

Research Article

THE EFFECT OF CASH RESERVE ON CONDITIONAL CONSERVATISM ACCOUNTING OF COMPANIES WITH THE AGENCY COST OF FREE CASH FLOW

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ABSTRACT

Due to the development of stock corporations, many investors were appeared that have no direct role in their participation with managing units office. The outcome of this process was the ownership separation from management companies. The ownership separation was lead to agency issue. Indeed, agency theory proves that managers strive to maximize profits to hide bad news related to companies and report the good news, immediately. Due to the high cost of agencies, there is a risk that conservatism reduces in financial reporting and earning management phenomena is spread. This study is conducted to investigating the effect of cash reserve on conditional conservative of accounting firms that have agency costs of free cash flow in listed companies of Tehran Stock Exchange. For this purpose, by applying the condition survey, 92 companies were selected as an instance in 2006-2011 periods. The research method is a data analysis with the multiple regressions combination type using Eviews software. In the present study, the conservatism Basu index is used to measure the conditional conservatism and the interaction of free cash flow and growth opportunities are used to measure the agency costs. In this study, the agency costs are used as independent variables, conditional conservatism as the dependent variable, the cash reserve as damper variable and the market value ratio to office value. The results show that cash reserve don't influence on conservative accounting companies that have agency flow costs of free cash.

Keyword: *Conditional Conservatism, Agency Costs, Cash Reserve*

INTRODUCTION

From an economic perspective, by assuming the relational behavior, it is assumed that all of people are seeking to maximize their interests and managers are also no exception. Managers interested in maximizing personal benefits, social welfare and consolidate its position, and they can provide a good picture of financial position of business unit from shareholders and other stakeholders. But in some cases, increasing the manager's wealth is not in line with increasing other groups such as shareholders. This issue shows the lack of siding of manager's benefits and other stakeholders in the business unit. In the analysis of the created value for shareholders, the company's free cash flow is important. By identifying the appropriate growth opportunities, managers can invest the funds in positive direction and thus, they can increase the wealth of their shareholders. According to the theory of conflict benefits between managers and owners, some managers may be forced to invest free cash flow in the projects with negative net present value and they can supply some their personal benefits in short term. Jensen was the first person who analyzed mentioned problem in his famous theory. He considered the costs of free cash flow as costs that are invested in projects with negative net present value. From Jensen perspective, the managers of business unit with low free cash flow and low growth, manages profit to eliminate the less profits and losses arising investment in such projects and they supply their personal benefits in short term. To solve this problem, Jensen notes to indexes such debt index and distribution of free cash flows as dividend that can modify the above equation (Mehrani and Bagheri, 2008).

Managers as a responsible for preparing the financial situation of company and by a greater awareness with respect to users of financial statement show appropriate image of business unit as a favorable unit. For example, by considering the costs of a period as an asset, they can reduce costs and increase profits

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reported in the financial statements. Also, the entity's net assets can be greater than actual reported amount. The overall result is that the image of business unit is considered better than actual situation and the incentives to capital injection and financing resource increases by external people. In such circumstances, accounting principles and procedures by the support of accounting standards setting authorities and with the aim of balancing the manager's optimism, supporting of the stakeholder's right and providing the financial statement, they apply conservatism concept. Conservatism is one of the features of financial reporting that at least from the early twentieth century, have an impressive quality in accounting and financial reporting. Whether the conservative is a desirable attribute for financial statement or not, and this is a historical issue in accounting literature. Conservatism is one of the restrictive accounting principles (convention accounting has been used by accountant for many years and despite of widespread criticism, it always has maintained its place among other accounting principles. So we can consider the conservative survival against the criticism over many years on this fundamental principle. Many researches have provided evidence of conservatism reporting in America, Britain and European countries, on the other hand, due to the conservative approach and policies governing the accounting standards in Iran, the evaluate of advantages and disadvantages of conservatism has a utmost importance. According to above issues, the main purpose of this study is evaluating the effect of cash reserve on conditional conservatism at listed companies in Tehran Stock Exchange.

Theoretical Foundations

Company's development over time was lead to emergence of stratum capitalists which do not have direct participation in companies. And they guided the companies and supervised on it, according to the selection of board members. This new development emerge a new group of professional managers who have little contribution or no contribution in businesses investment. Thus the management of their organization was separated from capital ownership (Shabahang, 1998). The ownership separation from management led to agency theory. Accordingly, managers do not decide as brokers in favor of the shareholders and owners and they may tend to increase personal benefit. And this lead to their investing on projects that have short-term benefits and ignored long-term benefits of shareholders. According to the manager's effort to maximize their profits than shareholders, the mechanism is used for reducing this problem. One of these mechanisms is the use of accounting data. For centuries, the accounting data are used to measuring the performance of managers and company's value. Accounting numbers are used as main variable for rewarding to the managers and compensating their rights and so managers tend to manipulate the profits due to their wealth. Managers act partially to increase their personal interests in the use of accounting standards that are the basis of informing to investors and they interfere in information sending. If there are no restrictions that limit the manager's opportunistic behavior, the accounting numbers contained in financial reports will be prepared and submitted partially. By improving issues such as efficient investment and monitoring facilities on the investment decisions of managers, it is expected that the conservatism helps to the protecting of company's resources and shareholder's wealth against the agency costs from free cash flow.

Theoretical Principles of the Cash Reserve Effect on the Relations between Agency Costs and Conditional Accounting Conservatism

How to employ internal funds is an important decision in the conflict between shareholders and managers. In economic growth of a company, as the cash reserves have been increased, managers decide that whether the cash should be distributed among shareholders, or it should be spend on internal expenses or be applied in external yielding or it should be maintained. It is an unclear issue that managers should select between cash reserve or cash consumption (Rasaiian *et al.*, 2010).

According to the free cash flow of Jensen (1986), managers have incentives to accumulate cash in order to increase the resources under their control, and in the investment decisions, the company benefit from judgment and diagnostic power. It is likely that surplus cash lead to increase the manager's motivations to invest in projects with negative present value. Harford (1999) argues that stakeholders concern of manager's accomplice on large reserves of internal funds. He suggests that the cash-rich firms are more likely to attend other companies and their results are more likely to reduce values. In contrast, Apler *et al.*,

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resulted that the managers maintain part of the cash due to caution (with prevention motivate). Also, Mick Wilson and Parch (2003) concluded that the continuous reserve dose not lead to poor performance and does not represent the confliction of benefit between managers and shareholders. Conservatism as an additional control mechanism is a part of the control system.

Literature

Hyung (2011) investigated the agency costs effects of free cash flow on a conditional accounting conservatism and concluded the following results:

1- Companies with the agency costs of free cash flow, adopt more conservative accounting that it is reduces the agency conflicts between shareholders and managers .

2- There is a positive relation between cash reserve with conditional conservatism companies that have agency costs of free cash flow. Arab (2011) analyzed the relation between conservatism in accounting and financial flexibility during the years of 2008 to 2009 by using combined data method. These findings show that there is a significant relation between companies' conservatism and financial flexibility, consisting of period cash and the sensitivity of cash changes to free cash flows and the decision of payment to shareholders.

Fakhari and Arabs (2012) conducted a study entitled "the relation between conservatism and flexibility in cash management". The results show that there is an inverse relation between company's conservatism and financial flexibility in cash management and the sensitivity of cash changes to free cash flow. These findings can infer to the effect of manager's internal decisions in addition the importance of conservatism role in financial accounting.

And it causes a better understanding to the importance and role of conservative management and the effect of financial flexibility for managers. Mahdavi and Panahian (2012) investigated the relation between accounting conservatism and the liquidity management in companies listed in Tehran Stick Exchange for the 2005-2010 periods. The results indicated significant negative relations between accounting conservatism and liquidity indicators (including cash, and cash equivalents and changes in cash inventory).

Also, the analysis and comparison of adjusted determination coefficient from the test model confirm that there is a strong relation between conservative accounting practices and liquidity indicators in company with high financial flexibility with compared with companies with less financial flexibility. Mehrani and others (2013) conducted a research for investigating the relation between conservatism in financial reporting and the cash reserve ratio. In this study, two models of Ozkan (2004) and Apler *et al.*, (1999) have been used to determining the cash reserve ratio and for conservatism; Guli and Hayen's model has been used.

About 54 listed companies in Tehran Stock Exchange for the period 2005-2010 were selected. And to test the hypothesis, the EvIEWS 6 econometric software and panel data with fixed effects have been used. Findings indicate that during the study period, conservatism don't have effect on cash reserve. Other results indicate that larger companies keep less cash and the companies that have other substitute assets. However, the companies with higher investment opportunity have more cash.

Hypothesis

Cash reserve influences on conservative accounting companies that have agency costs of free cash flow.

Research Method

Based on nature and methods of research, they can be divided into historical, descriptive, correlation or causal (after event) and empirical (experimental) research (Hafez-nia, 2006).

Research methods from three different perspectives are as follows:

Research Methods from Nature and Content Perspective

This study investigates the cash reserve effect on conditional conservatism accounting of companies that have agency costs of free cash flow and this study is the type of content analysis-descriptive. The mentioned method for researches such this study is useful because these studies are designed to explore the relation between different variables. This study has investigated the related data to a particular time

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that are a combination of time series and sectional series and this study is considered as a practical research because the results obtained in this study can be used in the financial data processing.

Research Method from the Purpose Perspective

This method is a practical study that uses actual data and various statistical methods for hypothesis rejection or acceptance and it is placed in PAT .

The Research Method

This research was conducted within the deductive-inductive reasoning. This means theoretical literature from library research, articles and websites is in the inductive form and data collection to confirm or reject the hypothesis is in deductive form.

Statistical Population and Sample

Due to the spatial domain of study, statistical sample will be selected by taking elimination method and considering the temporal and spatial domain of study.

1. With respect to the data required from the year 2005, companies which have been accepted up to the march 2005 in Tehran Stock Exchange and their name should not be deleted until the end of 2011 from the listed companies .
2. It should not have trading halts more than six months.
3. To enhance the comparability of studied companies, their financial period should be ended in 29 march and in the study period, they should not have financial changes .
4. It should not be a component of financial intermediation companies (investing, Holding, leasing, banking and insurance) because of their differences in capital structure .
5. Required information should be available.

Methods and Data Collection Tools

In each study, providing factual data regarding to the study's objectives is so important. In this study, for theoretical studying and literature reviewing, the library method is used by using books and scholarly articles and dissertations. Since the variables of this study include many accounting items that are contained in the audited financial statement of companies. The required data are extracted manually from financial statement from manage research sites, development and Islamic studies affiliated with the securities and exchange organization with the www.rdis.ir address, Kdal network, comprehensive information systems with www.codal.ir address, Financial Information Processing center of Iran with the www.fipiran.com address and CDs of securities and Exchange. And seems that has higher reliability than other available sources. And other required information related to Stock Exchange of the company is collected in Exchange database and in software which are in a form of PDF and Excel files .

Variable Measurement

A) Conservatism

According to Basu (1997), conservatism leads to less sustainability in periods with bad news than good news. He suggests that using more conservative approach causes that loss recognition is done quickly and in current period. While the profit recognition is conducting gradually and over some periods, so, in conservative accounting, bad news influence on profit, quickly but this effect could not be sustained. In contrast, the good news need more time for reflecting in profit, but this reflection in future periods has more stability. By using the following model, Basu found that profit asymmetry in reflecting good and bad news leads to different degrees of stability .

$$\frac{E}{P} = b_0 + b_1 RD + b_2 R + b_3 RDR$$

Where

$\frac{E}{P}$: The profit to price rate in each share :

D: it is a Dummy variable and is zero if the company's return was positive, otherwise it is 1 .

R: Annual stock return of company I in t year.

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To calculate the annual return of company's shares, the following indicators are presented:

$$R_{it} = \left[P_{it} (1 + \alpha + \beta) - (P_{i,t-1} + c\alpha) + DPS_t \right] / (P_{i,t-1} + c\alpha)$$

Where

R: the total return share of the company I in period t

α :The percent of capital increase from the cash and receivable :

β :The percent of capital increase from the reserves and profit share :

C: The price of underwritten stock

$P_{i,t}$: The price of stock company I in the end of t period

$P_{i,t-1}$: The price of stock company I in the beginning of t period

DPS_t : Distribution of stock dividends in period t :

AGENCY : The agency cost index :

B) Agency Cost

Ducas *et al.*, (2000) represented that the agency costs () are as a function in growth opportunities and free cash flows. As a result, companies with low growth opportunities that contains high free cash, and they are classified in companies with high agency costs. In this study, for measuring the agency costs, we first calculate Tobin's Q costs and free cash flow. Growth opportunities have been measured by Tobin's Q ration which is measured as follows:

$$Q = \frac{VOCSILOY + EMVOPSILOY + BVLTILLOY + BVCLILLOY}{BVTALLOY}$$

In the above model:

VOCSILOY: the common stock value at the end of year.

EMVOPSILOY: Estimated market shares at the end of the year.

BVLTILLOY: Book value of long-term at the end of year.

BVCLILLOY: Book value of current debt at the end of year .

BVTALLOY: Book value of total assets at the end of year (Sajjadi *et al.*, 2010)

Also there is not a preferred stock in Iran and it is given only from bailment aspect.

Free cash flows in this study using the Lehn and Poulsen model

Based on this model, free cash flows are defined as operating profit before depreciation to the fraction of total plus interest expense and dividends. And divided by the total standards assets (Lehn& Pouleson) and the variable calculation are given in the following equation:

$$FCF_{i,t} = (INC_{i,t} - TAX_{i,t} - INTEXP_{i,t} - PSDIV_{i,t} - CSDIV_{i,t}) / ASSET_{i,t}$$

FCF: Free Cash Flows

INC: Operating profit before deducting depreciation expense

TAX: Taxes

INTEXP: Interest Expense

PSDIV: Profit Paid to preferred shareholders

CSDIV: Profit paid to ordinary shareholders

ASSET: The total book value of assets

As mentioned in previous section, there is no preferred stock in Iran and it is important due to its bailment aspect .

C) Control Variables

The control variables include SIZE, MB, LEV as follows:

SIZE: natural logarithm of the equity market value.

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MB: the ratio of the equity market value to equity book value at the end of fiscal year

LEV: The ratio of total book value of debt to book value of total assets at the end of fiscal year. In the hypothesis, the cash reserve variable is considered as a damper variable to agency cost .

Cash Reserve: cost reserve reduces the likelihood of financial crises and it is considered as a safe shortage to meet unexpected losses and make possible the optimal investment policy when the company is facing with financial constraints. And ultimately it helps to the decreasing the collecting costs of assets and cashing the available assets (Ressaian *et al.*, 2010).

To measure this variable, the ratio of cash to assets is calculated for each industry. And then, the industry average cash is compared by the ratio of assets cash to our sample companies. We allocate to the companies that have higher than average industry, number 1 and otherwise, we allocate 0 .

The control variables include SIZE, MB, LEV as follows:

SIZE: natural logarithm of the equity market value.

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Hypothesis Test

To test the research, the following formula will be used:

$$\begin{aligned} \left(\frac{E}{P}\right)_t = & \alpha_0 + \alpha_1 D_t + \alpha_2 R_t + \alpha_3 D_t R_t + \alpha_4 AGENCY_{t-1} + \alpha_5 D_t AGENCY_{t-1} + \alpha_6 R_t AGENCY_{t-1} \\ & + \alpha_7 D_t R_t AGENCY_{t-1} + \alpha_8 x_{t-1} + \alpha_9 D_t x_{t-1} + \alpha_{10} R_t x_{t-1} + \alpha_{11} D_t R_t x_{t-1} + \alpha_{12} AGENCY_{t-1} x_{t-1} \\ & + \alpha_{13} D_t AGENCY_{t-1} x_{t-1} + \alpha_{14} R_t AGENCY_{t-1} x_{t-1} + \alpha_{15} D_t R_t AGENCY_{t-1} x_{t-1} + \alpha_{16} MB_{i,t} + \alpha_{17} LEV_{i,t} \\ & + \alpha_{18} SIZE_{i,t} + \varepsilon_{i,t} \end{aligned}$$

In the above model, is the hypothesis answer.

X is the cash reserve variable related to the hypothesis that is placed in x.

Hypothesis states: cash reserve influences on conservative conditional accounting of companies contains agency costs of free cash flow.

H0: Cash reserves influence on conditional conservative accounting of companies that have agency costs of free cash flow .

H1: Cash reserve influence on conservative conditional accounting that have agency costs of free cash flow.

According to the test results of multi variable regression that is provided in above table, the results of Chow and Hausman test and a significance level of these tests will be confirmed, the value of Chow statistic is 842/5 and its significance level is 000/0 and also, the Hausman test statistic is 000/0 and its significance level is 980/0.

Because the significant level of Chow test is lower than 05/0 and on the other hand, the significant value of Hausman in higher than 05/0, so the random type is random effect. The ratio of regression F-statistic is equal to 5/583 and its significant level is lower than acceptable error level (5%) that this coefficient indicates the significant level of regression model in the 95% confidence level. The value of Watson statistic is 1/774 and because this statistic is between 5/1 and 5/2, and shows there is no correlation between components of model error.

The coefficient of determination indicates that the independent and control variables in the model, explain 20.2% of the variability. The results of hypothesis test show the coefficient value is equal to -7/839 and the t-statistic is -0/985 and the significance level of excess cash reserve to conditional accounting conservatism is equal to 0/325. These coefficients indicate the surplus cash reserve to conditional accounting conservative. So the research hypothesis is not approved. So the coefficients of control variable and their confidence level show that the financial leverage variable has negative effect on the ratio of profit to the price of each share. Also, the variable of the market value to book value and the companies' size have a positive effect on the ratio of profit to price .

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The table of Hypothesis test results

Prob.	t-statistic	coefficient	Sign	variable
0/720	-0/358	-0/025	C	constant
0/470	-0/721	-0/021	D	Type of return
0/116	-1/570	-0/031	R	Annual return
0/727	0/348	0/025	D*R	α_3
0/060	1/881	0/048	AGENCY	Agency expense
0/353	-0/928	-0/048	D*AGENCY	α_5
0/268	-1/108	-0/033	R*AGENCY	α_6
0/298	-1/040	-0/160	D*R*AGENCY	α_7
0/981	0/022	0/000	CASH	Cash retrieve
0/961	-0/048	-0/002	D*CASH	α_9
0/252	-1/146	-0/035	R*CASH	α_{10}
0/855	-0/182	-0/021	D*R*CASH	α_{11}
0/249	1/152	0/038	AGENCY*CASH	α_{12}
0/769	-0/292	-0/025	D*AGENCY*CASH	α_{13}
0/339	0/956	7/618	R*AGENCY*CASH	α_{14}
0/325	-0/985	-7/839	D*R*AGENCY*CASH	α_{15}
0/006	-2/742	-0/098	LEV	Financial leverage
0/000	3/398	0/077	MB	The ration of market value tobook value
0/000	4/555	0/021	SIZE	size
1/774	D.W	5/583	F-statistic	
0/202	R ²	0/000	(Prob.) Significance level F	
	0/000	5/842	(Chaw test (constant effst)	Panel type
	0/980	0/000	Huasman test	

The General Conclusions

The hypothesis states: the policy of excess cash reserve influence on conditional conservatism accounting of companies that have the agency costs of free cash flow. The surplus cash may increase the manager's motivation to investing in projects with negative present value. Harford (1999) argues that shareholders concern about stewardship managers on stockpile of internal funds.

He shows the companies that are cash-rich firms and it is more likely to training other companies and their training reduces its value. In contrast, Apler *et al.*, (1999) concluded that managers reserve a part of cash f (prevention motivated).

Also Mick Leson and Parch (2003) concluded that the cash reserve will not lead to poor performance and does not indicate a conflict between managers and shareholders.

The obtained results from this hypothesis indicate that the surplus cash reserve in Iran is an important factor for improving the quality of financial reporting. So, shareholders should be aware that by increasing in surplus cash, increase demand for conservatism in financial reporting. The result of this research does not match with the results of Hyung (2011), Arab (2011), Fakhari and Arab (2012) and Mahdavi and Panahiha (2012).

Proposals from the Research Results

In companies of surplus cash reserve, we can suggest to investors a risk conflict and it is considered opportunistic management and increase the demand for conservative financial reporting .

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As a mechanism of control and supervision on the performance management and limiting opportunities for management and they becomes applicant for more conservative financial reporting and they pay special attention to financial reporting in investment decisions .

Suggestions for Future Research

- 1-investing the relation between accounting conservatism and free cash flow.
- 2-investigating the relation between conservatism and managers performance
- 3-Investigating the relation between conservative on high investment and low investment.

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