

## STUDY EFFECT OF CAPITAL MARKET SENSITIVITY ON CONSERVATIVE FINANCIAL REPORTS OF FIRMS

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### Abstract

Recently, capital market sensitivity and managers' motivation to transfer wealth and value of the firm to themselves is the subject of a scientific study that has been vastly investigated. Since conservative financial reports belongs to the firm control system and reduce management's opportunistic behavior, the consequently reduce capital market sensitivity relevant to stock price fluctuations. In this study, the relationship between capital market sensitivity and conservative financial reports are studied in Iran. Research sample was selected from the accepted companies in Tehran stock Exchange during 2011-2016, which is 237 companies. Based upon literature review, it was decided to use the regression model for studying this relationship. According to financial data of Tehran stock exchange, we concluded that capital market sensitivity has no effect on conservative financial reports.

**Keywords:** Capital Market Sensitivity, Conservatives, Financial Reports, Accruals.

### 1. Introduction

Conservative financial reporting is one way of a firm's report as regulatory system that is an alternative for controlling managers' opportunistic behavior with positive effect on firm practice in the long term (Fang, et al., 2016). Accounting conservatism includes strict standards by which bad news are implied as losses rather than good news as profits (Diether, et al., 2009). Conservatism is the main feature of the profit. Based on contractual principles, conservatism is the issue for firms' contracts with different people and groups. Based on this definition, conservative accounting is used when different groups with asymmetric information, asymmetric salaries and wages, and limited liabilities and intellectuality made abuse (Ramalingegowda & Yu, 2012).

Recently, capital market sensitivity and managers' motivation to transfer wealth and value of the firm to themselves is the subject of a scientific study that has been vastly investigated. Conservatism is one feature of financial reporting which has a critical role in restricting optimistic behaviors of managers who are responsible for providing information and estimating minimum revenue made by investors and creditors as the main users (Roberts & Whited, 2012). There are some mechanisms for alleviating these problems because managers attempt to maximize their own profit rather than shareholders (instead of shareholders) for maximizing the profit (Young, 2016). Since conservative financial reports belongs to the firm control system and reduce management's opportunistic behavior, the consequently reduce capital market sensitivity relevant to stock price fluctuations (Young, 2016).

In this study, the relationship between capital market sensitivity and conservative financial reports is studied. Based upon literature review, it was decided to use regression model for

studying this relationship. So, research hypothesis includes: capital market sensitivity has effect on conservative financial reports. Rest of the study includes literature review and theoretic principles. And then data are analyzed and finally after discussing the results conclusion and recommendations are provided.

## 2. Literature Review

Capital market is considered the main economic basis of each country. The higher investment is made in capital market; the more economic growth is made. In this study, capital market sensitivity is similar to growth rate of firm's stock price. The extent that firms' stock price is volatile has effect on capital market sensitivity(Kothari, et al., 2010).Conservative financial reports are publication of financial reports aiming at showing the minimum level of firm's profitability based on manager's policies. Quality of accruals is one criteria of measuring conservatism in financial reports(Fang, et al., 2016). Chatfield traced conservatisms back to medieval era; when property owners handed their task over to supervisors. Supervisors immediately noticed that they need to be conservative for supporting their company. Lack of forecasting increases assets' value and is very important because if the loss happens for the property in this time, the responsibility is on supervisor. Kiso,vigant and varfild (2001) defined conservatism as follow: " historically, conservatism in accounting is manner that is used when assets and profits is estimated higher than the real amount so this methods is used for alleviating the consequences."

For example, section 95 of financial accounting statements, Number2, 1980, asserts that: "if there are two similar estimations for receivable and payable money, conservatisms choose estimation at least optimistically". In section 2-18 from theoretic concepts of Iran financial reporting standards, caution is explained as qualitative features of accounting data that makes financial statements beneficial for users. As a previous sentence, in compatibility of revenue and expenses, one condition is added that make interpretation of this section difficult: In theoretic concepts related to financial reports which are translation of statements of England accounting standards board, technical committee of Iran audit organization recognizes conservatism as caution and present it as qualitative characteristics of reliability.

Young, (2016) performed a research titled as "capital market sensitivity and conservative financial reports: evidence from short-term selling limitations" and studied relationship between mentioned variables. Research results indicated that the more capital market sensitivity to fluctuation of products selling price, the more is published conservative financial reports of managers.

Dimitrious, Anests and NigaKis (2014) had a research in Athens stock exchange aiming at study conservative effects of financial reports on information content of accounting earnings in Greece companies. Results of the study indicated that there is non-linear relationship between conservatism and information content of accounting earnings.

Xia,D.Zhu (2012) studied relationship between conservatism and governance and growth rate of companies selling. So they used data of 2001-2006. Based on findings, high degree of leverage, low level of shareholders control and low level of managemet ownership creates circumstances with higher level of conervative accounting.

Lafond & Roychowdhury, (2008)studied relationship between capital market sensitivity and conservatism. They found out firms in that managers have less ownership, they mention to their earnings in more conservative manner. This indicated that beneficiary demand for more conservatism in financial reports is used as a tool for reducing agency problems. When conflicts between managers and beneficiaries are increased, conservatism is used as a tool for alleviating this conflict.

Hassani, (2013) attempted to illustrate that how conservative reporting has effect on firms' financial decisions, especially cash flow sensitivity. Accordingly, the relationship between cash flow sensitivity and accounting conservatism was studied and also behavioral action of some control variables was tested regarding to this relationship. Results indicated that there is a negative relationship between cash flow sensitivity and accounting conservatism index.

### 3. Research Methodology

Research methodology is a method that helps there searcher to avoid error and provides the chance of achieving research goals. In other word, scientific research methodology is regular and systematic procedure that need to be used in statistical methods and relating variables of the research (Delavar, 2007).

This research is descriptive and correlative aiming at clarifying the relationship between quantitative variables and determining measurements. Aim of correlative study is providing this relationship and using it for forecasting. This research is also practical. The study was performed in inductive framework. Following model is used for testing the hypothesis in which relationship between capital market sensitivity and accruals are evaluated. Young (2016)

$$ACC_{i,t} = \alpha_0 + \alpha_1 CF_{i,t} + \alpha_2 D_{i,t} + \alpha_3 CF_{i,t} \times D_{i,t} + \alpha_4 Treat_{i,t} + \alpha_5 Treat_{i,t} \times CF_{i,t} + \alpha_6 Treat_{i,t} \times CF_{i,t} D_{i,t} + \alpha_7 Treat_{i,t} \times CF_{i,t} CF_{i,t} \times D_{i,t}$$

In which:

ACC: quality of accruals and agent of conservative reports

CF= cash flow

D= notional variable that if cash flow is bigger than one it is one or it is zero

Treat: capital market sensitivity

(ACC: conservative financial reports)

In this research, non-operating accruals are used for measuring conservatism. Accruals and non-operating type are used because accrual accounting is a pathway for conservatism on one hand and enforcing authority by manager in unreliable circumstances so it provides conditions appropriate for conservative deeds. Using this standard is stemmed from this hypothesis that lack of confidence level in relation to items that are not part of normal and continuous operations(non-operating accruals)is more than confidence level of items that are part of normal activities of the firm (Gioly and Hayn , 2000).

Total accruals, operating accruals (working investments) and non-operating onves are calculated based on Gioly and Hayn model (2000) as follow:

$$ACC_{it} = NI_{it} + DEP_{it} - CFO_{it}$$

$$OACC_{it} = \Delta AR_{it} + \Delta I_{it} + \Delta PE_{it} - \Delta AP_{it} - \Delta TP_{it}$$

$$NOACC_{it} = ACC_{it} - OACC_{it}$$

In which, variables are defined as follow:

ACC: accruals sum

NI: gross profit before unexpected items

DEP: cost of depreciation

CFO: operating cash flow

OACC: operating accruals

$\Delta AR$ : change in receivable accounts

$\Delta I$ : change in inventory

$\Delta PE$ : change in prepayment

$\Delta AP$ : change in payable accounts

$\Delta TP$ : change in payable taxes

NOACC: non-operating accruals

While operating accruals (working investment) are stemmed from continuous and normal activities of the firm, non-operating accruals include increase of expenses that are created by estimations' change, profit and loss of assets selling and loss of fixed assets value reduction, earnings transferred to future periods and capitalizing expenditures (Givoly & Hayn, 2000). Since values smaller than non-operating accruals are indicator of high conservatism, in this research for lining up algebraic values of non-operating accruals with conservatism level, symmetry of these accruals were used. This standard was also used by Pike et al, Givoly and Hayn, Ahmad et al. for calculating conditional conservatism in this research, Zhang model (2015) was used as follow: (Zhang, 2008).

$$ACC = \frac{\text{non-operational accruals}}{\text{total asset}} \times (-1)$$

Capital market sensitivity ( $Treat_{i,t}$ ) is calculated as follow: the more fluctuations in firm's stock price is the more it clarifies capital market sensitivity level Kothari, et al., (2010) which is calculate through difference between cash flow mean obtained from investments with firm investments' mean (Hovakimian, 2009). Formula of calculation is as follow:

$$CFSI_{it} = \sum_{t=1}^n \left( I_{it} \times \frac{CF_{it}}{\sum_{t=1}^n CF_{it}} \right) - \frac{1}{n} \sum_{t=1}^n I_{it}$$

CF= capital flight

I= cost of capital (investment)

Out of the companies listed in Tehran stock exchange, based on limitations and systematic elimination, 102 firms were selected as statistical sample of the research. In addition, required data of this study were collected from computer information banks, Tehran stock exchange organization library and using Novin Rah-Acard, Tadbirpardaz softwares and [www.rdis.ir](http://www.rdis.ir) website which belonged to Tehran stock exchange (research management, development, and Islamic studies).

#### 4. Hypothesis Test

Based on durability test of each variables including dependent, independent and control variables, it is illustrated that all research variables are durable and stable based on Levin, Lin & Chu test. Because calculated p-value of Levin, Lin & Chu test was 0/000 and less than 0/05. So, regression estimation for variables of this research is accurate and they are valid. In addition, cash flow logarithm and variables normality were used.

Before model fitting, we used F-Limer test for studying data homogeneity and data non-homogeneity. Based on the table 1, it is clarified that significance level of Chu test (F), sections are non-homogenous and they do not have personal differences. So, using pool model is appropriate for testing hypothesis.

Table 1: Results of F- Limer test:

Test results	p-value	Test statistic	Test model
Acceptance- pool model	0.277	1.092	Research model

For studying regression pre hypothesis except durability, we need to study lack of serial autocorrelation and variance evenness. In table 2, as mean error (residuals), test statistics and level of significance are zero, null hypothesis is accepted.

Table 2: Results of error mean which is zero (residuals)

P-Value	T statistic	Standard deviation	mean	Variable
0.001	-7.24E-03	0.40691	-1.33E-14	Residual

In this research for analysis of multi collinearity, VIF test was used. If it is lower than 5, it means that multi collinearity is low and regression is valid. Value of VIF in table 3 indicates that all values are between 1 and 3. So, there was no multi collinearity between variables. In addition, Durbin-Watson statistic in table 3 approved lack of serial auto correlation.

Table 1: Regression estimation and study multi collinearity of the model

VIF	P-Value	Test statistic	Standard deviation	coefficient	Variable
-	0.0000	-9.03291	0.04096	-0.37001	constant
1.02	0.6915	-0.39708	1.33E-07	05.29E-08	CF
1.02	0.6755	0.41891	0.47272	0.019803	D
1.01	0.6810	0.41127	1.33E-07	5.48E-08	D×CF
1.02	0.6017	-0.52227	3.7104	-193785	Treat
1.49	0.7456	-032461	0.0111	-0.00036	Treat×CF
1.04	0.2744	1.09414	9.27574	10.1490	Treat×D
2.34	0.6330	00.47785	0.00112	0.00054	Treat×D×CF
D-W2.081	P-Value	Fstatistic	0.4653	Adj R2:0.0154	R <sup>2</sup> :0.0139
	0.957				

Level of significance for all variables and for whole model was calculated in 95 percent confidence. According to the explanation coefficient of fitting model, it is clarified that 0/0139 changes of dependent variable of the model is explained by independent and control variables. According to table 4, significance level of t statistic for capital market sensitivity on conservative reports is higher than 5 percent and significant effect of capital market sensitivity on conservative reports (Treat×D×CF) is not approved and the hypothesis is rejected. Based on the literature review, this research has not been performed yet. But based on single variable, it is compatible with (Ahmed & Duellman, 2007; Hassani, 2013) and it is not compatible with Young, (2016) research.

### Discussion and Conclusion

Whereas conservatism is studied in literature review, effectiveness of conservative accounting trend and standardization and financial reporting is approved. In addition, it was illustrated that capital market sensitivity have no relationship with conservative financial reports. Thus, it is recommended that managers do not consider capital market sensitivity as standard for conservative financial reports.



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