The effect of financial constrain on the relationship between over-investment and conditioned and unconditioned accounting conservatism

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ABSTRACT

The present study is going to investigate about the relationship between over-investment and conservatism that is a cautious approach against the implementation of over-optimistic management methods and it is divided into two subcategories; conditioned and unconditioned, respectively. Then it has measured the effect of applying financial constrains on the relationship between these two variables. The sample studied in this research was comprised of 145 firms from those enlisted in Tehran Stock Exchange within the time limit between 2007 and 2012. To test the hypotheses we have used a multiple variable linear regression method. The statistical method used in this study was panel data method. The results of testing hypotheses showed that over-investment has had a direct and positive effect on conditioned and unconditioned conservatism. Also financial constrain has had a positive and direct effect on the relationship between over-investment and conditioned and unconditioned conservatism. To measure research variables the following models have been utilized; Verodi's (2008) model for over-investment, Hayne & Givoly's model (2000) for conditioned conservatism, Ball & Shiva Kumar's model (2006) for unconditioned conservatism, and the localized model of KZ by Hesarzadeh for financial constrain.

KEYWORDS: *over-investment, conditioned conservatism, unconditioned conservatism, financial constrain, information asymmetry*

INTRODUCTION

One of the most challenging and wonderful issues in current era is economic development in a way that its realization has changed into one of the principal goals of policy making and it is considered to be one of the most effective factors in economic decision makings in countries. The development is also realized in the form of investment. The important issue in investment by firms is to access the resources to invest and to finance for its costs and economically the external financial resources are more expensive than the internal ones. This shows the importance of constrains of resources in a business unit. Thus, financial constrain can be defined as a degree of financial leverage of a company whose more amount can lead to more difficult external financing. Therefore, an economic unit should consider the amounts of investment regarding the resources' constrain in investment on different programs and it should avoid over-(under)-investment. Over-investment means the acceptance of programs with negative NPV for investment. One of the factors causing over-investment is the over-optimism of firm managers when they choose investment type. Thus, when results of investment are less than what has been predicted, the current net value will be negative and it would not satisfy the goals of equity owners. This may lead to concerns among capital owners and other beneficiaries that want to avoid losing the original capital and its subsidiary parts. This increases the depth of information asymmetry and makes agency theory more colorful in minds of the stockholders. Therefore, the owners emphasize on applying a conservative approach and reduce the financial resources controlled by managers. By applying internal constrain by stock owners and reducing the profitability of investment and increasing firm's financial leverage, it would be more difficult to borrow from resources outside of the firm and the access to resources would be limited.

Theoretical foundations and research literature:

Today investment has changed into an important and key tool in the hands of managers and it paves the way for the development, progress, and promotion of a business unit and finally creates value added and cash flows. But this is not enough and considering financial resources' constrains, increasing the efficiency of investment is considered as a very important issue in addition to investment development (Modarres & Hesarzadeh, 2008). Conceptually, investment efficiency is achieved when the company 'solely' invests in programs with current positive net capital value. Of course, this scenario is efficient only when the market is complete and there are not any faults or incompleteness such as inappropriate selection or agency costs (Verodi,

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2006, Bidel & et al, 2009). Moreover, investment efficiency or optimized investment requires an over-optimal investment activities avoided on the one hand, and the direction of activities towards those resources that need more investment, on the other hand (Modarres & Hesarzadeh, 1999). Morgando & Pindado (2003) believed that investment has an optimal level through which projects with positive NPV are carried out.

Factors causing over-investment:

1) **Information asymmetry concept:** it refers to a state through which one of the two trading parties has less information than the other about market status. In other words, the distribution of information among the whole users is not congruent (Hashemi, 2002). The existence of alternative strategies in accounting standards is one of the reasons why there is information asymmetry. Using these alternatives and the possibilities accessible for the managers creates probable conditions for misuse of the position of the managers. This misuse can be represented in the form of lack of showing transparent information or using more information to increase self advantages.

2) **Agency problem:** agency problems result from the isolation of ownership and management. The managers' welfare is not in line with those for stockholders and there are many strategies to gain benefits by managers as a result of the isolation of ownership and management. One of the most important controversies is firm's size and growth rate. Managers may follow growth rate increase up to a level higher than the optimal one for the wealth level of the stockholders because their salary depends on the firm's growth rate or since managers in big companies receive greater rewards. On the other hand, by increasing growth rate and increasing free cash flow, managers over-invest by administering projects with negative NPV and report the investment with a rate lower than the capital cost. Agency problems are also related to the relationships between stockholders and creditors in addition to the relationship between managers and stockholders. Managers in line with stockholders' benefits invest in risky projects and as a result the value is transferred from the creditors to stockholders because the stockholders do not pay any profits to the creditors while the creditors incur a part of bankruptcy risk. Thus, the incentive to increase capital cost through higher level interests, contract period change, and other legal issues exist for the creditors.

3) **Conservatism:** firms that invest higher than the authorized amount are categorized as over-investing companies. The investors and creditors investigate about the quality of information by analyzing financial statements. During some recent years the topic of the reported information quality has been noticed by many researchers and it has been one of the qualitative aspects of conservatism studied. This means that the more conservatism leads to a higher information quality level (Ball & Ducheh, 2009). Conservatism keeps agency costs low directly through increasing accessible cash flows and indirectly through the information role to reduce cash investment and through avoiding investment on low current net value (Givoly, 2007). Regarding the information role of conservatism, it seems that conservatism results in improving the control over investment decisions by management through reducing investment in parts where managers tend to do over-investment (Garcia Lara & et al, 2010). Basu (1997) has interpreted conservatism as the tendency of accountants to obligate a higher degree of acceptability to recognize good nerws (earnings) compared to the recognition of bad news (losses). Givoly & et al (2007) have defined conservatism as: choosing an accounting strategy in lack of reliance that finally leads to presenting the lowest amounts of assets and incomes and the least positive effects on owners' equity. The results of utilizing conservatism are one of the followings: (1) slower recognition of sales revenue, (2) more rapid recognition of costs, (3) lower assessment of assets, and (4) higher assessment of liabilities

The reasons to use conservatism:

Hendrickson & Won Berda stated three reasons to apply conservatism. First, the tendency of accountants to pessimism is necessary to compensate for the over-optimism of managers and owners. The second reason is that the tendency of managers to overstate the earnings and assessments is more dangerous than understatement for the owners. This means that the outcome of losses or bankruptcy is more serious than earnings' outcome. The third reason stated by these two scholars is based on the presupposition that an accountant has more access to information than the investors and creditors and an accountant encounters two risks when auditing: on the one hand there is a risk that maybe what has been reported would become inappropriate in the future, and on the other hand, there is a risk that maybe what has not been reported would occur in reality. Conservatism means that the cost of disclosure is more than hiding.

Different types of conservatism:

Ryan presented a definition for conservatism in 2006 and divided it into two types of conditioned and unconditioned. Conditioned conservatism or post incidental depends on the news. This means that the book value of net assets reduces in inappropriate conditions but it does not increase in appropriate conditions and it is realized in more rapid recognition of losses compared to the recognition of earning. This type of conservatism has a profit and loss perspective. For example, we can recall the least cost principle or market value for the

inventory or the reduction of value of assets (Beaver & Rine, 2005). To do the research above, the model posed by Shiva Kumar (2000) was used to measure conditioned conservatism.

Unconditioned conservatism or unpredicted conservatism is based on balance sheet perspective that reflects the tendency to show the net book value of assets less than the reality compared to their market values. Unconditioned conservatism reminds us about the application of conservative accounting in recognition and primary record of assets and liabilities. This type of conservatism is independent from the news and current incidents and only originates from the obligations of standards and accepted accounting principles. Research and development costs expenses, excessive depreciation, and first output from the last input methods are among this type of conservatism (Ball & Shiva Kumar, 2005). To measure unconditioned conservatism we used Hayne & Givoly's model (2000).

The major difference between these two perspectives is the fact that the incentive for unconditioned conservatism is the difficulty of measuring assets and liabilities, while the main incentive for conditioned conservatism is to neutralize the tendency of managers to present biased financial information (Beaver & Ryan, 2005).

Financial constrain:

The financial constraints are among important and basic issues that all firms encounter. There are common methods to investigate about financial constraints. The categorization of firms into two groups of financially constrained and financially not constrained firms. But, it should be noted that when there is a crack between internal and external expenses of the appropriated cashes, a firm encounters financial constrain. Based on this definition, all firms have financial constrain but with different degrees and levels of 'financial constrain'. To achieve a framework to categorize firms regarding financial constrains, we can use external cash. It happens when there is a difference between internal and external consumption of investment cashes in a firm is high and in this case the firm has a higher financial constrain level and vice versa.

The reasons for financial constrains

We can refer to information asymmetry and agency problems from among the main reasons why there is a difference between internal and external financing. When there is information asymmetry, the investors do not have much information about the status of capital projects in firms and therefore they demand a higher return rate to invest in such firms. Agency problems result in lack of trust between firm managers and investors to demand a higher return rate to finance for investment projects of the companies.

Over-investment of free cash flows as a result of financial constrains

This hypothesis stated that firm managers prefer to increase the amount of assets under their own control even if it results in reducing firm's value. In other words, they prefer to spend firm's free cashes for their own opportunistic benefits instead of dividing it among the stockholders. Since the issuance of bonds results in increasing free cash flows in a firm and it causes the stockholders encounter higher agency costs, the stock price decreases. This hypothesis also predicts that stock return and operational performance has a meaningful relationship with the ratio of market value of assets to their book value. Therefore, by reducing stock price after issuing bonds, return on stocks and operating performance decreases. Farady & et al reasoned that firms having severe financial constrains emphasize on cash flows more in decision making time. In other words, by increasing the difference between internal and external financing, the sensitivity of investment to internal cashes increases. Determining whether a firm has financial constrains or not is a very dangerous and difficult job. Thus, in order to categorize firms into groups of firms having financial constrains and those that do not have constrains requires having some criteria. In 2001, Lamount, Palk, and Rekvidu proposed KZ index. KZ index is a regression pattern in which financial constrain is a function of cash flow, distributed dividends, cash residuals, leverage ratio, and Q Tobin index. Based on this index, firms that have higher KZ are more dependent on owners' equity.

The research method here is measurement in nature and it is a correlation type regarding research type. The time range for this research was the years between 2007 and 2012. The data required for this research were collected from the data in Tadbir Pardaz software and the website entitled: www.rdis.ir, belonging to the center for research management and Islamic Studies of Tehran Stock Exchange. The data analysis and hypothesis test have been carried out by using Excel, SPSS, and Eviews software. The population and statistic sample were the firms enlisted in Tehran Stock Exchange. The sample used was selected by an elimination method. Firms that have had the conditions to be included in sample were 145 enlisted in Stock Exchange between the years 2007 and 2012.

Research hypotheses:
Major hypothesis 1:
1.   Over-investment affects accounting conservatism.
Minor hypotheses:
1-1.   Over-investment affects conditioned conservatism.
1-2.   Over-investment affects unconditioned conservatism.

Major hypothesis 2:
2. Financial constrain affects the relationship between conservatism and over-investment.
Minor hypotheses:
2-1. Financial constrain affects the relationship between conditioned conservatism and over-investment.
2-2. Financial constrain affects the relationship between unconditioned conservatism and over-investment.

Research variables' measurement method:
To measure over-investment we have used a model posed by Verodi (2006) (model 1-3). In this model, firm's capital costs are a function of growth opportunities and control variables.
Model 1-3:
Invest i,t+1 = α0+α1 Q i,t+α2R i,t+α3SaleGrth i,t+ α4Cash i,t
+ α5Leveragei,t+e i,t+1

The financial constrain criterion (KZ index)
In 2001, Lamount, Palk, Rekvidu, called this index KZ. KZ index is a regression pattern in which financial constrain is a function of cash flows, distributed dividends, cash residual, leverage ratio, and Q Tobin index. KZ index was localized in Iran by Tehrani & Hesarzadeh (2009) and its coefficients were estimated regarding the conditions considered for firms enlisted in Tehran Stock Exchange as follows:

$$\text{KZ index}=17.33-37.486\frac{C_{it}}{A_{t-1}} - 15.216\frac{Div_{it}}{A_{t-1}} + 3.394Lev_{it} - 1.402MTB$$

CF: net cash flow
Div: total dividends
C: cash residuals (cashes in banks)
A: book value of total assets
Q: Q Tobin index (firm's value criterion)
Lev: leverage ratio (the ratio of total liabilities to total assets)
The differentiation of firms with constrains in financing by using KZ index was carried out considering the table below:

	First 1/5	Second 1/5	Third 1/5	Fourth 1/5	Fifth 1/5
Constrain in financing probability	0 to %20	20 to %40	40 to %60	60to %80	80 to %100
Firms considered to have constrains in financing in the present research				*	*

Conditioned conservatism
In our research we have used a model posed by Shiva Kumar (2005) to measure conditioned conservatism.
$ACC_{it}= b0_{it}+ b1_{it}DC_{it}+ b_{2it}\Delta CFOit+ b_3(DC_{it}*\Delta CFO_{it})+ e$ it
ACC_{it} = accruals of firm in year t
$DCFO_{it}$ = if operating cash flow in year t is negative, it would be 1, or else it would be 0.
CFO_{it} = cash flow resulted from operating activity
Conservatism means that when there is negative cash flows, the accruals are more probably negative due to the faster recognition of losses not realized. When this relationship is bigger, the asymmetric behavior against profit would be present when there are not positive cash flows. The more good news (profit) and bad news (losses) will result in more conservatism.

To measure unconditioned conservatism we have used Hayne & Givoly's (2000) model. The only difference between it and conditioned model is that the total non-operating accruals alter operating accruals and the reason is that the main incentive for unconditioned conservatism is the difficulty of assessing assets and liabilities. Meanwhile, the main incentive for conditioned conservatism is to neutralize the tendency of managers in presenting financial information. The calculations for non-operating accruals are as follows:
ACCit= (NIit+DEPit) - CFOit
OACCit= Δ (ARit+ Iit +Pit) – Δ (APit + Pit(
$NOACC_{it}$ = non-operating accruals
ACC_{it} = total accruals

Research model:
To test first main hypothesis 1, we have used the following model:
CONSERVATISMProxiesit =β0+β1 investit +β2sizeit +β3 Growthit+ β4MBVit +β5 ROAIT +εIT
And for testing the major hypothesis 2, we have used the following model:

CONSERVATISMProxiesit= β0+β1 investit+ β2KZ+β3Invest   *KZ   +   β2sizeit +   β3 Growthit   + β4MBVit+ β5 ROAit+ εIT

CONSERVATISM$_{it}$ = it is the index for conditioned and unconditioned conservatism
Invest$_{it}$ = over-investment index
KZ = financing constrain measurement index
Size$_{it}$ = firm size (natural logarithm of assets)
Growth$_{it}$ = it is assets' growth (increase in end of the period assets compared to the start of the period)
MBV$_{it}$ = the ratio of market value to book value
ROA$_{it}$ = internal return on assets
E$_{it}$ = measurement error in the model

Research hypotheses' test method

In this research we have used a multiple variable linear regression to test hypotheses. The statistical method used was panel data method. First the pooled data method and the tests related will be explained. Then the tests related to the meaningfulness of the total model and the meaningfulness of the independent variables will be explained. Finally and after describing the tests related to the presuppositions in the classic regression, the decision making method on the rejection of approval of the research hypotheses would be presented.

Regarding what was pointed out for testing the hypotheses, first we used F statistic to test the appropriateness of the data merge and then based on Haussmann's test we determined test type (fixed effects or random effects) and regarding the method we estimated the model. To study the meaningfulness of total model we used F statistic. By comparing F statistic and F in the table with degree of freedom K-1 and N-K in an error level of %5, the total model was investigated. Also to study the meaningfulness of the coefficients of independent variables we used t statistic. The t statistic gained based on t table with degree of freedom of N-K in an assurance level of %95 was compared. If the absolute amount of t calculated was bigger than t in the table, the counterpart coefficient would be meaningful and it shows that there is a relationship between the independent and dependent variables. Also as an alternative method to make decisions about the acceptance or rejection of a hypothesis we have done calculations based on probability amount or meaningfulness level. If the probability calculated was bigger than or equal to type one error amount (α), the null hypothesis would be accepted, and if the amount of probability was smaller than type one error (α), the null hypothesis would be rejected.

Results of testing first research hypothesis:

The goal of testing the first research hypothesis was to study on the effect of over-investment on conservatism. Regarding that in the present study conservatism was considered in two perspectives of conditioned and unconditioned conservatism, in order to identify whether panel data method would be efficient in models above or not, we have used Chaw's test and in order to determine which method (fixed effects or random effects) would be more appropriate we have used Haussmann's test. Results of these tests have been shown in the figure below.

model	test	P-Value	degree of freedom	Value of statistic test	Statistic test
first	Chow Test	0/0000	(659٬144)	2/778	F
	Hausman Test	0/0034	7	21/234	χ^2
secound	Chow Test	0/0000	(689٬144)	12/922	F
	Hausman Test	0/0011	7	24/117	χ^2

Regarding the results of Chaw's test and since the amount of P-Value has been less than 0.05 in both models (0.0000, 0.0000), the incongruence of latitude from bases was approved and it was considered necessary to estimate models by using panel data method. Also due to the fact that P-Value of Haussmann's test has been less than 0.05 in both models (0.0011, 0.0034), it would be necessary to use fixed effects method to estimate the models.

Studying the credibility and strength of models:

1- F Fischer statistic: to accept the presupposition of meaningfulness of the total pattern, or the existence of a meaningful linear relationship between independent and dependent variables we have used F Fischer test and it overall showed that there has been a meaningful linear relationship between independent and dependent variables and the pattern has had the required validity for analyzing the results. The model's identification coefficient showed that the variables entered in first model could describe %75.46 of changes of the dependent variable (conditioned conservatism index) and variables entered in second model could describe %74.04 of changes of the dependent variable (unconditioned conservatism index).

(2) model (UC_CONSV)	(1) model (C_CONSV	variables'
-0/4842	1/9771	fixed effects
(-34/240)	(0/425)	(t statistic)
(0/0000)	(0/6708)	(P-Value)
0/0173	-26/5032	INVEST
(0/468)	(-4/469)	(t statistic)
(0/6399)	(0/0000)	(P-Value)
6/109	5/825	VIF
-0/0053	-1/9078	D_INVEST
(-4/911)	(-12/931)	(t statistic)
(0/0000)	(0/0000)	(P-Value)
1/683	1/683	VIF
0/1678	143/6226	D_INVEST × INVEST
(3/206)	(16/634)	(t statistic)
(0/0014)	(0/0000)	(P-Value)
5/072	4/819	VIF
0/0384	0/0036	SIZE
(35/654)	(0/010)	(t statistic)
(0/0000)	(0/9916)	(P-Value)
1/031	1/029	VIF
-0/0113	-0/0443	GROWTH
(-2/028)	(-0/070)	(t statistic)
(0/0429)	(0/9441)	(P-Value)
1/204	1/205	VIF

(2) model ROE	(1) model ROA	variables'
-0/0003	0/0829	(t statistic) MBVit
(-0/480)	(2/451)	(P-Value)
(0/6307)	(0/0145)	VIF
1/209	1/211	
-0/0436	-1/7164	ROA
(-5/517)	(-2/143)	(t statistic)
(0/0000)	(0/0324)	(P-Value)
1/187	1/188	VIF
0/7404	0/7543	R
13/017	13/401	model F
(0/0000)	(0/0000)	(P-Value)
11/867	26/303	Jarque-Bera statistic
(0/0026)	(0/0000)	(P-Value)
3/910	41/665	Breusch-Pagan statistic
(0/0003)	(0/0000)	(P-Value)
1/571	1/987	Durbin-Watson

The interpretation of results of testing the first research hypothesis:

Based on results in figure 4-6, in first model, the meaningfulness of the t statistic related to "investment's inefficiency * over-investment index" (that represents firms have had over-investment) has been less than 0.05 (0.0000) and its coefficient has been positive (143.6226). Thus, the hypothesis H_1 has been approved in an assurance level of %95 and it can be claimed that over-investment and conditioned conservatism have had a direct and meaningful relationship in a way that by increasing over-investment in companies, their conditioned conservatism level increases. Therefore, the minor hypothesis 1-1 could be approved in an assurance level of %95. This is also correct in second model in a way that in this model the meaningfulness level of t test related to the variable: " investment's inefficiency * over-investment index" has been less than 0.05 (0.0014) and its coefficient has been positive (0.1678). Thus, we can say that there has been a direct and meaningful relationship between firm's over-investment and unconditioned conservatism level. Therefore, the minor hypothesis 2-1 was approved in an assurance level of %95. Regarding the findings above we can conclude that over-investment has bee effective in both levels of conservatism (conditioned and unconditioned conservatism) in firms that are active in capital market in Iran and it increases the level of conservatism in firms enlisted in Tehran Stock Exchange. Thus, the first research hypothesis is approved in an assurance level of %95.

Results of testing the second research hypothesis

The goal of testing the second research hypothesis was to study on the effect of financial constrain on the relationship between over-investment and conservatism. Regarding that in the present study conservatism was considered in two perspectives of conditioned and unconditioned conservatism, in order to identify whether

panel data method would be efficient in models above or not, we have used Chaw's test and in order to determine which method (fixed effects or random effects) would be more appropriate we have used Haussmann's test. Results of these tests have been shown in the figure below.

P-Value	degree of freedom	Value of statistic test	Statistic test	test	model
0/0000	(658،144)	2/367	F	Chow Test	third
0/0174	8	18/558	χ^2	Hausman Test	
0/0000	(688،144)	12/516	F	Chow Test	fourth
0/0036	8	22/792	χ^2	Hausman Test	

(4) model (UC_CONSV)	(3) model (C_CONSV	variables'
-0/4881	1/4429	fixed effects
(-34/640)	(0/622)	(t statistic)
(0/0000)	(0/5338)	(P-Value)
0/1627	30/1603	INVEST
(19/098)	(5/286)	(t)
(0/0000)	(0/0000)	(P-Value)
1/942	1/869	VIF
-0/0061	-1/3491	D_INVEST
(-5/970)	(-7/691)	(t statistic)
(0/0000)	(0/0000)	(P-Value)
1/620	1/634	VIF
-0/0028	-0/4024	(statistic t) KZ
(-1/106)	(-3/170)	(P-Value)
(0/2689)	(0/0016)	VIF
2/004	2/020	
0/1176	29/1409	D_INVEST × INVEST KZ ×
(2/298)	(5/681)	(t statistic t)
(0/0218)	(0/0000)	(P-Value)
1/404	1/375	VIF
0/0392	0/1690	size
(33/350)	(0/911)	(t statistic)
(0/0000)	(0/3622)	(P-Value)
1/045	1/043	VIF
-0/0106	0/2112	GROWTH
(-1/926)	(0/571)	(t statistic)
(0/0544)	(0/5677)	(P-Value)
1/199	1/206	VIF

(2) model ROE	(3) model ROA	variables'
-0/0005	0/0913	MBV
(-0/751)	(2/110)	(t statistic)
(0/4527)	(0/0352)	(P-Value)
1/406	1/407	VIF
-0/0576	-1/1420	ROA
(-6/231)	(-1/112)	(t statistic)
(0/0000)	(0/2664)	(P-Value)
1/543	1/532	VIF
0/7363	0/4151	R
12/639	3/072	F statistic model
(0/0000)	(0/0000)	(P-Value)
13/525	796/193	Jarque-Bera statistic
(0/0011)	(0/0000)	(P-Value)
4/346	25/408	Breusch-Pagan statistic
(0/0000)	(0/0000)	(P-Value)
1/576	1/982	Durbin-Watson statistic

The interpretation of results of testing the second research hypothesis:

Based on results in third model, the meaningfulness of the t statistic related to "investment's inefficiency * over-investment index * financial constrain index" (that represents firms have had over-investment and financial constrain simultaneously) has been less than 0.05 (0.0000) and its coefficient has been positive (29.1409). Thus, the hypothesis H_1 has been approved in an assurance level of %95 and it can be claimed that financial constrain affects the relationship between over-investment and conditioned conservatism directly and meaningfully in a way that by increasing financial constrain the effect of over-investment and conditioned conservatism increases. In other words, in firms that over-invest along with having financial constrains, there would be more tendency to apply conditioned conservatism in financial statement. Therefore, the minor hypothesis 1-2 could be approved in an assurance level of %95. This is also correct in fourth model in a way that in this model the meaningfulness level of t test related to the variable: " investment's inefficiency * over-investment index * financial constrain index" has been less than 0.05 (0.0218) and its coefficient has been positive (0.1176). Thus, we can say that financial constrain affects the relationship between unconditioned conservatism and over-investment directly and meaningfully and increasing firms' financial constrains result in increasing the effect of over-investment on unconditioned conservatism. In other words, firms that try to over-invest along with financial constrains and tend to apply unconditioned conservatism in financial statements. Therefore, the minor hypothesis 2-2 was approved in an assurance level of %95. Regarding the findings above we can conclude that financial constrain can affect the relationship between conservatism (both conditioned and unconditioned) and has been effective in increasing this relationship. Thus, the second research hypothesis is approved in an assurance level of %95.

Conclusion and suggestions:

Results of testing the first research hypothesis showed that there has been a direct relationship between accounting conservatism and conservative accounting over-investment. This research showed that conservatism has information advantages that reduce over-investment and thus reduces investment's inefficiency. Regarding the role of conservatism, it seems that the reason is the improvement of control over management decision making through reducing investment where managers tend for over-investment. It also results in fostering cheap external financing through increasing investment where managers tend for under-investment. Results of this hypothesis accord with researches by Garcia Lara & et al (2010), Thaoma (2011), and Mahmoudabadi & Mehtari, 2011).

Also results of the second research hypothesis showed that financial constrain has had a positive and direct effect on the relationship between over-investment and conditioned and unconditioned conservatism as an independent variable. This means that by increasing financial constrain in the company and lack of investment following that in projects under considerations, the managers would increase their precision in selecting a project for investment and avoid over-investment. On the other hand, accounting conservatism increases as a result of accounting conservative over-investment and finally the projects chosen for the investment would be chosen with higher cautious and more precise calculations (more positive). Finally value added and the earnings created for equity owners will increase and the final goal of the firm regarding maximum earnings would realize.

The evidences in this research showed that there has been a meaningful and direct relationship between over-investment and conditioned and unconditioned conservatism. Also financial constrain has had a positive and direct effect on the relationship between over-investment and conditioned conservatism and unconditioned conservatism, either. In this research only the effect of over-investment on conservatism has been investigated. Thus, results of the research showed that by increasing over-investment, the investors become sensitive and consider it as the result of misuse by managers of the confidential information and they ask for more conservative methods to preserve their benefits. Also the creditors analyze the ratios and observe financial leverage increase against lack of increase in expected profits regarding investments and will avoid conferring credits. Thus, when the business unit needs cash to invest in a profitable project, it would face constrain and would lose investment opportunity. Therefore, firms that over-invest while encountering financial constrain would tend to apply conditioned and unconditioned conservatism.

It can be suggested that in future researches the effect of cash flows on earning management and conditioned and unconditioned conservatism be investigated. Also instead of financial constrain, it would be better to use operating cash flow.

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