The Effect of Abnormal Operating Cash Flows on Unconditional Conservatism

M. ALIAKBARI[1]
B. BANIMAHD[2]
Gh. TALEBNIA[3]
F. Rahnamay ROODPOSHTI[4]

[1,3,4]Accounting Department, Science and Research Branch, Islamic Azad University, Tehran, Iran,
[1]E-mail: aliakbari@iauns.ac.ir (Corresponding author)
[2]Accounting Department, Karaj Branch, Islamic Azad University, Iran

Abstract   This study attempts to find out the relationship between unconditional accounting conservatism and abnormal operating cash flows in Iranian firms. In this paper, unconditional conservatism is measured by Givoly and Hayen (2002), and abnormal operating cash flows is measured by Dechew and Tang model (2008). The statistical population studied at this research includes firms accepted in Tehran Stock Exchange, and the period of research is the years since 2006 to 2011. The systematic omission method has been used in this research in order to achieve the sample and 858 observations were chosen as the sample for research. Results show a negative relationship between unconditional accounting conservatism and abnormal operating cash flows. The results suggest that firms with upper levels of unconditional accounting conservatism appear to have lower abnormal operating cash flows.

Key words   Operating cash flows, Abnormal operating cash flows, Accounting conservatism, Unconditional accounting conservatism

1. Introduction

Accounting conservatism has been one of the most effective principals in financial reporting (Sterling, 1967; Basu, 1997; Givoly and Hayn, 2000; Watts, 2003; Ball and Shivakumar, 2005; Grambovas *et al*., 2006). When encountering uncertainties in economic transactions, accountants use conservatism procedures, to report lower estimates for the values of assets and revenues, but higher estimates for the values of liabilities and expenses.

Conservatism is defined as higher pessimism to identify the profits compared to the losses. This leads into the rapid identification of losses compared to profits and the result is reduction in net assets value. The existence of conservatism procedures in financial reporting in response to the demand for this information is done to solve agency issues (Watts, 2003). Basu (1997) defined conservatism as the followings:

Conservatism is defined as the differential verifiability required for recognition of profits versus losses underestimating the gains and assets.

This definition shows conditional conservatism. In recent studies conservatism is divided into two types: the first one is unconditional conservatism independent from News, unconditional conservatism is raised from using the accounting standards reducing the profit independent from current economic news. For example, immediate identification of advertisements costs and research and development as costs even the future cash flows are positive (Ball, 2004). The other one is post event conservatism based on News, conditional conservatism and Asymmetric Timely Earning. Conditional conservatism means timely recognition of bad News to good News in profit.

Accounting conservatism increases available cash via increasing the inflows of cash and reducing the cash outflows. Conservatism increases cash flows via conservatism saving, reducing capital cost and increasing operational cash flow (Bidel *et al.*, 2011). Ahmad and Dulman (2002), Lara *et al.,* (2010); and Li (2010) proved that conservatism via limiting extreme investing and increasing operational cash flow reduces capital cost and facilitates financing out of organization and leads into rapid access of the company to cash financial resources.

One of the most important factors that influence the decisions of users of financial statements to evaluate the entity's value and performance is inflows and outflows cash flows associated with it. According to Financial accounting standard boards, Business enterprise is required to prepare and publish the Cash Flow Statements. The purpose of this requirement is to help actual and potential investors, creditors, and other users of accounting information in assessing the amount, timing and uncertainty about future cash flows of the business enterprise. Due to the importance of cash flow, a further studies in this area and the results of previous research that suggests that cash flows represents the cash amount of inflows and outflows is real, therefore, the reliability of cash flows statement is more than net income and fewer managers are trying to manipulate cash flows.

Recent academic studies indirectly indicate that managers may engage in and benefit from managing cash flows. Roychowdhury (2006) finds that firms reporting small positive annual profits engage in real activities to avoid negative earnings. Some of these activities, such as reducing discretionary expenses, may also be examples of myopic behavior to manage cash flows to achieve certain benchmarks. Graham et al.'s (2004) survey of 401 financial executives finds that 21.4% of chief financial officers rank cash flows and free cash flows as the most important performance measures, relative to 51.6% who rank earnings as the most important.

The main objectives of the study determine of factors affecting on cash flows management and Abnormal operating cash flows and also help users of information, such as financial analysis, financial accounting standards board and others to understand the factors affecting cash flows.

Researchers and practitioners have noticed potential threats to the quality of cash flow reporting. A study by the Georgia Tech Financial Analysis Lab directed by Charles Mulford, suggests that cash flows, especially operating cash flows, are subject to manipulation. Typically, there are several ways for managers to accomplish this, including selling receivables, transferring in and out of trading securities, decreasing working capital, turning trade credit into cash, and capitalizing operating costs.

1.1. Theoretical background of the research

1.1.1. Abnormal Operating cash flow

The accounting standards setters, adopted the accrual method, and this method is not able to show the change in cash, cash flow so as to supplement other financial statements are prepared. According to accrual system, the net profit is equal cash flows plus accruals, hence we have:

Accruals+ cash flow = Net income (1)

On a cash basis, due to the absence accruals, net cash flow is exactly equal to net income. But in accordance with accounting standards, accounting system is accrual. And this approach may cause possible manipulation of net profit for the manager by the sales credit policy, related-party transaction, identify or not identify reserves and so on. Above equation can be written as follows:

Accruals = net income - cash flows (2)

Equation (2) can be argued that control of accruals, cash flows could be controlled. In other words, accruals management practices can lead to cash flow management. For example, capitalized certain operational costs, delay recognition of certain costs, increase profits and as a result operating cash flow of being manipulated. accruals controlling are arising from controlling operational activities of the business unit, such as buying and selling of goods to increase or decrease in inventory, postponing the collection or receipt of timely demand, purchasing credit policies in order to increase the accounts payable at the end rather than first period, decrease the pre-payment, and so on.

In other words, the timing of accruals, the director has created. It will be directly effects on the operating cash flow (Lee, 2012). Abnormal Lee's (2012) model is used to calculate abnormal Operating cash flows.

Researchers and practitioners have noticed potential threats to the quality of cash flow reporting. A study by the Georgia Tech Financial Analysis Lab directed by Charles Mulford, suggests that cash flows, especially operating cash flows, are subject to manipulation. Typically, there are several ways for managers to accomplish this, including selling receivables, transferring in and out of trading securities, decreasing working capital, turning trade credit into cash, and capitalizing operating costs.

1.1.2. Unconditional conservatism

A general interpretation of conservatism in accounting is articulated by the International Accounting Standard Board (IASB), which states that conservatism is "a degree of caution in the exercise of the judgment needed in making the estimates required under conditions of uncertainty such that assets or revenues are not overstated and liabilities or expenses are not understated".

Although there is no unified definition of conservatism, there have been several definitions of conservatism in the literature. For example, the first definition was stated by Bliss (1924), who defines conservatism as "anticipate no profit, but anticipate all losses" (Pae *et al*., 2005). Basu (1997) views conservatism in cases where earnings reflect 'bad news' more quickly than 'good news'. Givoly and Hayn (2000) define conservatism as selecting accounting principles that minimize cumulative reported earnings by slower revenue recognition, faster expense recognition, lower asset valuation and higher liability valuation. Pae *et al*. (2005) refer to conservatism as the differential verifiability required for recognition of profits versus losses, this definition means that there is a higher degree of verification required for recognizing good news as gains than for bad news as losses. Under current GAAP, conservatism applies to measurement of assets and recognition of revenues and expenses; it tends to lead accountants to choose accounting methods in favor of slower recognition of income and lower valuation of net assets (Chen *et al.,* 2004).

Accounting conservatism might be classified into two different pairs of terminologies. For example, Ball *et al*. (2000) classify conservatism into income statement and balance sheet conservatism, while Pope and walker (1999) refer to the two types as ex-post and ex-ante conservatism. Chandra *et al*. (2004) refer to the two types of conservatism as news dependent and news independent conservatism. Ball and Shivakumar (2005) use the terms conditional and unconditional conservatism and this paper follows this categorization.

2. Materials and methods

2.1. Relevant prior research

Lee (2012) show inflated operating cash incentives of managers can be investigated. His research results showed that sometimes managers of business enterprise do their performance according to the framework of generally accepted accounting principles, and sometimes not consistent .He also concluded that managers with a method such as accelerate the timing of accruals debt collection, manage operating cash flows (Lee, 2012).

Pae and Yoon (2012) studied accuracy of operating cash flows forecasts by financial analysts. They found that the operating cash flows forecasting and profit forecasts for financial analysts is separates the two functions. Anticipated operating cash flows primarily requires experience and careful financial analyst earnings forecasts in the second degree require experience and his accuracy in forecasting cash flows.

Xu (2012) showed a significant relationship between cash flows sensitivity and company's manager's bonuses. His research has confirmed the companies that paid bonuses based management equity, in companies that have high investment projects and also have high cash, cash flows sensitivity is high. But the sensitivity of cash flows arising from the payment of dividends would be low. When managing bonus Standard Deviation increase a unit, so companies investment rate increased by 5 units and company maintained 2 units in cash as savings and a total of seven units are paid less.

Ran (2009) were compared operating cash flows management in China and America. He found that operational cash flows by earnings management, is managed. The results also indicated that anticipated financial analysts about the company's future cash flows and last year operating cash flows are other factors for the manipulation and management of operating cash flows. He shows that China smoothing operating cash flows is more than America and in contrast American financial analysts than their Chinese counterparts, are used the operating cash flows forecasts.

Ran Zhang (2013) investigates the Cash Flow Management, Incentives, and Market Pricing. He fined indications that managers take actions to report positive operating cash flows, avoid missing analyst cash flow forecasts, and meet the cash-dividend target. His results also indicate that certain firm characteristics are associated with the magnitude of cash flow management. The persistence test shows that the persistence of cash flows and earnings decreases with the increasing magnitude of abnormal cash flows.

Typically, there are several ways for managers to accomplish this, including selling receivables, transferring in and out of trading securities, decreasing working capital, turning trade credit into cash, and capitalizing operating costs. Managers can easily mask the volatility of cash flow performance by investing in trading securities. Under GAAP, marketable securities have to be classified as trading, available-for-sale, or held-to-maturity securities. Cash generated from investments classified as trading securities is reported in the operating section of the cash flow statement, whereas cash generated from available-for-sale and held-to-maturity investments is reported in the investing section.

Managers can use excess cash to buy securities and then harvest it by selling them when they need more cash to make operating cash flows look better. The third way managers can temporarily increase cash flows is to shrink their working capital. This could be achieved by selling inventories, delaying payment to suppliers, and leaning on customers to pay sooner.

2.2. The research hypotheses

According to theoretical research, the following hypothesis is developed.
There was a significant relationship between unconditional conservatism and abnormal operating cash flows.

2.3. Research Methodology

This is a fundamental research. Research studies that are fundamental to the construction of theoretical models to explain the phenomena explored (Khalili, 2008). In terms of timing, this study is cross-sectional observation is performed at only one time point (Khalili, 2008). Research method in this paper, is deductive-inductive method. Theoretical research through a library study and research assumption has been developed based on.

2.4. Statistical sample

The study sample, the firms listed in Tehran Stock Exchange. But the sample of firms that have the following conditions:
- Companies that have been adopted since 2004.
- Companies are not investing.
- Companies with fiscal year ending March 29 of each year.
- Companies that do not have a trade-off study course.
- Companies that their data is available.

According to the conditions set above, only 143 firms (including 858 observations) belonging to 15 different industries on the period 2006 to 2011 the above conditions have been and therefore, as the sample were selected. Source of data collected in this study, are the company's financial statements. The data for this study were collected through a computerized database. Furthermore, through the study of theoretical papers have been completed.

2.5 Model variables

This model is as follows:

$$ABOCF = a_0 + b_1\ UCC + b_2 ROA + b_3 SIZE + b_4 LOSS + b_5 DEBT \tag{3}$$

Above model has some variables describe as follow:
ABOCF is Index of Abnormal operating cash flows that obtained from following equation.

$$\frac{cfo_t}{TA_{t-1}} = \lambda_0 + \lambda_1\left(\frac{1}{TA_{t-1}}\right) + \lambda_2\left(\frac{sale_t}{TA_{t-1}}\right) + \lambda_3\left(\frac{\Delta sale_t}{TA_{t-1}}\right) + \varepsilon \tag{4}$$

Where CFO_{it} is Cash flow is obtained from operations, TA_{it-1} is total assets in the first period, Sale is revenue and ΔSale is change in sales this year compared to previous year.

UCC is Un Conditional Conservatism that follow Givoly and Hayn model, ROA is Profitability index that is the ratio of net income to total assets of each firm in each year, SIZE, is the company's large size and calculated by the natural logarithm of the total assets of each firm in each year, LOSS is a dummy variable that is shown whit one and zero. At the end of the financial period, if the company has reported losses the value is 1 and in otherwise its value is zero, DEBT is the debt divided into total assets of the company for homogeneous.

3. Findings

3.1 Descriptive Statistics

Descriptive statistics of the variables are summarized in table 1. In this table, near the median and mean of a normal distribution can be deduced (table 1).

Table 1. Descriptive Statistics

		G.H.CONSEV	ABOCF	SIZE	ROA	DEBT	Unstandardized Residual
N	Valid	858	858	858	858	858	858
	Missing	828	828	828	828	828	828
	Mean	.019839	.004065	13.2922	.140456	.812415	0E-7
	Median	.003420	.000737	13.1334	.108583	.756300	-.0066038
Std. Deviation		.1667492	.0944081	1.49785	.1716335	.6099321	.11665429
	Minimum	-.8491	-.5554	9.82	-.3821	.0123	-.56340
	Maximum	1.2924	.7329	18.32	1.3589	1.2863	.64493

3.2. Hypothesis test

According to the results of testing hypothesis, related test to abnormal operating cash flow model for the entire sample of firms is done. According to Table 2, the variables with a significance level of analysis , it is clear that only abnormal operating cash flow, returns on assets and unconditional conservatism that achieve with Givoly and Hayen's model are associated with. The figure is less than 5 % significance level and 95% confidence level can be accepted in this connection.

Table 2. Coefficients

Coefficients[a]								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.013	.027		-.473	.637		
	size	-.001	.002	-.014	-.456	.648	.882	1.133
	roa	.223	.020	.405	11.392	.000	.646	1.548
	debt	.006	.005	.038	1.297	.195	.963	1.038
	loss	-378.153	709.448	-.017	-.533	.594	.824	1.213
	ucc	-.371	.019	-.658	-19.206	.000	.696	1.438
a. Dependent Variable: abnocf								

According to Table 2, we also found that if abnormal operating cash flow is increased, unconditional conservatism would be decreased, and this findings fully consistent with logical reasons and theoretical. Because the higher degree of abnormal operating cash flow would be a sign of manipulation of accruals or other related items, and more involvement of management causes lower quality for profits. And the relationship between these two variables would be reversed (table 2).

$$\text{ABOCF} = 0.223 \text{ ROA} - 0.371 \text{ UCC} \qquad\qquad (5)$$

Where ABOCF is abnormal operating cash flow per company per year, ROA is Profitability of each company per year; UCC is profit quality or error of the model.

Table 3. ANOVA

Durbin-Watson	Adjusted R Square	R Square	ANOVA	
			sig	F
1.761	.301	.305	.000	74.887

According to Table 3 can be seen that the t-statistic is -19.206 and significance also equal to zero. This statistic shows the regression line (Equation 5) is a real regression or false. The statistical confidence level of 95 % of the regression line would confirm. The regression coefficient (R^2) ratio of explained variance to total variance represents, to .305 percent. Durbin-Watson statistic to estimate the presence of autocorrelation in the model error value is used. Since the base is 1.761, so it could be argued that there is no autocorrelation in values of model error.

Error values for the test of normality Kolmogorov - Smirnov investigated. In this case, the chart shows that standardized residuals are normal and the regression model is verifiable (Chart 1).

Chart 1. Standard residual normality histogram
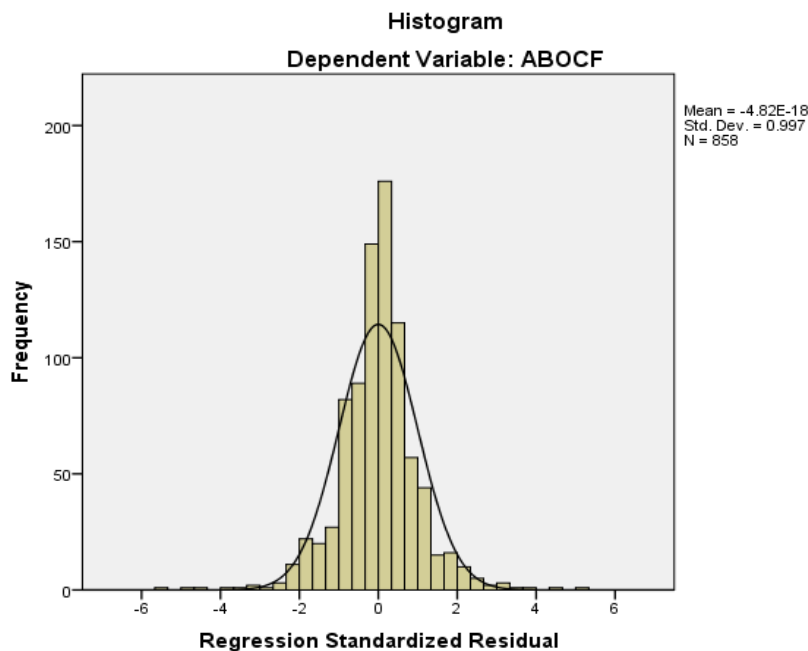
4. Conclusions

Inverse relationship between unconditional conservatism and abnormal operating cash flow is also consistent with the facts. Unconditional conservatism, which is achieved by Givoly and Hayen's model, is focused on accruals. This indicator shows that managers in order to achieve certain goals, such as getting

more bonuses, reduce debt and loan agreements, conditions and limitations or reduce the political pressure, manipulate the accruals. The current situation implies that increase in unconditional conservatism leads to decreasing manipulation of managers. Reduction in accruals manipulation leads to a decrease in abnormal operating cash flow management. And thus consistent with the results of Lee (2012). Among these variables, only the profitability index, which indicates manager's performance, has positive relation with abnormal operating cash flows. What is the best practice company management and profits increase, cash flow from operations also increases.

References

1. Accounting Standard Board (2009), Accounting standards, Publication No. 160. Tehran, Iran, 758.
2. Aghaie, M.A., Jamali, Gh. and Ahmadi, H. (2010). Effect of operating cash flow of impulses on the capital structure of listed companies in Tehran Stock Exchange. Journal of Financial Accounting
3. Hejazi, R. Gheytasi, R.M. Mousavi, M. (2012). The relationship between cost of debt and cash flow management, Accounting Knowledge Journal, Vol.10, 117-136.
4. Izadinia, N., Rasayyan, A. (2010). Regulatory tools, corporate governance, cash holdings and performance of listed companies on the Stock Exchange, Journal of Economic Research and Policy, Vol. 55, 141-154.
5. Lee L.F. (2012) Incentives to Inflate Reported Cash from Operations Using Classification and Timing, The Accounting Review, Vol. 87(1), 1-33.
6. Luo M. (2008) Unusual operating cash flows and stock returns, Journal of Accounting and Public Policy, Vol. 27, 420–429.
7. McInnis J. and Collins D.W. (2011). The effect of cash flow forecasts on accrual quality and benchmark beating, Journal of Accounting and Economics, Vol. 51, 219–239.
8. Mikhail, M. Walther, B. Willis, R. (2003)."Reactions to dividend changes conditional on earning quality", journal of accounting, auditing, and finance, Vol. 18(1), 121-151.
9. Pae J. and Yoon S. (2012). Determinants of Analysts' Cash Flow Forecast Accuracy, Journal of Accounting, Auditing & Finance, 27(1), 123–144.
10. Penman, S. Zhang, X. (2002). Accounting conservatism, the quality earnings, and stock returns, The Accounting Review, Vol. 77(2), 237-264.
11. Ran Z. (2009) Cash flow management in the Chinese stock market: An empirical assessment with comparison to the U.S. Market, Frontiers of Business Research in China, 3(2), 301–322.
12. Revsine, L. Collin, D. Johnson, B. (1999). Financial reporting and analysts, prentice hall, upper saddle river, New Jersey, 988.
13. Schiper, K. Vincent, L. (2003). Earnings quality, Accounting Horizons, supplement 2003, pp.97-110.
14. Scholer, F. (2004). The quality of accruals and earnings and the market pricing of earnings quality, working paper, Arhus school of business, 13.
15. White, G. Sondhi, A. Fried, D. (2003). The analysts and use of financial statements, john Wiley and Sons, third edition, 767.
16. Xu P. (2012). Managerial incentives and a firm's cash flow sensitivities, International Review of Economics and Finance, forth coming.
17. Yaghobnejad, A. Banimahd, B. Shokri, A. (2012). Provide a Model for Measure of earnings management of listed companies in Tehran Stock Exchange, Journal of Management Accounting Research, 12, 1-16.
18. Yoon S. and Miller G.A. (2002) Cash from operations and earnings management in Korea, The International Journal of Accounting, 37, 395–412.