

## A survey on Earnings Management and Machiavellianism in Iran

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### ABSTRACT

The objective of the paper is to investigate the effects of Iranian chief financial officers' perceptions of the loss aversion and Machiavellianism on earnings management. The research is based on a survey of chief financial officers employed by listed firms on Tehran stock exchange. The results indicate there is a significant positive relationship between Machiavellianism and earnings management; that is individuals high in Machiavellianism attempt more to manipulate earnings than individuals low in Machiavellianism. Chief financial officers' also judged that there is also an inverse relationship between age and opportunistic earnings management and men do opportunistic earnings management more than women. There is also a direct relationship between loss aversion and opportunistic earnings management.

**KEY WORDS:** Earnings management, Tehran stock exchange, Machiavellianism, Loss aversion and Iran.

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### INTRODUCTION

In the past decades, the methods of earnings management or EM, commonly noted to as creative accounting, is discussed as the most important topics of ethical confronting accounting practitioners (Davidson et al., 2004; Merchant and Rockness, 1994; Fisher and Rozenweig, Shafer, 2002; 1995; Kaplan, 2001a, 2001b; Elias, 2002; Burns and Merchant, 1990). Once managers apply their opinion in structuring transactions and in reporting of financial and to modify the reports of financial to influence the results of contract which depend on the numbers of reported accounting or to deceive some stakeholders concerning the underlying company economic performance is called earnings management occurs (Healy and Wahlen, 1999). America's Congress approved the act of Sarbanes-Oxley (SOX), due to the increasing recourse to earnings management caused in 2002 in order to support investors or stakeholders also to increase the accuracy and reliability in the financial reports of enterprises (Coates, 2007). Nowadays, in the financial world, earnings management is one of the main worries because the reports of earning management effect on resource allocation efficiency and cost of capital (Dayanadan et al. 2012).

The actively manipulate earning subject to a goal of pre-determined is called earnings management that it may be occurred by the market or a financial analyst or managers (Ng et al., 2009; Davidson et al., 2004). To raise capital, increase compensation, avoid covenant defaults or influence regulatory outcomes, managers may involve in earnings management. However, there are so many researches about detecting earnings management behavior and evaluation impact of EM on capital markets, unfortunately there is a few researches on the ethical of perceptions of earnings management. In addition, those investigations have accompanied mixed results (Merchant and Rockness, 1994; Burns and Merchant, 1990; Fischer and Rozenweig, 1995; Elias, 2002; Kaplan, 2001a, 2001b; Greenfield, 2005).

Economics and financial analysis of decision assume that people try to maximize their expected utility. A lot of empirical evidence shows, however, systematically violation of their expected utility theory by people (Starmer, 2000; Camerer, 1995). Rabin (2000) stated that the generally viewed degree of risk aversion more than insinuates a risk aversion degree of unrealistic more than great stakes under expected utility. The danger of applying biased utilities is, clearly, that forecasts of decisions would be changed. Loss aversion is one important factor why people deflect from expected utility. A lot of empirical investigations have found evidence of loss aversion (Barberis et al. 2001; Kahneman et al. 1990; Tversky and Kahneman, 1991). Expecting to obtain high returns with low risk is called Loss aversion which is an emotional and cognitive bias, affect the general performance of those financial decisions (Suresh, 2013). Loss aversion means being extremely uncomfortable with a loss or a potential loss (Suresh, 2013).

Machiavellianism is the influence and domination of one person over opposite side, whereby, the opponent is persuaded to do his/her wishes. With the increasing influence of the person on the other side, he/she would come to dominate others and do what he/she wants and will be what he/she expects. People with high Machiavellianism specification will tend to win and their main concern is the job what they must do and nothing

else. In this regard, they carry out their duties by their subordinates, and used them as a tool to achieve the goals being (Farhangi, 2009).

The primary and major question of this survey is whether earnings management is an ethical and behavioral conduct in Iranian chief financial officers. Iran has some specific features related to the matters of global convergence and harmonization, which is in Middle East as a big economy. Iran's experience in adopting and implementing accounting and financial practices is likely to impress other developing countries. The study focuses on chief financial officers perceptions because they use accounting practices to prepare a set of financial statements for users.

The main objective of this research is in order to help to the accounting and literature of finance on earnings management through evaluating if earnings management could be considered as an ethical and behavioral issue. The findings of the paper can also help the capital market regulators of developing countries to better understand the motivation of the financial information providers. The rest of this research explains briefly the relevant literatures and the development of hypothesis also states the research method which is applies in the paper then it analyzes and discusses the results.

## LITERATURE REVIEW

First, consider the following respective academic definitions about literature review of this study to know more commonly about various definitions of earnings management:

Schipper (1989) says that earning management is a targeted intervention with the purpose of obtaining a number of private gain in the process of the reporting of external financial, (as opposition, say, exclusively facilitating the process of neutral operation of the).

Healy and Wahlen in 1999 says that EM occurs once managers apply their opinion in structuring transactions and in financial reporting and to modify financial reports to influence the results of contract which depend on the numbers of reported accounting or to deceive some stakeholders concerning the underlying company economic performance.

EM is classified into two categories which are management of efficient earnings and management opportunistic earnings. According to Healy and Wahlen, (1999), the objectives of management of opportunistic earnings is try to deceive some investors about the opinion of the firms or to influence the accounting-based contracts results which depend on numbers of reported accounting by managers to use applying personal ideas in the reporting financial and in transactions of non-routine to change financial reports and. The objectives of management of efficient earnings are managers desire to give private data to shareholders, to improve the informational content to revenues and promote communications between the public, managers and investors and (Siregar *et al.*, 2008; Jiraporn *et al.*, 2008).

Earnings management is classified into two types which are the opportunistic use of accruals, an accounting-based manipulation, and the manipulation of real activities (Di Meo, 2014). Understanding why earnings management occurs will allow policy makers to best craft policies that combat this practice. In general there are four main incentives for companies to engage in earnings management: insider trading, equity offerings, compensation agreements and Debt contracts (Pathak, 2014). Managers often use the flexibility of accounting principles and personal judgments to manipulate earnings (Pathak, 2014).

Some factors such as job retention, promotions or personal bonuses are also motivation for managers to manage earnings to encounter their aims of budget (Duncan, 2001). Baik *et al.* (2011) provide evidence that higher-ability managers make more accurate forecasts, consistent with these managers being more able to forecast the future. Demerjian *et al.* (2013) provide evidence that higher-ability managers have higher-quality earnings. Although they do not examine earnings quality metrics that reflect earnings management, their findings would imply less earnings management by best managers (Demerjian, 2014). A survey proved that people, sense of justice far outweigh self-interest and beliefs about obligations with analysis of decision-making in business and personal situation and conclude (Bowie and Duska, 1990). They believe that any incidence of reporting of fraudulent financial begins with a transgression of ethical and that earnings management methods raise the most major ethical matters confronting the accounting profession. Kaplan & Likewise, *et al.* (2007) believe that earnings management goes up the most appropriate and major ethical matters facing nowadays experts of accounting. Greenfield (2005) believes that experts of earnings management can lead to deceiving of stakeholders even though the methods are not contrary to the GAAP or the generally accepted accounting principles (Dayanadan *et al.* 2012).

The literature indicates judgments of individuals about earnings management depend on recognition in ethical ideology. In general, to have a "reputation of solid integrity" and is extremely respected by the public in terms of reliable financial statements, timely and preparing transparent is considered in the accounting profession (Rozenweig & Fischer 1995). As regards, this reputation was lately been unstable by a number of accounting frauds with high profile and the earnings management reports methods which have damaged the trust of stakeholders and overall confidence in the accounting profession. Analyzing the influence of personality

traits and ethical ideologies on earnings management may assist to know the reason occurring of these unethical action, and enable experts of accounting to recover their integrity and reputation (Dayanadan et al. 2012).

According to opinion of Kahneman and Tversky's, loss aversion means that a person is loss averse if she or he does not like equiponderant 50-50 bets and, as well as, they become more loss averse when these bets goes up with the stakes absolute size (1979). It clearly is a behavioral notion defined completely considering of preferences. In theory of decision and economy, loss aversion related to people, trend to strictly prefer eschewing losses to procuring profits. Several researches offer losses are psychologically as gains and twice as powerful. First, Loss abomination was introduced by Daniel Kahnman and Amos Tversky (Verhofen, 2014). When individuals compete, Loss aversion probably be more pronounced. According to Verhofen, (2014) Prows and Gill in 2012 supply empirical document that in a competitive environment, individuals are loss averse over points of reference given with actual endeavor by their expectations.

The literature of earnings management shows that firms manage their earnings in order to avoid loss (Burgstahler and Dichev, 1997). Kaznik (1999), claim that if managers and firms miss their own forecasts, then it would be costly because of the loss of reputation, threat of litigation, or negative price movements. Survey evidence from CFOs also has showed that CFOs say they believe it is important to avoid reporting earnings below zero, below prior period earnings, and below analyst expectations (Graham et al. 2005). Therefore, in this survey, we suppose that loss averse managers try to manipulate earnings to avoid loss; so that they would be able to receive more testimonial and save their reputation.

Machiavellianism is identified as a corresponding character of syndrome as Christie and Geis say (1970). After that in 1992, Machiavellian motivation was recognized as one of pure instrumentality or cold selfishness by Fehr and colleagues. Instead of having unique use of objectives, individuals high in Machiavellianism (referred to casually as "Machs") were assumed to have usual inner motives (e.g., sociality and achievement). Based on motives, Machs follow them in dual path. This idea has needed several adjustment due to current work wherein Machs were asked concerning their motivations. In compare to down Machs, great Machs gave great preference to competition, power and money (Stewart & Stewart, 2006) and relatively down preference to community building, family concerns and self-love (McHoskey, 1999). Machs admitted to a focus on unabated winning and success at each cost (Rychman, Thornton, & Butler, 1994). Consider that this motivational profile of distinctive does not certainly contradictory with the original opinion of Mach as purely tools: After all, tend to maximize instrumental benefits, power seeking and money seeking in the long run (Jones and Paulhus, 2009).

Machiavellianism individuals perceive on earnings management. They found that people who exhibit low idealism strictly less than who are with high idealism judge earnings management. A study demonstrate that people high in Machiavellianism focus on the final results and desire to depend on conscience of personal moral to make decision in their interests to ensure that the "end of the matter" Wakefield (2008). Hargis (2006) purport that people have more inclined to lie, manipulate others and pay a bribe who are high in Machiavellianism compared with people are in low Machiavellianism; hence, all kinds of unethical behavior effect on Machiavellianism and there is a significantly and positively relationship between them (Dayanadan et al. 2012).

Shafer and Wang (2011) find that certified public accounting also judged management of accounting earnings greater intensity. They show individuals high in Machiavellianism do not consider earnings management as an unethical behavior. Versus to previous research in the USA about earnings management, the attendees judged accounting earnings management more leniently, but judged operating earnings management greater intensity.

Dayanandan et al. (2012) investigate the relationship between Machiavellianism individuals' perception on earnings management, ethical values and the relationship between them. They find that people who exhibit low idealism less than people with top idealism judge earnings management.

## **Hypothesis development**

The hypothesis which matches with the purpose of this study are as follows:

Hypothesis 1: There is a relationship between efficient earnings management and Machiavellianism that is statistically significant.

Hypothesis 2: There is a relationship between efficient earnings management and loss aversion that is statistically significant.

Hypothesis 3: There is a relationship between opportunistic earning management and Machiavellianism that is statistically significant.

Hypothesis 4: There is a relationship between loss aversion and opportunistic earning management that is statistically significant.

## **1- MATERIALS AND METHODS**

Data was collected by means of three questionnaires, administered to the respondents. The first questionnaire contains the assessment of the Machiavellianism behavior background; while, the second one

examines the tendency to manage earnings; and, the third one comprised the assessment of the tendency to averse losses. Our goal was to assess if loss aversion and Machiavellianism behavior can affect on the incentives of the earnings management.

### Statistical sample

A group was surveyed, comprising Iranian chief financial officers, who work in listed firms of the Tehran stock exchange. In this study 450 questionnaires were distributed among them randomly and 303 completed questionnaires were obtained.

### Variables

Independent variables include machiavellianism and loss aversion, the control variables include age and gender. The dependent variables are also opportunistic and efficient earnings management.

### The questionnaires

Three questionnaires were used for achieving the purpose of this research. The first questionnaire contains the assessment of the Machiavellianism behavior background. Similar to Christie and Geis (1970), this research used the scores rank of 5-Point Likert scale questionnaire. The second questionnaire included questions on a Likert scale and based on questionnaires used by Montier and proposed by Pompian (2009), with adjusting to the Iran capital market. The third questionnaire consists of questions on a Likert scale and taken from a questionnaire used by Bleski, Mimz and Brozovsky (2008).

## 2- FINDINGS AND DISCUSSION

### Descriptive Statistics

According to the findings of this sample, about 30 percent are female and 70 percent are men. Also, about 46 percent are employed in field of auditing, 34 percent in accounting and 20 percent in the financial sphere. The age distribution shows 6% of samples are between 25 to 30 years, 32% between 31 to 40 years, 23% between 41 to 50 years and 9 percent are between 51 to 65 years old. Following table reports the statistics of descriptive for all of variables included independents and dependent variables.

Table1: The variables of dependent and independent based on the descriptive statistics

Statistics	Age	Loss aversion	Machiavellianism	Efficient Earnings Management	Opportunistic Earnings Management
Frequency	303	303	303	303	303
Average	36/38	6/5314	23/25	22/0627	19/0066
Median	33	6	23	22	19
S.D	9/507	0/86402	5/498	6/43609	7/07013
Min	23	4	8	7	6
Max	65	8	40	40	42

### Hypotheses Testing

The following tables shows multivariable regression results for the dependent variables of efficient earnings management of opportunistic earnings management and the independent variables Machiavellianism, loss aversion and the control variables of age and gender:

Table2: multivariable regression results for the dependent variables of effective earnings management

	Coefficient	Statistic t	Significant Level (sig)	Variance Inflation Factor (VIF)
y-Intercept	13/734	3/737	0/000	
Age	-0/039	-0/977	0/329	1/133
Gender	-0/555	-0/671	0/503	
Machiavellianism	0/284	4/280	0/000	1/120
Loss Aversion	0/510	1/216	0/225	1/028
F Statistic	5/686		0/000	1/017
D. W. = 1/850			Adj R <sup>2</sup> = 5/8%	

Dependent variable: efficient earnings management

Table 3: multivariable regression results for the dependent variables of opportunistic earnings management

	Coefficient	Statistic t	Significant Level (sig)	Variance Inflation Factor (VIF)
y-Intercept	12/104	3/040	0/003	
Age	-0/087	-1/995	0/047	1/133
Gender	-3/162	-3/524	0/000	1/120
Machiavellianism	0/261	3/638	0/000	1/028
Loss Aversion	0/757	1/665	0/097	1/017
F Statistic	7/924		0/000	
D. W. = 1/778			Adj R <sup>2</sup> = 8/4%	

Dependent variable: opportunistic earnings management

### 3- CONCLUSIONS, REMARKS AND LIMITATIONS

In this paper, the relationship between Machiavellianism, loss aversion, age and gender with an efficient opportunistic earnings management has been studied. Research evidence shows to exist a relationship between Machiavellianism and effective earnings management and the relationship is significant and positive. It means that the person be more opportunistic are more inclined to efficient earnings management. Also evidence suggests that there is a significant relationship between age, gender, Machiavellianism and loss aversion with opportunistic earnings management. The relationship between Machiavellianism and opportunistic earnings management is direct it means that the person be more opportunistic are more inclined to efficient earnings management; there is direct relationship between loss aversion and opportunistic earnings management it means that whatever a person is a more loss aversion he/she is more likely to manage earnings opportunistically. There is inverse relationship between age and opportunistic earnings management it means that with increasing age, tend to be opportunistic earnings management is reduced and in fact young people are much more likely to manage earnings opportunistically. On the other hand, men are also more likely than women to act opportunistically earnings management.

The findings of this paper is consistent with results of, Murphy (2012) that suggests there is a positive relationship between Machiavellianism and false accounting information disclosure, Stewart and Stewart (2006), Wakefield (2008), Hiris (2006) and Dayanandan (2012) that have stated that "There was a significant relationship between Machiavellianism and unethical behavior, and the Machiavellian people distort truth and deceive others to achieve their purpose". Therefore based on the results of this study it is suggested to implement a proper corporate governance in Iranian firms to prevent any potential fraud to have more control over the people who prepare financial reports. Also to reduce unethical behavior include earnings management the proper training should be considered. The results of this study provided useful knowledge about the characteristics of Machiavellianism and loss aversion among Iranian chief financial officers. There should provide incitement mechanism for chief financial officers to prevent them from manipulating earnings while reporting financial statements and act honestly. For future research it is suggested that variables of Machiavellianism and loss aversion are examined in the capital markets and in relation with the investment decisions, and other behavioral biases and motivations of earnings management are assessed together. This research faced the limitations which are the substantial limitations of the questionnaires. Resistance in declaring the personal information, and the incoherence of the answers that complicated the explanation, were the research limitations. Finally, more research should be done on Machiavellianism and its correlation with different types of frauds and negative effects. Because high Machiavellians do not experience negative affect the same way others do, the intervention discussed above might not succeed with them. They may be more likely to respond to increased probability of detection and greater punishment, consistent with economic theory.

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