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Investigating the Impact of the Financial Crisis on Conservative Accounting and Transparency of Banking Information

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ABSTRACT

The phenomenon of the financial crisis is not a new phenomenon around the world. The structure of an economy or a set of economies may face a financial crisis. In fact, it is deformation, dimensions, causes and roots of the financial crisis which create a state of change from this crisis. Recently, evidence has shown that the market value of firms subject to bankruptcy is significantly reduced. In this study, the impact of the financial crisis on conservative accounting and transparency of banks in Iran has been studied. After designing the transparency indicators, the transaction information was collected from the Stock Exchange in the five-year period of 2011-2015. The statistical sample consists of 18 banks selected by systematic elimination method, which in total were 90 years-bank. In this research, linear regression and correlation were used to investigate the hypotheses of the research. Eviews software was used to analyze the data and test the hypotheses. What can be said in the overall conclusion of testing the hypotheses is that the financial crisis affects the conservative accounting and transparency of banks.

1 Introduction

As the complexity and dynamism of banking activity in recent years has increased, the goal of achieving transparency has been more challenged. The challenge of transparency topic has increased, as the potential benefits of disclosure have become more apparent to observers due to the widespread expansion of banks' activities in the market and, as a result, to increase the potential for market discipline as a complement to supervision. On the other hand, the recent financial crisis has created a widespread belief that banking institutions do not have the necessary transparency. Although timeliness and conservatism in the accounting literature are together to form a certain level of transparency in financial accounting, there is sufficient evidence of the impact of the crisis on the level of transparency regarding the conservatism and timeliness of the banking industry. Timeliness and conservatism are critical factors in measuring the quality of financial reporting and by making debt contracts more efficient and reducing the agency problems of investment and management decisions are in favor of users of financial statements. The timely inclusion of both positive and negative information on profits to shareholders such as board and foreign investors provides effective monitoring on selection of responsible executives. In the banking sector, conservatism is considered critical to the complexities of this industry, especially since the outbreak of the financial crisis, when uncertainty in the payment of debts leads to the loss of investor confidence in the banking system, conservatism can be used to

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reduce the adverse effects of non-transparency [20]. The reason for the focus of this research on the banking industry is primarily due to its unique characteristics, especially in terms of lack of transparency and complexity, and due to the central role of banks played in the market during the crisis. The impact of these features on the transparency of reporting by banks during the crisis period is far more important. Nevertheless, conservatism makes caution in financial reporting in the context of financial instability. In total, little researches have done about the asymmetric timeliness of loans in the banking industry and no study has examined the impact of the financial crisis on the conservatism and transparency of banks; and so this study will be considered an issue that has not yet been adequately addressed. Therefore, the present study seeks to answer the question of how the financial crisis affects conservative accounting and transparency of banks. This research is essentially a descriptive-correlative research and based on the purpose is an applied study. The data were collected by library method and referring to the financial statements and explanatory notes and with the help of Rahaad Novin and Tadbir Pardaz software.The statistical population is all companies accepted in Tehran Stock Exchange in the period of 2011 to 2015, which by targeted sampling, 108 companies were selected as a sample for testing statistical hypotheses.

2 Literature Review

The financial crisis can be caused by disturbances in one of the fundamentals of the financial sector and spread due to the existence of financial relationships with other financial variables and the real sector of the economy. Crisis in the stock market, balance of payments, bankruptcy of banks and insurance companies, severe exchange rate changes, and a decline in the value of a single currency are some crises in this area [16]. Francis& Martin [9] found that an investor seeks to increase its return on investment, but when management uses time asymmetry, investors are confronted with limited distribution of assets and dividends. Dimitras [6] concluded that companies with low accruals will have more financial distress, and financial distress will increase systematically by reducing accruals. From the point of view of fundamental analysis, the low level of accruals and high operating cash flows both can be a sign that the company has encountered difficulties.

If accruals are equal to changes in working capital, an increase in working capital will increase accruals, which is a sign of a decrease in the level of financial crisis [13].Firms are likely to engage in incremental earning management practices by approaching bankruptcy times by reducing items such as the cost of sold goods. It is likely that managers' excessive optimism about the fact that this performance will improve in later periods, cause them to manipulate incremental profits. This may happen even when they realize that their actions will accumulate and reverse in the future [5]. Companies that face the possibility of a higher financial crisis seem to manage profits in order to get rid of the costs of bankruptcy. Hence, it could be assumed that there is a positive relationship between the likelihood of confronting the financial crisis and the use of relational accruals. In addition, companies with a good financial position also try to maximize their profitability, regardless of economic reality, using their accrual accounting facilities [14]. Manganaris et al. [20] did not find the existence of conservatism in the first year of necessity to use IFRS in the European banking industry. However, the level of conservatism has increased significantly after the crisis. Liang & Chan [18] have shown that stock banks have more informational content, and if their information environment is clearer, they will have a lower risk of falling stock. Joseph Beams Yun-Chia Yan [15] found that auditors are controversial in assessment on maintaining activity. Persakis and Iatridis [22] showed that during the fi-

nancial crisis, the quality of profit has declined. However, this decline in the quality of profit is more pronounced in branches 2 and 3, which are characterized by shareholders' weak conservatism. Specifically, for all branches, this research showed that in an effort to confront the economic stagnation, managers have a strong inspiration to choose tougher conservative policies, lower profitability predictions and archiving more accruals. Countries in branches 2 and 3 report more relevant financial figures and followed an artificial flattening during the financial crisis, while countries in branch 1 are in some ways inconsistent. Dimitras et al. [6] provided evidence that corrupt companies that have been audited financially by the Four Big auditing institutions have revealed lower accruals. The results indicated that Greek and Spanish companies have reduced the use of earnings management during the recession. In contrast, Portuguese, Irish and Italian companies showed mixed results. They tend to reduce earnings management practices, but there are reasons that affect managers' behaviour to increase earnings management practices. The findings of this research can be useful for investors as well as for setting standards for government officials. Tuvadaratragool [25] indicated that financial information can be used to adequately illustrate the bankruptcy of Thailand in the normal economic situation. Filip and Raffournier [8] found that earnings management was clearly diminished during the years of the crisis. This claim has been proven in most of the 16 countries under review. They also reported a link between the level of earning management and the ratio of economic growth, and provided evidence that national characteristics and market forces have an impact on the way to monetization and have no impact on the quality of accruals. Kurt & Atmaca [17] showed that during the crisis, liquidity structures and quality of food companies are declining, and they are working to maintain a financially-oriented structure, mainly through borrowing and a low level of activity. In addition, it has been observed that liquidity, financial structure and profitability problems have affected the levels of performance and profitability, and most companies that their business have low levels of profitability or losses, have been shut down.

Sepasi and Abdoli [23] found that companies have board or have a woman in their board compared to companies with male senior executive’s companies have a higher conditional conservatism accounting; in other words, women identify quicker the bad news in reported earnings. Aflatouny et al. [2] showed that with the increase of unconditional conservatism, the volume of facilities received by corporations from banks increases. Abdollahi et al. [1] showed that there is no meaningful relationship between conditional conservatism and unconditional conservatism with the risk of bankruptcy due to the Zavgin model. Vali pour et al. [26] in conditional conservative test found that unlike expectations, both groups use non-conservative accounting methods; therefore, with more applying the earnings management in firms with financial crisis, the quality of earning measured by the conditional conservatism criterion in each group is the same. Keshavarz Haddad and Moghareh Abed [16] showed that the global crisis has spread to Tehran Stock Market Index. Also, the crisis affected the indices of the industry and the first market and led to a decrease in the value of these indices, but did not affect the indicators of financial intermediation and the second market. Ansari et al. [4] found a negative relationship between conservatism and accrual-based earning management and a positive relationship between conservatism and earning real management, and tested the conservatism effect on the overall level of earning management and found a negative relationship between conservatism and the overall level of earning management. Ghaemi and Alavi [11] found that there is a negative and significant relationship between transparency of information and the amount of cash holding. In other words, companies that have higher information transparency will keep less cash. According Mojtahedzadeh and Farshi [22], results showed that there is a negative correlation between the asymmetry criterion in

timeliness identifying to measure conservatism with future profitability, and the criterion of the ratio of market value to stock book value is positively related for conservatism measurement with profitability. Zolfaghari et al. [28], using the predicted values for gross domestic product of the business partners involved in the crisis obtained the impact of different groups of commodities from this crisis, which had a negative effect on some commodity groups.

3 Research Background

The main concepts that are used throughout this paper are as follows.

3.1 Global Financial Crisis and Iran's Economy

Regardless of the causes of the crisis, the crisis is spreading through financial markets and US foreign trading to the financial and real sectors of the economy of other countries. Different countries of the world have taken different effects from the recent financial crisis, depending on their type of interactions and their links with the global economy. The countries that interacted and merged their financial markets, the effects of the crisis came directly their economics through financial markets, and other countries that did not interact with the world's financial markets, indirectly and through foreign trade affected by this crisis. Obviously, the severity of the vulnerability of countries is different, and as a result, countries that have a high degree of freedom of trade and openness to the economy have seen the greatest damage from the crisis. Then, global recession that directly affects the balance of payments of the Iranian economy will transfer the crisis. However, in the current situation, this effect is mainly due to the decline in oil prices. Reducing oil prices and reducing the volume of Iranian oil sales by OPEC quotas will affect Iran's oil revenues, but what distinguishes this oil shock from earlier shocks caused by the fall in oil prices (such as the 1995 currency crisis) is due to the recession of the global economy and the decline of economic growth, which will reduce the income from non-oil exports in the Iranian economy [24].

3.2 The Concept of Conservatism

Traditionally, accountants have introduced conservatism as the law of overtaking losses and revenues. They defined conservatism as accounting intention to have strong documentation for identifying good news versus identifying bad news. Therefore, the higher the difference in the degree of approval for earning become more than loss, the more conservatism is necessary. In theoretical concepts of accounting, conservatism is known as a cautious reaction to uncertainty and to protect shareholders' equity and creditors, so that it is imperative to be able to handle and verify the ability to identify good news in financial statements than bad news. Make Caution is the application of a degree of care that is required in judgments for accounting estimations in ambiguous terms, so that revenue of assets are not more than real and costs and liabilities are not less than real. Conservatism indicates that costs should be recognized earlier and revenues should be identified later [21]. Researchers use three types of criteria to assess conservatism: net asset values, earnings and accruals, and the ratios of earnings and stock return, all of which are based on conservative asymmetry in identifying gains and losses [27]. This kind of conservatism is also referred to as time asymmetry. Precautionary measures will require fewer measurements to be made to identify costs in comparison with revenue recognition. This approach creates time asymmetry in identifying revenues and expenditures [5]. In this type of conservatism, bad

news (losses) is detected faster and more complete than good news (profits). Conditional conservatism is characterized by required accounting standards, namely, timely recognition of losses in the event of undesirable and bad news (negative returns on stocks), and lack of identification of profits when there is good and desirable news (positive returns on stocks); this kind of conservatism is also known as profit and loss conservatism or retrospective conservatism. Unconditional conservatism is in fact a stable under-representation of net assets that is independent of news. For example, immediately identify the costs of advertising and R&D as a cost rather than capitalizing, is a kind of unconditional conservatism. Unlike conditional conservatism, this kind of conservatism is not required by accepted accounting standards, and the result is less than the actual presentation of the net worth of assets by present accounting procedures and is also known as balance sheet conservatism. The definition of conservatism in balance sheet view states that in cases where there is a real doubt about the choice between two or more reporting methods, the method should be selected to have the least favourable effect on equity. Also, legal and tax interpretations lead to unconditional conservatism. According to this view, historical cost accounting is recommended as a conservative approach because positive net present value of investment in accounts is less than their fair value [11].

3.3 Transparency

There are many definitions of transparency such as openness of institutions (easy access to internal operations), corporate visibility (clarity), integrity and easy to understand. In this definition, the clarity or openness of firms means easy access to internal operations and openness of institutions means the clarity of information. There are also several other definitions that, depending on which concept they are based on, can be distinguished from one another in three categories:

(A) Stakeholder based definitions: Transparency is defined as increase the timely and reliable flow of economic, social and political information available to all relevant stakeholders and lack of transparency is defined as a deliberate inhibition of access to information, misrepresentation of information or market failure to ensure the adequacy of the relevance and quality of the information provided.

(B) Accountability based definitions: Transparency is defined as the degree of openness of institutions, i.e. the amount of monitoring and evaluation of actions of individuals inside the company (such as managers) by outside entities (such as shareholders).

(C) Definition of transparency with emphasis on the implementation of laws and regulations: The World Trade Organization (WTO) believes that access to transparency in international commercial contracts requires three basic prerequisites; information on laws, regulations and other procedures is publicly circulated; informing beneficiaries groups of relevant laws and regulations and changes in them and ensuring that laws and regulations are implemented in an integrated, neutral and reasonable manner [3].

4 Hypotheses and Methodology

According to theoretical foundations and in order to achieve the research objectives, the following hypotheses are presented:

The main hypothesis: The financial crisis affects the conservatism and transparency of banks.

First sub-hypothesis: The financial crisis affects banks' conservatism.
Second sub-hypothesis: The financial crisis affects the transparency of banks

In this research, for the purpose of commenting on the main hypothesis, sub-assumptions are tested that the model used for the first sub-hypothesis is as model (1):

$$\begin{aligned}\mathrm{UEarn_{it}}=&\mathrm{B_0}+\mathrm{B_1URet_{it}}+\mathrm{B_2Rd_{it}}+\mathrm{B_3URet_{it}RD_{it}}+\mathrm{B_4Crisis_{it}URet_{it}}+\\&\mathrm{B_5Crisis_{it}RD_{it}}+\mathrm{B_6Crisis_{it}RD_{it}URet}+\mathrm{B_7MCAP_{it-1}}+\mathrm{B_8LEV_{it-1}}+\\&\mathrm{B_9BM_{it-1}}+\mathrm{B_{10}prvol_{it-1}}+\varepsilon\end{aligned} \quad (1)$$

The model used for the second sub-hypothesis is the model (2):

$$\begin{aligned}ACC_{int}=&B_0+B_1OCF_{it}+B_2CFD_{it}+B_3OCF_{it}CFD_{it}+B_4Crisis_{it}OCF_{it}+\\&B_5Crisis_{it}CFD_{it}+B_6Crisis_{it}OCF_{it}CFDt+B_7Risk_{it-1}+B_8Size_{it-1}+\\&B_9BM_{it-1}+B_{10}AUD_{it-1}+\varepsilon\end{aligned} \quad (2)$$

In these two models:

$UEarn_{i,t}$: Unexpected earnings per share for 3 months after the end of the fiscal year and the conservative representative of the bank

ACC_{it}: Total accrual and transparency representative of bank information

OCF_{it}: Operating cash flow

CFD_{it}: The dummy variable is equal to 1 for negative cash flow and otherwise is zero

$\mathrm{URet_{it}}$: Accumulated abnormal returns

$\mathrm{RD_{it}}$: The dummy variable is equal to 1 if the unexpected return is negative (bad news) and zero if it is positive (good news)

$Crisis_{it}$: Financial crisis

$\mathrm{MCAP_{it-1}}$: Natural logarithm of capital market value

$\mathrm{LEV_{it-}}$: Financial leverage

$\mathrm{BM_{it-1}}$: The logarithm of the book value to the market value of equity

$\mathrm{MB_{it-1}}$: Growth opportunities

AUD_{it-1}: Audit quality

$Size_{it-}$: Bank size

$Risk_{it-}$: Risk

In the following, we will present a method for measuring the variables of research:

4.1 Dependent Variable

This research has two dependent variables:

A. Bank Conservatism: The index of unexpected earning per share for 3 months after the end of the fiscal year and is presented in model (3):

$$UE_{it}=\frac{(EPS_{it}-LEF_{it-1})}{|LEF_{it-1}|} \quad (3)$$

In this model:

EPS_{it}: declared earning per share

LEF_{it-1}: The last notification of the earnings forecast of each share

B. Transparency of bank information: its indicator is the total of accruals and is calculated by dividing the profit before unrealized items, minus operating cash.

4.2 Independent Variable

The independent variable of this research is the financial crisis, which is the same probability of bankruptcy as the Altman model (4):

$$Z= 1.2x1 + 1.4x2 + 3.3x3 + 0.6x4 + 0.99x5 \quad (4)$$

X1: (working capital).(total assets)

X2: (accumulated profit).(total assets)

X3: pre-interest and tax income.(total assets)

X4: (stock market assessment).(book value of debt)

X5: (sale).(total assets)

In this model, if Z is less than 1.81, then the company is bankrupt (has financial crisis) and is identified by number 1, otherwise it is equal to zero.

4.3 Control Variables

The research control variables are presented as follows:

(A) The size of a bank that is measurable through the logarithm of the total assets of the company.

(B) Systematic Risk: A portion of the total portfolio risk that is irremovable and due to factors that affect the total price of the securities is created and used stock price index to calculate it. The beta coefficient for a particular stock is determined by comparing the systemic risk ranking of that share with the systematic risk of the stock price index, which is shown in model (5):

$$\beta=\frac{COV(Rm.Ri)}{\sigma^2 Rm} \quad (5)$$

R_i = stock return of the company

R_m = Stock return of market index

$\sigma^2 Rm$ = variance of R_m

(C) Growth opportunities is equal to the ratio of market value to the book value of the studied companies.

(D) The quality of the audit, which is equal to one, if the audit of the bank is carried out by the audit firm, otherwise is zero.

(E) Operating cash flow

(F) negative operating cash flows, which is a dummy variable and equal to one, for negative cash flows, otherwise is zero.

(G) The accumulated abnormal return obtained from model (6):

$$Ret_{i,t}=R_{it}-Rm_{it} \quad (6)$$

R_{it}: Stock return rate calculated for sample companies through model (7):

$$Rit = \frac{Pit + Dit - Pi0}{Pi0} \times 100 \quad (7)$$

P_{it}: stock price i at the end of time t

P_{io}: stock price i at the beginning of time t

D_{it}: Dividends paid by firm i at time t

R_{mit}: The market return rate in this research will be calculated based on the total stock market index in model (8):

$$Rmt = \frac{Imt - Im0}{Im0} \quad (8)$$

I_{mt}: Total stock index at the end of time t

I_{mo}: Total stock index at the beginning of time t

(H) Unpredictable negative return, which is a dummy variable, equal to 1 if the unexpected return is negative (bad news) and zero if it is positive (good news).

(I) Natural Logarithm of capital market value

(J) Financial leverage that can be calculated by dividing the total debt of the company into total assets.

(K) Logarithm of the ratio of book value to market value of equity

5 Research Findings

5.1 Descriptive Statistics of Research Variables

Before testing the research hypotheses, the variables are briefly summarized in Table 1. In Table 2, the variable average represents the equilibrium point and the distribution centre and is a good indicator of the centrality of the data which for an abnormal accumulated return variable is 21.81667. Median is another central indicator that shows that half of the data is less than this and the other half more than this value. Also, the uniformity of average and median value indicates that this variable is normal which is zero for the abnormal return variable. The largest and lowest amount of the variable of merger and acquisition activities is equal to one and zero, respectively. Scatter indicators are a measure of how much data are scattered from each other or scattered over the average. The standard deviation is one of the most important dispersion indices for an abnormal accumulated return variable of

Table 1: Descriptive Statistics of Research Variables (part 1)

	Conservatism	Accumulated abnormal return	Good and bad news	Negative unexpected return	accumulated abnormal returns due to the crisis	The crisis due to good and bad news	Natural logarithm of capital market value	Accumulated unusual return due to the crisis and with respect to good and bad news
Average	4151.876	21.81667	0.4000	6.709444	10.9302	0.233	16.4978	-4.840667
Median	0.020000	4.435000	0.00000	0.00000	0.0000	0.000	16.3950	0.00000
Maximum	35399.00	179.9500	1.0000	0.00000	179.950	1.00	18.4400	0.00000
Minimum	-40001.00	-50.28000	0.000	-50.2800	-50.2800	0.000	13.2540	50.280000
Standard Deviation	10325.32	51.38087	0.492	11.84187	40.8165	0.425	1.04451	11.58370
Skewness	0.620125	1.416308	0.4083	-2.06151	2.34145	1.260	-0.2099	-2.590762
Kurtosis	7.739860	4.466402	1.1667	6.811255	9.18357	2.590	3.02677	8.894024
Jack-Bera	0.35440	0.458200	0.1524	0.115500	0.25545	0.246	0.66347	0.236555
Probability	0.675546	0.655840	0.8515	0.865500	0.84755	0.766	0.71767	0.875550
Total	373668.9	1963.500	36.000	-603.850	983.720	21.00	144.805	-435.6600
Total of Standard Deviation	9.49E+09	234959.5	23496	21.60000	148273	16.10	97.0989	11942.22
Observation	90	90	90	90	90	90	90	90
Sections	18	18	18	18	18	18	18	18

0.425322. The amount of asymmetry of the frequency curve is skewness, which the value of the skewness coefficient for the positive internal control weaknesses variable is positive which indicates the distribution of the skewness is toward the right. The dispersion index of the amount of stretch or

bursts of the curve is considered tensile or Kurtosis than the standard normal curve. In this study, Kurtosis is positive for all variables.

Table 2: Descriptive Statistics of Research Variables (part 2)

	Accumulated abnormal returns due to the crisis	The crisis due to good and bad news	Accumulated abnormal return due to the crisis with respect to good and bad news	Natural logarithm of capital market value	Financial leverage	Book value logarithm to market value	Operating cash	Negative operating cash flows
Average	10.9302	0.2333	-4.840667	16.4978	0.88200	16.0016	353654	0.0333
Median	0.0000	0.000	0.00000	16.395	0.92000	-16.1300	1778534.	0.000
Maximum	179.950	1.0000	0.00000	18.4400	0.99000	-12.3600	1830345	1.00000
Minimum	-50.280	0.0000	-50.2800	13.2540	0.20000	-17.920	-129258	0.00000
Standard Deviation	0.22412	40.816	0.425322	11.5837	0.1244	0.97422	4328612.	0.1805
Skewness	2.34144	1.2609	-2.590762	-0.2098	-3.2229	0.7426	1.586123	5.19947
Kurtosis	9.18357	2.5900	8.894024	3.02677	14.1020	4.72112	4.923467	28.0345
Jack-Bera	0.25545	0.2458	0.236555	0.66347	0.61555	0.19555	0.515440	0.28855
Probability	0.84755	0.7655	0.875550	0.71768	0.41555	0.32555	0.495500	0.72555
Total	983.720	21.000	-435.6600	1484.80	79.380	-1440.15	3.18E+1	3.00000
Total of Standard Deviation	148272.	16.100	11942.22	97.0988	1.49824	84.4706	1.67E+2	2.90000
Observation	90	90	90	90	90	90	90	90
Sections	18	18	18	18	18	18	18	18

Source: Researcher Findings

5.2 Reliability Test of Research Variables

In this research, we used the unit root test of the combined data, the results of which are presented in Table 3.

Table 3: Reliability Test of Research Variables

Method	Statics of test	Probability	Sections	Observations
Zero hypothesis: existence of unit root (common unit root process)				
Levine, Lyn and Chow	-30021.3	0.0000	18	72
Zero hypothesis: existence of unit root (single unit root process)				
Iim and sun	-5426.37	0.00000	18	72
ADF-Fisher (Chi-square)	47.7762	0.0906	18	72
PP-Fisher	67.4703	0.0011	18	72

Source: Researcher findings

In Table 3, the zero hypotheses are based on the existence of a unit root by taking into account the common unit root process by the Levine, Lyn and Chow method, as well as the Fisher's ADF method test, and PP-Fisher method with 18 sections and 90 observations in the level of 5% is rejected. The results of unit root test on all variables indicate the absence of unit root.

5.3 F-Limmer and Hausman Test

The results for research hypotheses are presented in Table 4.

Table 4: Test results of F-Limmer and Hausman

Hypothesis	F-statics	Freedom degree	Probability	Result
First sub-hypothesis	19.764401	(17.62)	0.0000	Panel data
Second sub-hypothesis	11.73121	(17.16)	0.0000	Panel data
Hausman test of research hypotheses				
Hypothesis	Chi-square statics	Freedom degree	Significance level	Result
First sub-hypothesis	13.378723	10	0.0012	Constant effects
Second sub-hypothesis	13.986614	10	0.1736	Random effects

Source: Researcher findings

In Table 4, according to the results, the panel data method is accepted for hypotheses. The panel data approach can be done using two random effects and constant effects models, which can be used to select them using the Hausman test. According to the sub-hypotheses, the probability of the chi-square test for the first sub-hypothesis is less than 5% and for the second sub-hypothesis is more than 5%. Therefore, the random effects are used to estimate and analyse the sub-hypotheses.

5.4 Summary of Analyses for each Hypothesis

To investigate the main hypothesis, we examine the following sub-assumptions:

5.4.1 Analysis of the First Sub-Hypothesis

Based on this hypothesis, financial crisis is expected to have an effect on banks' conservatism which its results are summarized in Table 5. In Table 5, the probability of t statistics for accrued abnormal return variables, dummy variable for good and bad news, abnormal returns accrued with respect to the crisis, the crisis with regard to bad news, accrued abnormal returns with respect to the crisis and variable for good and bad news, the natural logarithm of the capital market value and the logarithm of book value to market value of equity are less than 5%; therefore, this relation is statistically significant and the probability of the t statistic for the variables of y-interception, the accumulated unusual returns according to variable for good and bad news, financial leverage and capital market value is more than 5%. Therefore, the estimated coefficient of the above variables is not statistically significant; therefore, with 95% confidence, these variables are meaningless in the regression model. The adjusted deterministic coefficient shows the explanatory power of independent variables that can explain 82% of the variations of the dependent variable. The probability of the F-statistic indicates that the whole model is statistically significant; therefore, the zero assumption is rejected, that is, the fi-

nancial crisis is affecting the conservatism of the banks.

Table 5: Summary of The Results of the First Sub-Hypothesis

Variables	Coefficient	Standard deviation	t-statics	Probability
y-Interception	3351.728	12912.67	0.259569	0.7961
Accumulated abnormal return	0.328136	0.067846	4.836473	0.0000
Dummy variable for good and bad news	-0.171361	0.074220	2.308048	0.0243
Abnormal accumulated returns according to the variable for good and bad news	92.56134	51.26296	1.805618	0.0758
Abnormal accumulated returns according to the crisis	-0.880929	0.072922	-12.08041	0.0000
Crisis due to bad news	-0.195785	0.098045	-19.96886	0.0000
Abnormal accumulated returns according to crisis and variable for good and bad news	-0.110531	0.063384	-17.43842	0.0000
Natural Logarithm of capital market value	-1014.172	492.3921	-2.059684	0.0436
Financial leverage	-3224.199	1743.933	-1.848809	0.0693
Logarithm of the ratio of book value to market value of equity	-820.2183	373.0964	-2.198408	0.0317
Capital market value	428.5197	324.0492	1.323391	0.1909
Deterministic coefficient		0.87	Durbin-Watson	2.02
Adjusted Deterministic coefficient		0.82	F-probability level	00.0

Source: Researcher findings

Table 6: Summary of The Results of the Second Sub-Hypothesis

Variables	Coefficient	Standard deviation	t-statics	Probability
y-Interception	-3872.611	26061.63	-0.148594	0.8823
Operating cash flows	0.002668	0.000527	5.067668	0.0000
Negative operating cash flows	415.9970	2563.580	0.162272	0.8715
Operating cash flows in a dummy variable	-0.000191	0.000673	-0.284694	0.7766
Operational cash flow during the crisis	-0.009950	0.000511	-19.47635	0.0000
Crisis due to dummy variable	-0.001885	0.000109	-17.29048	0.0000
Risk	-0.771978	0.052320	-14.75491	0.0000
Operational cash flow during the crisis with respect to dummy variable	-0.001576	9.32E-05	16.90826	0.0436
Bank size	7.431819	1304.870	0.005695	0.9955
Logarithm of book value to market value	-0.811297	0.108392	-7.484840	0.0000
Auditing quality	-0.415600	0.032882	-12.63921	0.000
Deterministic coefficient		0.87	Durbin-Watson	2.02
Adjusted Deterministic coefficient		0.82	F-probability level	00.0

Source: researcher findings

Therefore, the estimated coefficient of the above variables is not statistically significant; therefore, with 95% confidence, these variables are meaningless in the regression model. The adjusted deterministic coefficient shows the explanatory power of independent variables that can explain 82% of the variations of the dependent variable. The probability of the F-statistic indicates that the whole model is statistically significant; therefore, the zero assumption is rejected, that is, the financial crisis is affecting the conservatism of the banks.

5.4.2 Analysis of the Second Sub-Hypothesis

Based on this, the financial crisis is expected to affect the transparency of banks, the results of which are presented in Table6. In Table 6, the probability of t-statistics for operational cash flows, operating cash flows in crisis, crisis with regard to dummy variable, risk, operating cash flow during the crisis with respect to dummy variable, logarithm of book value to market value and auditing quality is less than 5%. Therefore, this relationship is statistically significant and the probability of t-statics for the variable y-interception, negative cash flow, operating cash in dummy variable and bank size is more than 5%. Therefore, the estimated coefficient of the above variables is not statistically significant; therefore, with 95% confidence, these variables are meaningless in the regression model; the zero assumption is rejected; that is, the financial crisis affects the transparency of banks.

7 Discussions and Conclusion

This study seeks to find out the impact of the financial crisis on conservative accounting and transparency of banks. The research results suggest that the financial crisis is affecting the conservatism and transparency of banks. The results of this study are consistent with theoretical foundations and research background. Garcia Lara et al. [10] have found evidence that corporate managers are willing to transfer capital market information and good news in a financial crisis because the want to prevent the reduction in the value of the company. Firms are likely to be involved in increased profit management practices by approaching the time of bankruptcy by reducing items such as the cost of sold goods. Companies that face the possibility of a higher financial crisis seem to manage profits in order to get rid of the costs of bankruptcy. Hence, it could be thought that there is a positive relationship between the likelihood of confronting the financial crisis and the use of accruals (transparency of bank information). In addition, companies with a good financial position are also trying to maximize their profitability, regardless of the economic reality, using the accrual accounting facilities. They provided evidence that financial turmoil companies that have been audited by the Four Big audit firms have revealed lower accruals (high transparency of information). The results indicated that Greek and Spanish companies have reduced the use of profit management during the recession, which in some ways is consistent with the results of the study.

According to the results of the review of the main hypothesis, the financial crisis can be considered as a concept by which organizations emphasize the interests of their stakeholders through legal requirements; it is appropriate that the audit organization and other regulatory and supervisory bodies, in developing accounting standards and financial regulations, consider the category of financial crisis and providing the necessary guidance, users will use financial information to make optimal and informed decisions more than advise. Based on the results of the first sub-hypothesis, it is recommended

that investors prior to investing in a company's stock, use the fitted model in this study, identify the effects of the crisis on the financial ratios of the companies and determine the results in their decisions. In addition, if managers can understand the impact of financial constraints, they should be careful about the conservative change in the bank in order to lead to more rational decisions. According to the results of the second sub-hypothesis, the financial crisis is affecting the transparency of banks. Due to the financial crisis, the potential benefit of a knowledgeable investor increases. Therefore, in this regard, in the field of application, it is advisable to develop and formulate theoretical fundamentals of financial reporting and accounting standards, consider results of this research and other internal researches and determine the position of the theoretical foundations and qualitative characteristics of the specific financial reporting of banks in relation to the financial crisis, stock brokers and financial advisers, whose task is to analyse the financial status of the banks accepted in the stock exchange and to describe the situation financial future of banks for customers. Researchers are encouraged to explore the following topics in their future research:

1. The effect of quality of financial crisis on investment efficiency in active banks of Tehran Stock Exchange.

2. Investigating the effect of the pre and post financial crisis on the financial ratios of the bank.

3. An examination of demand for debt and equity in the period before and after the financial crisis.

4. Investigating the impact of the financial crisis on free cash flow.

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