in accounting conservancy in their financial reports have no assimilation in the agreements, which means that the lenders mostly use contract terms to satisfy their needs for reports that are conservative in terms of accounting, though the companies provide more conservative information (relatively), which indicates that the requests of lenders for having accounting conservatism were not fully achieved through the treatment of the accounting data.

7. The study of Hamdan, 2011, titled: "The Impact of Company Size, Debt Contracts, and Type of Sector on the Level of Accounting Conservatism: An Empirical Study from Bahrain". The study aimed at measuring the level of accounting conservatism and the affecting factors in all companies enlisted in Bahrain Stock Exchange (50 companies) during the period (2005-2008) using Basu's model (1997) and the input of the book value for the market value in order to measure the level of accounting conservancy. The results of the study showed that the financial reports issued by the Bahraini companies are characterized with conservancy. This finding has been confirmed through using two different aspects to measure the level of accounting conservancy. As for the differences among the companies in the level of conserving their financial reports according to their size, the results showed that the large companies are more conservative in their reports than the small ones. This can be attributed to the desire of the large companies to avoid political costs resulting from disclosing high profits or large values for their assets, due to the high control of the public bodies and financial analysts, not to forget the high level of company governance compared with the small size companies. Moreover, the results showed that each of the high or low debt companies have conservative financial reports. However, the highly indebted companies are more conservative. This indicates to the high pressures practiced by debtors on the companies' managements to be conservative in disclosing the profits and the high values of their assets.

Finally the study investigated the extent of differentiation of the economic sectors in Bahrain in terms of the conservancy of their finance reports, as it was found that the service sector is more conservative than the financial one.

8. The study conducted by Hamdan, 2011, titled: "Evaluation of the Conservatism Level in Kuwait Stock Exchange: By Using Basu Model". The study aimed at evaluating the level of accounting conservatism upon preparing the financial data by the companies listed in Kuwait Stock Exchange and to examine the factors that affect the level of accounting conservancy in such companies, taking into account, the size of the company, debt contract, and type of sector. In order to achieve the objectives of the study, Basu's model (1997) was used to measure the level of accounting conservancy. The sample consisted of (225) companies enlisted in Kuwait Stock Exchange. To measure the variables of the study, the financial data of the companies were used at the end of 2009. The results of the study showed that the Kuwaiti Stock Exchange succeeded to force the Kuwaiti companies to provide a reasonable level of accounting conservancy. In addition, the study showed that the small are more conservative in their accounting policies than the large ones. Moreover, there was an effect for the debt factor on the level of accounting conservancy upon preparing the financial reports. On the other hand, the least indebted companies were less conservative than the higher indebted ones. Furthermore, the study found that the financial sector in Kuwait Stock Exchange is more conservative in their accounting policies. What distinguishes the current study from the previous ones It is possible to summarize this study from the previous ones as follows: 1) The current study examines measuring the degree of accounting conservatism by using (Basu's model) in an environment that differs from the place where this model was applied in terms of the organizational and regulative perspective, namely, the Jordanian stock exchange environment. 2) New variables were added to the model to become a developed one in this study, specifically, the percentage of market value to the book value,
applying the fair value to re-evaluate the net assets of the company.

IV. VARIABLES AND MODEL OF THE STUDY

The model of the study: it can be clarified from the following figure (1):

![Diagram](Image)

**Figure (1):** Basu’s amended model to measure the efficiency of profit accounting conservatism in the Jordanian joint-stock industrial companies listed on the Amman Stock Exchange during the period 2008-2014.

- **Variables of the study**

  **Dependent variable:** Profits \(\frac{X_i}{P_{it-1}}\) measures the profit variable \(X_i\), company’s share profit \(i\) at the end of the period \(t\) divided by the share price at the beginning of the period \(P_{it-1}\). Dividing profit on the price is a necessary process to get rid of the effect of share price due to the difference in the nominal value for each company on the share profit.

  **Independent variables:**

  1. Market revenues per share in case of bad news compared with market revenues per share in case of good news \(R_{it} \times DR_{it}\).
  2. Percentage of market value to the book value per share \(MTB_{it-1}\): this variable separates between the cases where the percentage of market value is more than the book value per share at the beginning of the year for more than (one), which equals less than (one). Measuring the above variable is implemented on two stages:

     **First:** The percentage of market share to the book share are calculated at the beginning of the formula \(P_{it-1}/B_{it-1}\).

     **Second:** The value of (1) is registered when the percentage is more than (one) and is recorded as (Zero) in the other cases.

  3. The fair value \(FT\): This variable was used to separate the companies that re-evaluated their net assets due to inclusion or ownership. The variable was registered for any company during the year of re-evaluation and the following two years at the end of the re-evaluation. With the same method, the dual-measurement approach was used, which gave the variable a value (1) for the year of re-evaluation and the following two years, and the value (Zero) for the other years.

- **Hypothesis of the study**

  This study is based on the following hypothesis:

  **Ho1:** there are no significant statistical effects for the share’s market revenues in case of bad news compared with the effects of share market value in case of good news on the accounting reservation of the profits in the Jordanian join-stock industrial companies.

  **Ho2:** there are no significant statistical effects for the market revenues when the percentage of market value compared with the book value per share in the first period is high on the accounting reservation for the accounting profits in the Jordanian join-stock industrial companies.

  **Ho3:** there are no significant statistical effects for applying the fair value of re-evaluating the net assets of the company on the accounting reservation of profits in the Jordanian join-stock industrial companies.

- **Methods of measuring the hypothesis**

  The following models were used to measure the study hypothesis:

  1. **Measuring the first main hypothesis:** Which states “there are no significant statistical effects for the market revenues in case of bad news compared with the effect of share market value in case of good news on the accounting reservation of the profits in the Jordanian join-stock industrial companies”. Basu’s main model (1997) will be used in the equation No. (1) to measure the extent of profit response for the accounting reservation in the financial lists of the Jordanian commercial banks through the following slope relationship to express the slope of profits on revenues, as follows:

     \[
     \frac{X_t}{P_{it-1}} = \alpha + \beta_1 R_{it} + \beta_2 DR_{it} + \beta_3 (R_{it} \times DR_{it}) + U_{it} \tag{1}
     \]
2. *Measuring the second main hypothesis:* which stated: "there are no significant statistical effects for the market revenues when the percentage of market value compared with the book value per share in the first period is high on the accounting reservation for the accounting profits in the Jordanian joint-stock industrial companies".

This hypothesis is linked with the percentage of market value to the book value (MTB) and the factor of Basu's model (1997). This percentage measures the accumulated effect resulting from the difference in the market value and the book value (Beaver and Ryan, 2000, 127-148) and (Roychowdhury and Watts, 2007, 2-31). As for the coefficient of Basu's model, it reflects the accounting reservation that results from the changes of value during one period. Accordingly, it is expected that reservation factor will become higher through the use of Basu's model (1997) whenever the market value compared to the book value is high. To test this hypothesis, Basu's model (1997) will be amended by adding the percentage of market value to the book value in order to measure the accumulated effect of the accounting reservation, as in the following equitation (equation):

\[
\frac{X_t}{P_{t-1}} = \alpha + \beta_1 R_t + \beta_2 DR_t + \beta_3 (R_{t-1} DR_t) + \beta_4 MTB_{t-1} + \beta_5 MTB_{t-1} * R_t + \beta_6 MTB_{t-1} * DR_t + \beta_7 MTB_{t-1} * R_t * DR_t + U_{it}.
\]

3. *Measuring the third hypothesis:* which states: "there are no significant statistical effects for applying the fair value of re-evaluating the net assets of the company on the accounting reservation of profits in the Jordanian joint-stock industrial companies".

The assumption of fair value was established based on the fact that re-evaluating the company’s net assets will result in approximating the values of assets from their fair value. Consequently, the asset values are

\[
\frac{X_t}{P_{t-1}} = \alpha + \beta_1 R_t + \beta_2 DR_t + \beta_3 (R_{t-1} * DR_t) + \beta_4 FT_{t-1} + \beta_5 FT_{t-1} * R_t + \beta_6 FT_{t-1} * DR_t + \beta_7 FT_{t-1} * R_t * DR_t + U_{it}.
\]

**V. Methodology of the Study**

This study used the analytical descriptive method for data collection. In addition, the study used two main resources gather data:

In order to achieve the objectives of the study and test its hypothesis, data were collected through the following methods:

1. Preliminary resources: the financial lists of the Jordanian joint-holding industrial companies during the years (2008-2014).
2. Secondary resources: books, Arab and foreign periodicals, essays and the previous studies related with the topic as well as the daily newsletters of Amman Stock Exchange which are deposited in the library of the Stock Market.

**a) Population and sample of the study**

The population of the study consists of all of the industrial joint-stock companies enlisted in Amman Stock Exchange (N = 77) as per the companies' directory for the year 2014 and according to the website of Amman Stock Exchange. The sample included all industrial Jordanian joint-stock companies enlisted in Amman Stock Exchange after excluding the following companies:

1. The companies that were subject to liquidation or merger during the period of the study;
2. The companies that did not publish their financial lists regularly during the period of the study.

Accordingly, the final size of the sample which satisfied the previous requirements amounted to (59) companies that form (76 %) of the population.

**b) Statistical analysis**

This part tests the extent of the linear model for the data of the study. In this regard, the natural distribution of data was tested, then the coefficients between the independent and dependent variables were calculated and the same procedure was implemented regarding the independent variables among them. In addition, the existence of multi-collinearity phenomenon was tested through calculating the VIF as well as testing the multiple co-linearity phenomenon through the use of Darbun- Watson test. On the other hand, the time series stationary were tested, not to forget testing the heteroskedasticity test. Following is a presentation of the procedures that were implemented prior to testing the hypothesis.

**First: Testing of Normal Distribution of Data**

Among the conditions of the validity of the "General Linear Model" (GLM) is that the values of views shall follow the normal distribution. In case this requirement is not satisfied, then data shall be treated through using the ordinary logarithm or their quadratic (square root) as well as other procedures. It has been insured that data follow the normal distribution based on Jarque- Bera tests. The results were as follows:
Table 1: Jarque- Bera Test for Normal Distribution: testing the reliability of data for analytical analysis

<table>
<thead>
<tr>
<th>Variables</th>
<th>Jarque-Bera</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPS (Xit)</td>
<td>1.5558</td>
<td>0.7082</td>
</tr>
<tr>
<td>Price (Pit)</td>
<td>0.6900</td>
<td>0.7085</td>
</tr>
<tr>
<td>Price (Pit)</td>
<td>1.3533</td>
<td>0.5083</td>
</tr>
<tr>
<td>Return (Rit)</td>
<td>0.5732</td>
<td>0.7508</td>
</tr>
</tbody>
</table>

The above table shows that the level of coefficient level for all variables is higher than (0.05). According to Gujarati, 2004, 149, this indicates that all variables of the study follow the normal distribution.

c) Testing the autocorrelation

The problem of autocorrelation appears in the model if the neighboring views were linked, which will affect the accuracy of the model; the effect of independent variables on the dependent ones will be high due to that link. To insure thereof, the researcher used D-W- Durbin Watson tests. It is worth stating that DW is calculated based on a complex relationship. In addition, it could be obtained through SPSS. After calculating DW value, it will be compared with the other two values (dj) which represent the minimum limit for the absence of autocorrelation and (dy) which represent the maximum extent for the absence of autocorrelation. This comes based on the number of views and independent variables in the model for each level of significance. Either hypothesis might be accepted or rejected based on mathematical rules. The value of (DW) is the medium (2) and when the autocorrelation is absent, the coefficient will equal (Zero). Accepting or rejecting the (H0) will be based on some statistical comparisons.

Table 2: Testing Autocorrelation in the model of the study

<table>
<thead>
<tr>
<th>Durbin-Watson(d)</th>
<th>Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.920</td>
<td>Xit/Pit</td>
</tr>
</tbody>
</table>

A=0.05

From Durbin-Watson tables: dL= 1.400, dV= 0.610

N= 413 (Number of sample views)

K= 3: Number of independent variables.

In (Durin- Watson) test, the following hypothesis will be tested:

Ho: the model does not suffer from the autocorrelation problem;

Ha: the model suffers from the problem of autocorrelation.

From table (7), we notice that (DW value) = (1.920). By testing a moral value of (a = 0.05), we notice that the value of (dL= 0.610) and DV = 1.400 value. In addition, we notice that the value of DW is not located within the scope, where (DV >dL) and therefore, the model does not suffer of the problem of autocorrelation (Hussein and Sa'eed, 1998, 448).

d) Analysis of the results

After insuring the validity of data for analysis, it will be possible to test the models of the study, first to measure the level of accounting conservatism for the profits of the Jordanian join-stock industrial companies enlisted in Amman Stock Exchange. Here are the results of analysis as interpreted by the accounting conservatism.

Table 3: Showing the descriptive statistics of the main variables

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Share profitability</th>
<th>Net Revenues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Means</td>
<td>27,736</td>
<td>0.2460</td>
</tr>
<tr>
<td>The largest value</td>
<td>87.967</td>
<td>0.3502</td>
</tr>
<tr>
<td>The lowest value</td>
<td>7.6565</td>
<td>0.0336</td>
</tr>
<tr>
<td>SD</td>
<td>34.342</td>
<td>0.1331</td>
</tr>
</tbody>
</table>

From table (3) above, we notice the accounting means for the profit of share (EPS) which equals (27,736) with a standard deviation (34,342). In addition, the minimum value per profit share equals (7,6565) while the maximum value is (0.1331). The minimum value of the revenues equals (0.0336) and the maximum value is (0.3502).

e) Testing the hypothesis

H01: “There are no significant statistical effects for the market revenues in case of bad news compared with the effect of share market value in case of good news on the accounting reservation of the profits in the Jordanian join-stock industrial companies”.
As noted before, the idea of the Basu's model (1997) is based on the fact that market receives good or bad news from various resources and promptly reflects them on the prices. Accordingly, the revenues of shares take place (positive or negative) prior to receiving the accounting profit reports. In this regard, we find that variable (Rit) in the model records all positive and negative market revenues without differentiation. As for the variable of news (DRit), it is a dummy on with the value of (one) or (zero). It separates the negative revenues (which take the value: 1) from the positive revenues (that take value zero). Therefore, multiplying variable (Rit) with (DRit) will result in another independent variable (DRit X Rit) recording the negative values only. This procedure results in using (B1) to measure the slope coefficient of the profits on the positive revenues only. As for (B3), they measure the slope coefficient of the profits for the negative revenues only. On the other hand, coefficient (B2) measures the accounting reservation in the financial lists regardless of the positive or negative revenues and the value of such revenues. In this context, Basu stated that such coefficient, if it has a negative value, then it expresses the degree of reservation in the accounting profits regardless of the values of the negative revenues.

Table 4: The accounting reservation after separation based on the bad news compared with the good news in the industrial Jordanian joint-stock companies

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Response coefficient</th>
<th>P-value</th>
<th>Coefficients</th>
<th>Response coefficient</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \alpha )</td>
<td>0.249889</td>
<td>0.568</td>
<td>( \beta_1 )</td>
<td>0.443560</td>
<td>0.026</td>
</tr>
<tr>
<td>( \beta_2 )</td>
<td>0.443560</td>
<td>0.026</td>
<td>( \beta_3 )</td>
<td>-0.11882</td>
<td>0.054</td>
</tr>
<tr>
<td>R²</td>
<td>44.13%</td>
<td></td>
<td>R²</td>
<td>5.08%</td>
<td></td>
</tr>
<tr>
<td>S</td>
<td>0.676798</td>
<td></td>
<td>S</td>
<td>0.548269</td>
<td></td>
</tr>
</tbody>
</table>

From Table (4) above, we notice that \( \beta_1 \) equals (0.44356) and the value of t-test is: 2.666, P value- = 0.026 which are important from a statistical perspective since the (t) value is bigger than its scheduled value, while (p- value) is less than (0.05). Consequently, we would reject the null hypothesis and say: "there is no significant statistical effect for the market revenues in case of bad news compared with the effect of share market value in case of good news on the accounting reservation of the profits in the Jordanian joint-stock industrial companies".

As for the good news, the value (t= - 1.96292) is less than its scheduled value with a possibility of (P – value = 0.05). Accordingly, it is not possible to reject the first sub-null hypothesis in case of the good news and we would say: "there is no significant statistical effect for the market revenues in case of bad news compared with the effect of share market value in case of good news on the accounting reservation of the profits in the Jordanian joint-stock industrial companies". This might be attributed to the lack of data relating to the good new in the sample.

Based on the above results, we would reject the null hypothesis which state: "there is no significant statistical effect for the market revenues in case of bad news compared with the effect of share market value in case of good news on the accounting reservation of the profits in the Jordanian joint-stock industrial companies" and accept the alternative hypothesis which state: "there is significant statistical effect for the market revenues in case of bad news compared with the effect of share market value in case of good news on the accounting reservation of the profits in the Jordanian join-stock industrial companies".

\( H02: \) "There are no significant statistical effects for the market revenues when the percentage of market value compared with the book value per share in the first period is high on the accounting reservation for the accounting profits in the Jordanian commercial banks".
Table 5: Testing the relationship between the percentage of market value to the book value per share and Basu's model (1997) on the whole sample

\[ X_{it}/P_{it-1} = \alpha + \beta_1 R_{it-1} + \beta_2 DR_{it-1} + \beta_3 (R_{it-1} \times DR_{it-1}) + \beta_4 MTB_{it-1} + \beta_5 MTB_{it-1} \times R_{it-1} + \beta_6 MTB_{it-1} \times DR_{it-1} + \beta_7 MTB_{it-1} \times R_{it-1} \times DR_{it-1} + U_{it} \]

<table>
<thead>
<tr>
<th>P-value</th>
<th>Response coefficient</th>
<th>P-value</th>
<th>Response coefficient</th>
<th>Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.005</td>
<td>2.88538</td>
<td>0.148</td>
<td>1.46</td>
<td>1.3675</td>
</tr>
<tr>
<td>0.001</td>
<td>-3.4255</td>
<td>0.060</td>
<td>-1.91</td>
<td>-0.11882</td>
</tr>
<tr>
<td>0.012</td>
<td>-2.5648</td>
<td>0.267</td>
<td>-1.12</td>
<td>-1.1176</td>
</tr>
<tr>
<td>0.001</td>
<td>3.49613</td>
<td>0.000</td>
<td>3.70</td>
<td>0.5624</td>
</tr>
<tr>
<td>0.002</td>
<td>-3.14255</td>
<td>-0.23920</td>
<td></td>
<td>MTB</td>
</tr>
<tr>
<td>0.001</td>
<td>3.39226</td>
<td>0.01875</td>
<td></td>
<td>MTB \times R</td>
</tr>
<tr>
<td>0.068</td>
<td>1.85331</td>
<td>0.23852</td>
<td></td>
<td>MTB \times DR</td>
</tr>
<tr>
<td>0.181</td>
<td>-1.35110</td>
<td>-0.08045</td>
<td></td>
<td>MTB \times DR \times R</td>
</tr>
</tbody>
</table>

Analysis of Variance

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>P</th>
<th>Source</th>
<th>DF</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>3</td>
<td>5.3947</td>
<td>1.7982</td>
<td>5.65</td>
<td>0.001</td>
<td>Regression</td>
<td>7</td>
<td>10.6804</td>
<td>1.5258</td>
<td>5.74</td>
<td>0.000</td>
</tr>
<tr>
<td>Residual Error</td>
<td>81</td>
<td>25.7656</td>
<td>0.3181</td>
<td></td>
<td></td>
<td>Residual Error</td>
<td>77</td>
<td>20.4800</td>
<td>0.2660</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>84</td>
<td>31.1603</td>
<td></td>
<td></td>
<td></td>
<td>Total</td>
<td>84</td>
<td>31.1603</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The amended model ANOVA:
The analysis of variance for the amended model shows a significant F value (0.000) indicating a significant effect of the independent variables on the dependent variable.

The original model ANOVA:
The analysis of variance for the original model shows a significant F value (0.001) indicating a significant effect of the independent variables on the dependent variable.

Table (5) shows the results of the amended model as well as variables that reflect the increase of the percentage of market value compared with the book value for more than (1). The results of the model provide some indicators that the market’s dealing with the bad news depends on the percentage of market value compared with the book value. It this percentage is less than one, then the market will not be much affected by the accounting reservation and that will not be reflected to a large extent since the prices are basically low. Therefore, the coefficient of revenue of accounting profit response is not high.

In addition, the response confident for the positive revenues decreased to (- 0.24909) after it was (- 0.11882). The second evidence it that the response coefficient for the bad news rose to (0.74189) with a significant statistical value (P- value = 0.001) after it was (0.5624) with a moral value.

Based on the above results, we would reject the null hypothesis stating: “there is a significant statistical effect for the market revenues when the percentage of market value compared with the book value per share in the first period is high on the accounting reservation for the accounting profits in the Jordanian commercial banks”.

Ho3: there are no significant statistical effects for applying the fair value of re-evaluating the net assets of the company on the accounting reservation of profits in the industrial Jordanian joint- stock companies.
The above table presents a set of important results that tend to accept the application of the fair value which will increase the market reservation and accounting profit due to bad news after evaluation. At the level of positive revenues, the response coefficient did not differ from the original model (0.02: moral), and the fixed reservation (DR) rose in the accounting profits from (0.02 to – 0.03) but it is still immoral. In addition, the coefficient of reservation towards the bad news rose from 0, 17 in the original model to 0,19 in the amended one by applying the fair value and because moral at less than 0.1%. On the other hand, the explanatory power of the amended model rose to 14, 6 % instead of 10,3 % in the original model. As for the variables that were added to measure the effect of applying the fair value, the response of the accounting profits for the positive revenues was reversed with a value of – 0, 82 and moral at less than 0.1%. This means that the accounting profits were not congruent with the positive news received by the market during the years chosen to trace the effect of re-evaluation. The last significant results is the existence of a semi complete response between the negative revenues the accounting profits for the bad news that reached the market within each year. This result means that the accounting profits keep the same degree of market reservation and that the reservation coefficient in case of raising the book value to the fair value increases the reservation coefficient five times in case of keeping the book value of the assets (1.05 / 0.19= 5.5 times). In general, the results support the hypothesis that the application of the fair value results in increasing the degree of reservation towards the bad news which the market receives regarding the asset values.

VI. Conclusion

The Jordanian commercial banks can deal with the bad news in a way that reflects the accounting conservatism due to the existence of data relating with the bad news. As for the good news that shows profits, the reactions of the Jordanian banks are relatively less. This can be attributed to the lack of data linked with the good news, where the accountants tend to acknowledge the un-achieved profits prior to the achieved ones, which means stating the reports of the bad news (losses) faster than the good news (profits). This result is consistent with the study of (Abu Al-Khair, 2008); Abdul Malek, 2012), Al- Otaibi and Khalifa, 2012, and Kung et al., 2011. In addition to, The dealings of the commercial Jordanian banks with the bad news relies on the percentage of market value compared to the share's book value; if this percentage is more than (one), then the market will largely be affected with the accounting conservatism, as the coefficient of accounting profit response to the revenues will not be high. This result is consistent with the study conducted by (Abu Al-Khair, 2008) and (Abdul Malek, 2012); Also, There is a significant statistical difference for applying the fair value of re-evaluating the company's net assets on the accounting conservatism in the industrial Jordanian companies, where the application of the fair value results in an increase in the conservatism degree towards the bad news received by the market regarding the values of the assets.

<table>
<thead>
<tr>
<th>Table 6: Testing the fair value hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The model</strong></td>
</tr>
<tr>
<td>[ \frac{X_t}{P_{t-1}} = \alpha + \beta_1 R_t + \beta_2 DR_t + \beta_3 (R_t \times DR_t) + \beta_4 F_{t-1} + \beta_5 F_{t-1} \times R_t + \beta_6 F_{t-1} \times DR_t + \beta_7 F_{t-1} \times R_t \times DR_t + U_{it} ]</td>
</tr>
<tr>
<td><strong>The original model</strong></td>
</tr>
<tr>
<td>*** (218) 0.15</td>
</tr>
<tr>
<td>*** (5,23) 0.02</td>
</tr>
<tr>
<td>- (1.73) 0.03</td>
</tr>
<tr>
<td>*** (3,67) 0.19</td>
</tr>
<tr>
<td><strong>Stable a</strong></td>
</tr>
<tr>
<td>*** (2,5) 0.16</td>
</tr>
<tr>
<td>*** (5,2) 0.02</td>
</tr>
<tr>
<td>- (1.3) 0.02</td>
</tr>
<tr>
<td>*** (3,44) 0.17</td>
</tr>
<tr>
<td><strong>B coefficients</strong></td>
</tr>
<tr>
<td>*** (5,23) 0.02</td>
</tr>
<tr>
<td>- (1.3) 0.02</td>
</tr>
<tr>
<td>*** (3,67) 0.19</td>
</tr>
<tr>
<td><strong>R</strong></td>
</tr>
<tr>
<td><strong>RD</strong></td>
</tr>
<tr>
<td><strong>DR*R</strong></td>
</tr>
<tr>
<td><strong>F</strong></td>
</tr>
<tr>
<td><strong>R * F</strong></td>
</tr>
<tr>
<td><strong>F*DR</strong></td>
</tr>
<tr>
<td><strong>F*DR*R</strong></td>
</tr>
</tbody>
</table>
| **Moral at 0.1 % or less** **
             means (T) between brackets** |
| *** = t value is moral at 5% or less. **  |
| * means (t) value.                         |

The above table presents a set of important results that tend to accept the application of the fair value which will increase the market reservation and accounting profit due to bad news after evaluation. At the level of positive revenues, the response coefficient did not differ from the original model (0.02: moral), and the fixed reservation (DR) rose in the accounting profits from (0.02 to – 0.03) but it is still immoral. In addition, the coefficient of reservation towards the bad news rose from 0, 17 in the original model to 0,19 in the amended one by applying the fair value and because moral at less than 0.1%. On the other hand, the explanatory power of the amended model rose to 14, 6 % instead of 10,3 % in the original model. As for the variables that were added to measure the effect of applying the fair value, the response of the accounting profits for the positive revenues was reversed with a value of – 0, 82 and moral at less than 0.1%. This means that the accounting profits were not congruent with the positive news received by the market during the years chosen to trace the effect of re-evaluation. The last significant results is the existence of a semi complete response between the negative revenues the accounting profits for the bad news that reached the market within each year. This result means that the accounting profits keep the same degree of market reservation and that the reservation coefficient in case of raising the book value to the fair value increases the reservation coefficient five times in case of keeping the book value of the assets (1.05 / 0.19= 5.5 times). In general, the results support the hypothesis that the application of the fair value results in increasing the degree of reservation towards the bad news which the market receives regarding the asset values.
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