THE STUDY OF ECONOMIC CRISIS ROLE ON THE ACCOUNTING QUALITY IN ACCEPTED COMPANIES ON TEHRAN STOCK EXCHANGE

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Abstract
Economic conditions may have different effects on the companies and influenced on accounting procedure treatment and outcome quality of the way of using these procedures. Firms’ directors are also based on agency theory and in order to their benefits, they are looking to use opportunistic behavior, they consider economic situation for rate of earning management. Accordingly, in the current research, researchers examined data on 92 companies in the period of 7 years from the years 2007 to 2013 to examine the role of the economic crisis on the accounting quality of at companies accepted on the Stock Exchange of Tehran. The results of the analysis show that the assumption of the earning management in financial non-crisis period is higher than during the financial crisis. On the other hand there is significant negative relationship between auditor’s level and discretionary accruals during the financial crisis and it has been used less accruals for the companies that the auditors are audit office. The results also showed that during the financial crisis, Information value burden of prepared reports of the companies which have great auditor (audit organization is their audit) than companies that have the small auditor (audit organization is not their audit) and auditor’s level have positive affection to the relevance of the information contained in the financial statements in the period of financial crisis.

Keywords: financial crisis, non-financial crisis period, interest management, auditor level and the information value burden

Introduction
Financial statements form main part of the financial reporting process. The purpose of the financial statements, provide summarized and classified information about the financial situation, financial performance and financial flexibility of business units that is useful for a wide range of financial statements users in economic decisions (Accounting and Auditing Research Center, 2007). Preparation of financial statements will be affected by factors and conditions that is affected to provide reports, reliability, quality reports and the predict ability. These statements generally prepared and presented by accepted accounting standards and rules in every economic system and with accounting procedures. There are different conditions in different economic period is due to growth and or economy downturn Effect on providing method of financial reports, their quality and therefore quality of accounting. This affection is leading to the creation of value in times of economic growth but in economy crisis periods may mislead consumers and cause irreparable damage. Therefore the affection which financial crisis causes on accounting quality is important. The present research seeks to achieve this effect too (Belkaiu & Picur, 1984).

Express the issue and the causes of choosing research
It was more attention to the profit and loss statement, which resulted a category called “earnings management”, was born and raised (Belkaiu & Picur, 1984). Earnings Management defined as the process of aware steps in the range of accepted principles of accounting, which have been defined to bring earnings to the desired level. Closing reported earning to the target earning level is achieved through the manipulation of accounts. One of the purpose of earning manipulation has been reported Income Smoothing, thus smoothing can be considered part of earnings management Smoothing as a conscious and deliberate action to reduce the periodic swing of reported earning.
or predicted earning have been defined through the use of different accounting methods within the framework of accepted principles of accounting (Wayne, 2006). Economic conditions may have different effects on the companies and affects behavior of the accounting data. For example, it has been expected to reduce sales growth levels and margins of companies earning in economic downturn as well as companies investment and conversely is expected to happen the reverse of this issue during the growth period. As a result, it can be expected that the economic conditions have different effects on accounting data. Therefore, awareness of behavior change of accounting data according to business cycles can help investors and other decision-makers of financial markets to more accurately predict of future accounting data and would be more efficient allocation of resources. On the other hand, the affection of business cycles on accounting variables may vary according to specific characteristics (Pourheydari and Ali pour, 2011). In other words, companies’ specific features such as a cyclic or acyclic of a company or company level could have an impact on the relationship between accounting data with the business cycle. For example, accounting data of acyclic companies (such as the food industry and public services) are less affected in economic downturn condition. While accounting data of cyclical companies (such as durable goods manufacturers) are more effective and indeed, sales, profitability and investments have decreased significantly. This matter is quiet impressive to firm’s management method and how to deal with accounting procedure (Pourheydari and Ali pour 2011). Earning management will be less affected by economic conditions in the acyclic companies and in downturn period and management of the use of accruals in profits as the growth period. For their own interests But in cyclical companies that produce durable and luxury goods, downturn’s significant impact on company performance that finally earning management methods and moderate the use of accruals and other managers cannot easily manage their earning in firms. (Pour heydari and Alipour, 2011).

The accounting quality and economic crisis
Due to the economic aspects of information, financial reporting and accounting system plays a crucial role in the capital market. The main objective of financial reporting is to provide the needs of investors’ information. Investors and users of accounting information using predict future performance of the company and use it to evaluate the company. Feltham and Ohlson (1995) stated that one of the key factors of company evaluation is reporting quality of operating assets. Some researchers examined the effect of earnings management on value of the company. These researchers considered only effect of earnings management on company value and didn’t examine the affection of other factors such as economic characteristics and economic crisis. One of these economic characteristic is economic crises. According to the theory of economic cycles, companies are at different stages of the economic cycle, financially and economically have aspects and particular behavior, meaning that the economic and financial characteristics of a company affect the economy and the state of the economy where the company is located. The results of previous researches indicate that the reaction and response of capital markets to accounting information in different steps of economic crisis have significant difference together (Bikhya, 2007). Some researches show that related earning for decision-making during the economic crisis only by economic growth and stability in earning gain is inexplicable and there are other influencing factors. Because, for example, during the economic growth of the major problems of financial reporting are manipulated. More reforms and treatment for reporting financial problems mainly after the economic crisis started again and when analysts and decision makers focus on the risk of reduce price is done. (Eg Sarbanes-Oxley) Research confirms that an emphasis on lower prices risk during downturn period causes that managers (who are responsible for preparing financial reports) and auditors (who are responsible for the audit report) with a conservative attitude do their duties and earning Management has happened less than in the growth period. This is due to the following items:

Firstly during the economic crisis when there is possibility of reduced unexpected of stock market price, the risk of lawsuits will increase. As a result, economic growth decrease is caused lawsuits. One way of reducing lawsuit is conservative reporting and provides better earnings quality so that managers Will not be prosecuted due to opportunistic behavior and earning management (Watts, 1993). Adjusted earnings management leads to improved quality of financial reporting and the users of the financial statements is experiencing less financial loss Because of its distorted and unrealistic reports accordingly, the use of accruals during this period is less than the growth period. (Watts, 1993). Secondly, the demand for reporting of quality during economic crises is increased because there are no assurances in the investment. Since the possibility of negative output increases during a downturn, investors are demanding reliable accounting because accounting information arising from the application of earnings management accrual do not provide the timely data about the projects with value net of Negative present. Thirdly, the companies have always demanding to provide internal financing rather than providing external financing and during provide of the
external financing demanding debt than shares. During the economic crisis due to the companies earning decrease there is no providing in internal financing. Therefore, companies are seeking external financing and debt to cover the real needs of providers and reducing information costs related with managers Information asymmetry and shareholders In favor of reducing the accrual component fully grown during the economic crisis because all stakeholders are looking for cash and the benefit liquidity level that the company was announced. Accordingly, researches have emphasized that methods and the use of accruals in earnings change in the economic periods and during economic crises emphasis on conservative accounting to increase the quality of profit announcement is more than the growth period (Meier, 1984). According to earnings management in earning reduced during the economic crisis this problem lead to increase related earnings because while earning was without earning management and has been prepared as a conservative, reflection of bad news occurs faster than good news in earnings (Chui, 2007 and Brown et al., 2006). Therefore in order to improve the related earning to decide on the most conservative accounting and conservative earning is emphasized during the downturn but there is no emphasis on conservatism in growth period. Growth opportunities are more in growth period and according to accounting reports which are Performance criteria for the past, there is no perfect relationship between Retrospective earnings and future growth opportunities. Therefore, prospective information sources are more important for investors about future predicts. Accordingly, the predictive value of earning decreases in growth period due to earnings management increase, and investors to predict future situations use less historical information. Due to the affection that economic crisis could have on earning management and in the result of the accounting quality of companies, in this research, researchers examined the affection of economic crises on accounting quality through accrual and earning management is measured.

Methods and research methodology

The research target

The main target of the current research regarding the effects of the economic crisis could have on the accrual and utilization level of earnings management is as follow:

1. The identification of utilization level of earnings management during economic crisis.
2. The study of the audit effects by great auditors utilization level of earnings management during the economic crisis
3. The study of the audit Effects by great auditors on information value burden of financial statements during economic crisis

Practical Targets
The practical target of this research is for investors, shareholders, directors and analysts of the capital market. So that the results of this research can identify and guide users to the right way to evaluation method of firms which according to economic conditions they evaluate the benefits and risks of firm.

Research Questions
Due to the effect which has of the economic crisis and the auditor level on the accounting quality and accruals, the following questions have been made in the researcher mind which we are seeking for their answer:

Whether the usage of earning management increase during economic crisis or not?

Whether the big auditors of financial statements report with lower accruals or not?

Whether the ability of predictive of audited financial statements by great auditors will be affected by financial proof or not?

1-6 Research Hypotheses
According to previous researches (Yan et al., 2014, Margot and John, 2014) accrual factors level and as well as the accrual components and earning cash are different due to an economic period in which the firm operates. It means that during thriving economic earning accrual components increase which is done through accrual factors and by earning management and also they reduced during a downturn. Therefore, accordingly first hypothesis is presented as follow:
First Hypothesis:
There is significant relation between the economic crisis and the use of earnings management in the financial statements.
Since it is expected that great auditors have higher audit quality, then financial statements have been audited by the great auditor have better quality more than the other auditors during the economic crisis. Accordingly, the second hypothesis is as follow:
The second Hypothesis:
There is significant relation between discretionary accruals and the level of the auditors in crisis situations. Due to confirmed information by great auditors have more information value burden so, it is expected that audited financial statements by these auditors have more predicted ability and have more power of information value. Accordingly, the third hypothesis is as follow:
The third hypothesis:
There is significant relation between auditors’ level and the related information of financial statements in crisis situations.

Research variables
Current research variables are as follow:

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Dependent variable</th>
<th>Independent variable</th>
<th>Control variable</th>
<th>comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>Accrual factors</td>
<td>Economy crisis</td>
<td>Cash from Operating Activities, the market value, operating profit margins, debt ratio and the ratio of market value to book value</td>
<td>Regression model is tested divided by economic periods</td>
</tr>
<tr>
<td>Second</td>
<td>Accrual factors</td>
<td>Auditors level</td>
<td>Cash from Operating Activities, the market value, operating profit margins, debt ratio and the ratio of market value to book value</td>
<td></td>
</tr>
<tr>
<td>Third</td>
<td>price</td>
<td>Net profit and book value</td>
<td></td>
<td>Regression model is tested divided by economic periods and auditor level and hypothesis result is cleared.</td>
</tr>
</tbody>
</table>

Research method, innovation aspects of research
This Research is the branch of empirical research and export facto that is based on real data of stock market and financial statements of accepted companies will be done in the stock exchange. Since it is investigated the relation between two variables in this research, the research is correlation. Main Information on this research, the Stock market value and related information for financial companies. In this research, the relation between the independent variables (economic crisis and the auditor level) with the dependent variable (accrual) is evaluated. There are many researches about identifying the affecting causes and factors on earnings management and the accounting quality till now but study the financial and economic crisis and its affection on earnings management as well as evaluating the effectiveness according to auditor level, there is new aspect of related research to earnings management, which in the present research and analysis. The required data of research is collected from library sources, the issued information by stock Exchange organization, comprehensive bank of companies in stock exchange official site, Tadbir Parvaz software …. Firstly through library sources, publications, articles and scientific articles (scientific sites) literature and theory related to the research topic is developed. Then, main stage of research begin through extracted information from the financial statements of accepted companies on Tehran Stock Exchange and extracted information has been classified and summarized with Excel application and finally it is determined through SPSS software and using regression techniques, the mathematical relation between dependent and independent variables.
Definition of Operational variables

Table (1-2) Definition of Operational variables

<table>
<thead>
<tr>
<th>Variable name</th>
<th>Variable type</th>
<th>symbol</th>
<th>Variable definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discretionary accruals</td>
<td>dependant</td>
<td>DA</td>
<td>The discretionary accruals is calculated as follows: $\text{ACC} = \alpha_0 (1 / \text{ASSETS}<em>{(t-1)}) + \alpha_1 \Delta \text{rev} + \alpha_2 \text{PPE}</em>{t} + \varepsilon_T$</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$\text{ACC}_{it}$: total accruals for firm i at time t, which consists of net income before extraordinary items after deduction of cash flow from operating activities.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$\text{ASSETS}_{it}$: a total of company i at time t.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$\Delta \text{rev}_{it}$: Change in accounts receivable divided by total assets of the company i at time t.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$\text{PPE}_{it}$: property, plant and equipment Alan divided by total assets last year i at time t.</td>
</tr>
<tr>
<td>Auditors level</td>
<td>independent</td>
<td>AU</td>
<td>Virtual variable: this means that if the company auditor is auditing organization, is number one, otherwise is zero.</td>
</tr>
<tr>
<td>Virtual variable (economy crisis)</td>
<td>independent</td>
<td>crisis</td>
<td>Virtual variable: This means that if this financial year is in economy downturn, is number one, otherwise is zero.</td>
</tr>
<tr>
<td>Flow of Cash</td>
<td>control</td>
<td>OCF</td>
<td>The cash flow from operating Activities</td>
</tr>
<tr>
<td>Company level</td>
<td>control</td>
<td>LNMV</td>
<td>It is the natural logarithm of the share market value that is obtained of By multiplying the number of shares in the share price.</td>
</tr>
<tr>
<td>Operation profit margin</td>
<td>control</td>
<td>OPM</td>
<td>The division of operating profit to total sales</td>
</tr>
<tr>
<td>Debt-to-equity ratio</td>
<td>control</td>
<td>DE</td>
<td>The Debt-to-equity ratio</td>
</tr>
<tr>
<td>The ratio of market value to book value</td>
<td>control</td>
<td>MVBV</td>
<td>The ratio of market value to book value</td>
</tr>
<tr>
<td>Small profit measure</td>
<td>control</td>
<td>sp</td>
<td>virtual variable : in this case that if the sum of net income divided by total assets is between 0 and 0.01 , number 1 otherwise number 0 is allocated</td>
</tr>
<tr>
<td>loss Identifying measure</td>
<td>control</td>
<td>LL</td>
<td>virtual variable: in this case that if the sum of net income divided by total assets is between 0 and -0.2, number 1 otherwise number 0 is allocated</td>
</tr>
</tbody>
</table>

45
Annual returns | independent | AR

Stock returns:
\[ \text{Ret}_{it} = \frac{p_e(1 + \alpha + \beta) - (p_b - c\alpha) + \text{DPS}}{p_b + c\alpha} \]

\( \text{Ret}_{it} \): stock return of \( i \) company at \( t \) time
\( p_e \): stock price at the end of the financial period
\( \alpha \): percentage of capital increased from receivables and cash contribution
\( \beta \): percentage of capital increased from deposits
\( p_b \): stock prices in the beginning of the financial period
\( \text{DPS} \): dividend profit during the financial period;
\( C_a \): percentage of capital increased from receivables and cash contribution to the nominal value per share

Research background

Iatridi, and Dimitras (2013) studied about relation between financial crisis’s and accounting quality. Their research was done among accepted companies in financial markets of Portuguese, Ireland, Italia, Holland and Spain. The result shows that Greece, Portuguese and Italia try more in economic crisis period to use earning management for better profitability of earnings management and enter more accrual factors into financial statements. The result is not confirmed the results for earnings management in the economic crisis in Ireland, while in Spain it is vice versa.

Also the results showed that companies which audited by great auditors provide quality information just before the economic crisis in Portugal and Greece, but the result for Ireland, Italy and Spain shows that the information is provided high quality information during economic crises.

Masahiro et al (2014) in an article studied on the differences in accruals pricing and real earning management due to the economic crises between different countries and from the perspective of investors. This research was done Among 38 countries between 1991 till 2010, the results showed that the pricing of accrual factors is lower in countries where capital is stronger and financial crises happen less and contentious investment is higher, and investors intend in these countries is toward earning real management.

Margot and John (2014) evaluate the earning management and accrual factors at financial institutions due to the financial crisis. The above research examined accrual factors of financial institutions between 2002 till 2011 and for this purpose it has chosen before and after the economic crisis of 2008. The results show that pay attention to the accrual factors before the financial crisis of 2008 was very high, but after the crisis and possible bankruptcy in firms, the level of the factors is reduced in the reports.

Qingyuan et al (2014) studied earnings management between business cycles in accepted companies of China's Stock Exchange. The results showed that profit and earnings management according to react during the economic boom increased the level of profit and management profit and the recession reduced the sensitivity of the cash component of the accrual component of earnings economic times and the percentage change in cash due to the economic crisis and economic growth is greater than the accrual.

Robin and Wu (2012) studied the relationship between growth and the company’s pricing accruals. They concluded that agency managers always have the necessary organizational incentives to use accruals to show proper status for the company to provide proper information to business managers to use accruals and earnings management as a tool used by so accruals as a value-creating policy from the perspective of managers remains

Jenkins et al. (2009) in an article entitled "conservatism and the value relevance of earnings over the business cycle" to study the relationship between conservatism and the business cycle (economic expansion and contraction) and the relationship between the value relevance of earnings and the business cycle and concluded The value relevance of current period earnings in periods of contraction rather than expansion cycles as well, conservatism in periods of contraction over periods of expansion, but about the value of future expected profits in periods of expansion, contraction is greater than Eudora.
Qinglu (2005) in his research entitled "business cycle and accounting variables" to study the movement's accounting variables due to the change of macro-economic conditions. He has used panel data for his study. It has been studied from 1978 to 2003. The Qinglu results show that accounting variables such as sales and growth fixed assets are fully related with businesses cycle and these variables are more sensitive to economic downturn rather than economic growth. Of course, these changes domain is not the same in all industries. For example, for cycle industries such as the automotive industry, the affection of business cycle is quite impressive on accounting variables, while for acycle industries such as the pharmaceutical industry, this effect was significant only on investment and sales and it had no effect on their profitability.

Johnson (1999) examined the relation between business cycle with stock returns and company's earnings. His study period was 1970 to 1987 and using consolidated regression model. The results his research showed that companies' earning is affected by business cycles and stability of earnings, due to investment opportunities during the growth period was significantly higher than during downturn. The results show that stock returns in growth time is higher than the downturn period.

Liu and Vassallo (2000) investigated this issue that companies due to risk factors, such as the ratio of book value to market value, company level, how much are they affected by economic conditions? They studied the period between 1976 and 1997 and using the linear regression method. Their results show that stocks with high B / M in economic growth periods are in a good situation and in fact they have the appropriate functional and vice versa, in the economic downturn are poor.

Chordia and Shiva Kumar (2002) in a study entitled "profits, business cycle and stock returns" examined the business cycle role in asset pricing by experimentally method. They believe that companies earning is related to business condition. The study period of 1972 to 1999 and they used multivariate regression to examine their own hypotheses. The study results show that there is relation between business cycle and companies earning. In additional, they showed that there is relation between stock returns and business cycle and in fact business cycle Have a fundamental role.

Jian Zhou (2007), financial reporting and conservatism and earning management examined after after presentation of the Excel Sarbanes rule. Results showed that earning reporting in after Excel Sarbanes rule has been quite conservative. Companies reported their earning more conservative and less run their earning management method after excel Sarbanes.

Ahsan Habib et al (2012) examined the economic financial crisis affection on their earnings management and companies’ financial distress. The results of the data analysis show that companies that are experiencing financial distress, apply less earnings management also affection of the financial crisis and economic conditions on earning management and financial pressure of companies was confirmed and accrual factors are in companies financial report in the period which does not happen economic crisis.

Gul et al. (2002) in their study on the effect of the economic downturn in Hong Kong examined on conservatism level used in accounting as well as the relation between conservative accounting and audit fees before and during the economic downturn. The results showed that the conservatism level used in the Hong Kong-based companies during the economic downturn compared to before downturn period is less. Another finding of the study was that if the degree of conservatism in financial reporting is more, because in this case the auditors need to fewer check for discovering mistakes, audit fees will be less and vice versa.

Ahmad (2002) concluded with a research that accounting conservatism prevents investment managers in projects with negative returns.Also; there is a direct relation between the percentage of shares owned by board members and conservatism.

Koch (2002) in a research entitled "economic crisis and The reliability of forecasts of earning management" found that managers with economic crisis companies despite the fines due to the misleading reports have many motives for the release of Optimistic profit forecasts because the company or their position in the company may not to extent that they face penalties caused by improper reporters.

Bajynsky et al (2002) examined the effect of the legal environment on voluntary disclosure of earning management. They express that managers because of fear of legal debt, firstly don't have desire to release voluntary profit forecasts and secondly the frequency of earning forecast increased more in the periods with bad news.

Pau Thornton (2003) found that analysts’ and profit forecast errors about companies that report bad news are more than companies report good news. They interpret their results as financial analysts are not able to combine conservative accounting on their profit forecasts.

Barth et al (2005) during the research found that earning analysis in two parts: accruals factor and cash flows and or in to five parts including cash flows and four accruals components, reducing
forecasting error average and thus helps to predict the value of the company. Barth et al. (2002) studied earning analyze affection on unusual earning forecast and the valorization of the stock market. The findings of this research indicate that firstly earning breakdown to both cash and accrual components in the combined data level leads to reducing forecast error. But in breakdown of earning analysis industry to the cash flows and four accrual components leads to prediction error to the lowest level.

Bassam (2002) with a research based on obtained evidence from the Stock Exchange of Oman, US, on the one hand to examine the capabilities or a cash fine and earning accrual in determining the value of the company and on the other hand, to check the strength of these components in prediction of abnormal profit, profit, cash flows, profit dividend and payment returns. The results show that the accrual factors and cash flow in a normal earning forecasting, future returns and determine the value of the company with explanatory power. Furthermore, the combined use of accrual factors and cash flows than each of these components separately, are more capable in forecasting of future abnormal earnings.

Quinglo (2005) in his research entitled "business cycle and accounting variables" to study the accounting variables movement due to the change economic great conditions. He has used panel data for his study. From 1978 to 2003 has been studied period. The results of Quinglo research show that accounting variables such as sales and fixed assets development are fully in relation with business cycles and these variables are more sensitive to economy downturn than growth. Of course, domain of these changes is not the same in all industries. For example, for cyclical industries such as the automotive industry, the affection of business cycles on accounting variables is quite impressive, Whereas for acyclic industries such as the pharmaceutical industry, this effect was significant only on investment and sales and had no remarkable influence on profitability.

Johnson (1999) has studied the relation between business cycles with returns of stocks and companies earning. The period research was 1970 to 1987 using consolidated regression methods. Results of the study showed that companies earning are affected by business cycles and stability of earning, due to investment opportunities during the growth was significantly higher than during the downturn. Also, the results show that stock return is higher in growth period than downturn period.

Liu and Vassallo (2000) studied about this issue that how the companies are affected by economic conditions due to risk factors such as the ratio of book value to market value, company level? The period from 1976 to 1997 using the linear regression method. Their results show that stock at a ratio of high B / M in economic growth period has faced good condition and in fact, had good performance and vice versa, in the economic downturn are poor.

Chordia and Shiva Kumar (2002) in a research entitled "earnings, business cycle and stock returns" studied the role of business cycle in asset pricing in experimentally method. They believed that companies earning is related with business conditions. The study period was 1972 to 1999 and using multivariate regression method, examines own hypotheses. The results of their study indicate that there is relation between business cycles and companies earning. In addition, they showed that there is a relation between business cycle and stock returns and in fact the business cycle have fundamental role in assets pricing.

Perez-Quiros and Timmermann (2007) examine the volatility of stock returns in periods of business cycles change. The results of their study showed that the volatility of stock returns is significant during the business cycles change. Antonio et al (2007) also examines the issue that whether business cycle variables and profitability biased behavior can explain the speed of transaction in the three main markets of Europe. The results of their study showed that the profitability rate of the transaction speed in Europe markets is affected by global trade conditions.

Dastgir et al (2012) examined the quality of earnings in the financial distress Company's. This research was done in the accepted companies of Tehran Stock Exchange in the period of 1380 to 1388. The results indicate that financial distress companies manage their earnings three years before bankruptcy in the form of increasing. This management examined in two ways of manipulates the accrual factors and actual activities and identified that financial distress companies manage their earning through real activity rather than healthy companies while healthy companies are doing it though accruals factors more. Also, in this study, using bal and Shiva Kumar model was studied and compared conditional conservatism condition in distress and non-distress companies and determined that level of conditional conservatism in distress companies are more rather than non-distress companies, it means that The earnings of non-distress companies are more
assured than distress companies and as a result, the earnings quality of the distress companies is higher than non-distress.

Pourheydari and Alipour (2011) in a research examined manner the behavior of accounting data due to business cycles in the Tehran Stock Exchange. The results show there is no significant relation between studied accounting variables with business cycle, but there is a significant relation under the affection of economic growth and downturn and gross profit margin with business cycles during economic growth. The findings of this research suggest that the relation between business cycles in large companies than small companies is significant only on the accounting variables of gross profit margin, pre-tax profit and net profit and its effect is remarkable.

Khodami Pour et al (2012) studied the relation between conservatism in the earning value due to the business cycles in Stock exchange. In this regard, 164 accepted companies in Tehran Stock Exchange for the period time of 1998 to 2009 were selected as systematic deletion method. The statistical results show that the conservatism relation and the value relevance of current profit during periods of economic downturn is higher and the value relevance of future expected profit during the growth period is higher, also correlation between accounting historical data and future growth opportunities are certainly reduced.

Khoshtinat and Yousefi Asl (2007) examine the "relation between symmetry and asymmetry of information with conservatism". They used in order the domain of proposed price difference of shares buy and sale and criterion with profit for measuring of conservative and information asymmetry. The results of mentioned research show that there is positive significant relation between information asymmetry among investors and the applied conservatism level in financial statements. As well as changes in information asymmetry between investors caused a change in the level of conservatism.

Akbari (2008) examined affected variables on validity of earning forecasting by management in period time of 1996 to 2007. The result of research show that firstly announcing negative news (predicted earning less than past) rather than positive news made further reaction in stocks price. In other words, the belief and reliability of negative news is more to market brokers than positive news.

Secondly, companies’ levels are more effective to investors in belief and acceptance of predicted earnings. The accuracy of past predictions on the realization of future believes is also effective. In addition to mid-term predictions rather than annual prediction made more reaction in the stock price and ultimately presence or absence of adjustments in prediction is not effective on the belief and credit of future prediction. This means that investors look Suspicious and doubts to predictions of positive news, predictions by small companies, and predictions by companies that had a great diversion in the past and annual prediction and from their point of view; the error possibility of prediction is high in these companies.

Mashayekh and Shahroki (2007) in an article entitled “accuracy study of profit prediction by managers and their effective factors” they examined 279 companies in the period of 2002-2005 (including 639 View). The results show that the managers’ predictions are with deviation optimistic and prediction accuracy is different due to the company level, profit or loss of the company and the type of industry.

Arabmazar et al (2006) while study information content of Cash flows and accrual found that earning rather than operating cash has more power to explain stock returns.

Another result of the research suggests that Non-discretionary and discretionary accrual factors have data increasing content rather than operated cash.

Korderstani and Roodneshin (2006) reached the conclusion during the research that the cash component of earnings, book value on equity and return on common shareholders considered to Determining the value of related Data Company. Also earning cash component have more information content rather than the changes in receivable accounts, inventory changes and changes in Payable accounts as three-components of earning accrual (Gilaninia, 2015) in his research using Roudneshin findings et al suggests that earning accrual is the that earning cash component and studied three accrual components, cannot predict the unexpected earning.

Descriptive Statistics

In this section, Firstly descriptive statistics indexes that are including central indexes ( maximum, minimum, average ) and the distribution indexes including variance, standard deviation, skewness and kurtosis parameters are discussed.
Table (1-4): dependent and independent variables Statistical index

<table>
<thead>
<tr>
<th>Symbol</th>
<th>RET</th>
<th>P</th>
<th>MVBV</th>
<th>OPM</th>
<th>LNMV</th>
<th>ACC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>0.349581</td>
<td>10857.33</td>
<td>1.962061</td>
<td>-0.006495</td>
<td>27.19171</td>
<td>-0.264186</td>
</tr>
<tr>
<td>Median</td>
<td>0.205137</td>
<td>7447.517</td>
<td>1.589924</td>
<td>0.000000</td>
<td>27.17244</td>
<td>-0.302270</td>
</tr>
<tr>
<td>Maximum</td>
<td>3.983831</td>
<td>68026.76</td>
<td>10.57526</td>
<td>0.447325</td>
<td>31.34081</td>
<td>2.849817</td>
</tr>
<tr>
<td>Minimum</td>
<td>-0.899750</td>
<td>547.0552</td>
<td>-0.962879</td>
<td>-0.574126</td>
<td>23.67818</td>
<td>-2.935113</td>
</tr>
<tr>
<td>SD</td>
<td>0.650163</td>
<td>10422.07</td>
<td>1.498855</td>
<td>0.077776</td>
<td>1.460420</td>
<td>0.955976</td>
</tr>
<tr>
<td>Skewness</td>
<td>1.623526</td>
<td>2.485108</td>
<td>0.799095</td>
<td>-0.945253</td>
<td>0.240875</td>
<td>0.148554</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>7.262553</td>
<td>10.77022</td>
<td>4.523619</td>
<td>10.13513</td>
<td>2.815229</td>
<td>3.173285</td>
</tr>
</tbody>
</table>

The Study of Normality of research variables

One of the main regression hypotheses is normality of model residuals. Normality of the dependent variables leads to normality of model residuals (difference between the estimated values of the actual values). So it is necessary to control the normality of the dependent variable bior parameters estimation. To estimate the final research model was used related information to independent and dependent variables and then was estimated the model final regression. It is necessary to estimate the model, then per different values of the independent variables, dependent variable values to be estimated. The difference between the estimated values of the actual values is model residuals. But before estimation of the model it can also examined the distribution of the dependent variable to be ensured the distribution of residuals. The above hypothesis was tested by Kolmogorov, Smirnov test. In this test the null hypothesis and the alternative hypothesis is written as follows.

\[ H_0: \text{The dependent variables follow data normal distribution} \]
\[ H_1: \text{The dependent variables don't follow data normal distribution} \]

Table (2-4) : Kolmogrov - Smirnov test for dependent variables

<table>
<thead>
<tr>
<th>Dependant variable name</th>
<th>Kolmogrov-Smirnov test statistic</th>
<th>P-Value amounts</th>
<th>conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discretionary accrual factors</td>
<td>0.031</td>
<td>0.142</td>
<td>It is normal</td>
</tr>
<tr>
<td>market value of company</td>
<td>0.285</td>
<td>0.628</td>
<td>It is normal</td>
</tr>
</tbody>
</table>
As seen in above table, the P-Value calculated for the dependent variables of 0.05 values is higher significantly level, therefore we can say that at a significance level of 5%, H0 is accepted and H1 is rejected. 

The model Recognition test
Firstly it must be done the related tests before the model estimation. The first test which we done is examination test of following hypothesis. Due to constant coefficients of the variables, whether intercept is fixed or not within all years. Totally for the select of Pooled and Panel models we use the following test:

Pooled Model
All intercepts are equal
H0: α1= α2= α3=…= αT

Panel Model
At least one intercept varies with the rest
H1: αi ≠ αj

To test the above hypothesis is used the Chow statistic. The results are summarized in the following table. If the value of P-Value is less than 5% is used Panel method for estimating. The model used in this research is as follow:

Model (1):
DAC = β0 + β1AU + β2OCF + β3Ln MV + β4OPM + β5DE + β6MVBV + β7SP + β8LL
+ β9AU OCF + β10AU Ln MV + β11OPM + β12AUDE + β13AUMVBV
+ β14AU SP + β15AU LL + β16Crisis + ε

Model (2):
DAC = β0 + β1AU + β2OCF + β3Ln MV + β4OPM + β5DE + β6MVBV + β7SP + β8LL
+ β9AU OCF + β10AU Ln MV + β11OPM + β12AUDE + β13AUMVBV
+ β14AU SP + β15AU LL + β16Crisis + ε

Model (3):
P = β0 + β1BVPS + β2NPSS + ε

Model (4):
NPP = β0 + β1AR + ε

As can be seen in all four model P-values are more than 5%, zero hypothesis is not rejected based on the intercept equality and should be used pooled method for testing the hypothesis.
Conclusion and Recommendations

Total Conclusion
The results of the hypothesis analysis show that the level of earning management in Non-economic crisis is higher than economic crisis. On the other hand, during economic crisis there is a significant negative relation during economic crisis between auditor level and discretionary accrual factors and for companies that audit organization is their auditors the accrual factor is used less. Also the results showed that during economic crisis, information value burden of reports which provided by great auditors of companies (audit organization is their auditor) is more than companies with small auditor (audit organization is not their auditor) and the level of auditor has positive effectiveness on related of mentioned information in financial reports during economy crisis

Compare the research results with the similar research results
The results of this research with previous research in two similar results and contrary results are presented as follow:

The researches that gained similar result with research results
Pourheydari and Alipour (1390) in a research show that under the impact of economic growth and downturn condition, there is significant relation of the gross profit margin during economic growth with business cycle. Khodamy Pour et al (1391) study the relation between conservatism on the earning value burden with due to the business cycle in stock exchange. The results show that profit value burden of future expected are more during growth period. Iatridi. and Dimitras (2013) examines the relation between economic crisis and accounting quality. The results showed Spain used more of earning management in the period before the crisis of and also the results for Ireland, Italy and Spain suggests that companies are audited by great auditors, the provided information during the economic crisis have high quality.
Margot and John (2014) shows that due to the accrual factors before the economic crisis of 2008 was very high, but after the crisis and possible bankruptcy of firms, the level of the items s is reduced in the reports

Qingyuan et al (2014) study earnings management between business cycles in accepted companies in China's Stock Exchange. The results showed that profit and earnings management react due to the economic period and earning management and earning level increased in the growth period and reduced in downturn period.

Ahsan Habib et al (2012) show that companies that are experiencing financial distress applied less earnings management, also affectation of financial crisis and economic condition on earning management and financial pressure of companies was confirmed and accrual factors also entered more to financial reports of companies in the Periods when the economic crisis does not happen.

The researches that gained contrary result with research results
Dastgir et al (2012) examined the quality of earnings in the financial distress Companies. The result suggests that financial distress companies manage their earnings three years before bankruptcy in form of increasing. Iatridi. and Dimitras (2013) examine the relation between economic financial crises, and accounting quality. The results showed that Greece, Portugal and Italy during the economic crisis to make more effort to use earning management for show better profitability and entered more accrual factors to financial statements.
The results showed that companies in Portugal and Greece which audit by great auditors offer high quality information just before the economic crisis.
Masahiro et al (2014) showed that the pricing of accrual factors was less in countries where are stronger investors and financial crises happen less and also investment motivation is higher, and investors intend is towards earning real management in these countries.

Research proposals
According to the results of the research and during research, the following proposals offer to managers in one side and to the owners in other side for use in the process of their decision.

Proposal for directors of accepted companies in the Stock Exchange
1. According to the results of the first hypothesis is suggested to directors that during the economic crisis to do accounting procedures by applying conservative and balancing of optimism that lead to earnings management or reduce the quality of earnings. Managers should not be considered conservatism unimportant and avoid from applying it because its absence lead to make low quality profits and earning management that maximized conflicts of interest between managers and owners.
2. According to the results of the second hypothesis is suggested to managers to use great auditors or audit organization during economic crisis, because the results show, accrual factors, which indicates the quality of financial reporting in the financial statements audited by audit organization is less than financial statements audited by other audit institutes.

3. According to the results of the third hypothesis is suggested that in times of economic crisis managers of big auditors or audit firms, since the results show, once the value and relevance of data for decision making that a measure of quality of financial, financial statements audited by the Audit Office audit of financial statements by other institutions.

Proposals for shareholders and investors

1. According to the results of the first hypothesis is suggested to shareholders, investors and other analysts in capital market to be careful usage of earning management by companies during economic growth (non-economic crisis) and their decisions will be taken based on information of financial statements and balanced it based on the usage of accrual factors in the financial statements.

2. According to the results of the second hypothesis is suggested to shareholders, investors and other analysts in the capital market that during economic downturn (economic crisis) consider to auditor level as a factor affecting earnings management of accrual factors and for their evaluation enter to models decision. Because the results show that during economic crisis that audited financial statements by great auditors of audit organization have less accrual factors comparing to audited financial statements by small auditors.

3. According to the results of the second hypothesis to shareholders, investors and other analysts in capital market is suggested that during economic downturn (economic crisis) consider the auditor level as a factor affecting on the information value burden and relevance of information and enter it to models decision for their evaluations because the results show that mentioned information in audited financial statement by great auditors ( audit organization) have more forecasting ability comparing with audited financial statements by small auditors (other audit institute)

Scientific Proposals for future research

According to the results of the research, the following topics are recommended for new research to researchers.

1. The study of audit quality role on earnings management due to the economic crisis period

2. The study of conditional and unconditional conservatism role in adjusted earnings management

3. The study of relation degrees of earnings quality with conservatism degree due to audit reports

4. The study of relation between companies governance mechanisms with non-discretionary and discretionary accrual factors

5. The study of accrual factors Role in establishing of company governance and the development of the capital markets due to periods of economic crisis

6. The study of the quality of financial reporting role in the decision making of investors due to economic crisis period

7. Effect of accrual factors and accounting earning management in establishing of company social responsibility

8. The study of relation between conservatism and the expertise level of auditors due to the economic crisis period

9. The study of relation between earnings management and the auditor's report due to the economic crisis period

10. The study of relation between conservatism and earning management in the company's life cycle
Research limitations

The limitations of this research can be expressed as follows.

1. The current research was used Jones model (2002) to evaluating earnings management. So, the effects of using other models or variables to identify earnings management and consider them as accrual factors, can be achieved the different results with results of this research.

2. Classification of economic periods to crisis and non-crisis periods based on the average of economic growth rate in the intended period that consider years less than the average as crisis period and years more than the average as non-crisis period. So use of another model for classification of crisis and non-crisis periods is possible to have different definition with current research definition than crisis and non-crisis periods, which this issue lead to change in classification and finally lead to change in the results.

3. In the current research is used to evaluate the auditor’s level from criteria of audit organization. So, using the other similar operational definition that is a criterion for auditor’s level other parameters may lead to the different results with current research results.

4. Analysis of assumptions and variables measured in this study at all levels of the company and for the Tehran Stock Exchange took place while the reaction management and reporting practices in the capital market in different industries, different results can be obtained in the present study Achieved. The impact of this research in various industries individually, could affect the results.

5. The number of companies that have presence conditions in the research sample can change the results. Also, due to limitations in data collection of companies that are not members of the exchange, in this study, in this research only accepted companies in Tehran Stock Exchange were analyzed. While perhaps due to the Special Conditions ruling exchange and related regulations, the affection of crisis period on earnings management in non-exchange companies lead to different results with the results of current research.

6. Considering that the population of this research is companies in the Tehran Stock Exchange, the generalization of the results to companies outside the stock exchange will be restricted. The restriction are applied on the companies which participated in the Tehran Stock Exchange, but are not included in the statistic sample.

7. Inflation and other macroeconomic variables on earnings management and managers use of accrual factors are completely effective and usage method of accounting procedures that are effective on accrual factors may influence the research result and they considered fixed in the used models in research.
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External references


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