

## Investigating the Effect of Professional Ethics Indicators on Financial Performance of Companies, Case study: Tehran Stock Exchange

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### Abstract

*This study is aimed to investigate the role of each variable in the professional regulation of financial managers including integrity, objectivity, professional competence and care and confidentiality and its effect on professional ethics of financial managers, the effect of professional ethics on financial performance in Stock Exchange companies has been also investigated. In order to this a questionnaire has been provided and distributed among 206 financial managers of Tehran Stock Exchange. The collected data were investigated using PLS method. Based on the obtained results from structural model, the relationship among hidden variables of model (except integrity which is confirmed in confident level of 90 percent) was confirmed in confident level of 95 percent. Based on the obtained results, professional ethics of managers has been affected most by objectivity and professional competence. The results have also showed that professional ethics has significant effect on financial performance of companies.*

**Keywords:** professional ethics, financial performance, Stock Exchange, partial least squares method

### 1. Introduction

With the evolution of human economic activity and over time and creating companies with limited responsibilities and public companies, share ownership got gradually separated from share management and separating ownership from management leads to creating conflicts of interest between ownership and representative (manager). Since the managers don't always work due to the stockholders' interests and may use the assets of company unreasonably, therefore there is interest conflict between owner and manager. Considering companies' recent scandals and creating crises, this interest conflict has drawn the attention of big companies to taking the culture and moral values into account.

Recent scandals and creating crises have drawn the attention of big companies to taking the culture and moral values into account. Accountants have faced a lot of criticisms about their failure in warning unethical ethics of management and their own unethical ethics through incomplete documents and creating obstacles for investigating (Sridharan U.V, Dickels 2002). This ethics is highlighted when accounting profession has put a significant attention on moral subjects (Farrell B.J, Cobbin D.M 2000). The source of moral principles which is usually referred to in accounting major and financial management, the code of professional ethics is dominant on profession (Overt et al, 2005); in another word, the first step in a culture of legal acceptance and moral integrity which determines the acceptable ethics and red lines clearly (Joseph, 2005).

Dehkoda has defined the morality as the collection of "moods and behavior" and the morality science as "the knowledge of good and bad behavior" and considers it as one part of "Three parts of philosophy or practical wisdom" which includes "human managing his spirit or a particular person". Dr. Hassan Anvari in great word dictionary has defined morality as a collection of accepted cultural behaviors and habits among people of a community and following that refers it to honorably behavior. Masaheb encyclopedia has defined morality science as investigating and determining the value of human actions based on moral principles and adds that there are various attitudes toward human conscience and his responsibility in terms of his actions and different philosophers have considered various factors such as religion, nature and experience as moral principle. In Britain encyclopedia, ethics have been divided into three branches; theoretical, normative and applied ethics. Theoretical ethics or meta-ethics investigates related subjects to the nature of moral concepts and judgments. Normative or instructional ethics provide some regulations and criteria for the way of living and good or bad, correct or incorrect and so on are defined in it and the way of choosing among them and the way of the right act according to certain rules are stated. Applied ethics is in fact the rest of normative ethics where the function of normative ethics is discussed in some ethics such as human rights, racial and gender equality, equity and similar issues.

Ethics and professional code of ethics are basically placed in the branch of applied ethics and contain a value system that based on that good or bad and correct or incorrect ethics of a profession owners are defined and stated.

Today professional ethics has been that much important that even big business companies also adhere to a professional ethic for social responsibilities and publish it in the form of professional ethics code as a practical guidelines of managers and its staff. Moreover behavioral ethical codes are paid attention as a part of stakeholders' rights. Senior Finance Officers Association of Iran works with a wide spectrum of stakeholders such as members, employers, accountants (domestic and independent), creditors and entity investors and finally the economic system of the country and has developed professional ethics regulation in order to explain the behavioral tasks of members with this wide spectrum.

## 2. Research Theoretical Literature

Professional ethics is one of main bases of professional organizations and mainly one feature of each professional organization is having appropriate professional regulation. Self-discipline professional organizations are pioneer in developing, following that the regulation of professional ethics and public participation of members in developing, their heart adhere to professional ethics regulation. Adhere to "ethical regulation" with creating balance, support and keeping the interests of all stakeholders will have the trust of users' community from the services of financial management, professional ethical regulation also:

- Proposes an acceptable ethics and the framework of professional responsibilities of members
- Promotes the standards of running work
- Proposes an appropriate pattern for evaluating the performance of members
- Helps the introduction of members' identity and professional characteristic

Professional Regulations provisions are as follows: integrity, objectivity, professional care and competence, confidentiality and professional ethics.

- 1- A professional accountant should be integrated in his professional relationship and transactions. Honesty, openness and fairness are required for integrity.
- 2- Objectivity: A professional accountant should consider the realities in his professional relationship and transactions and doesn't let prejudice, bias, conflict of interest or influence of others to affect his work and professional judgment.
- 3- Professional competence: A professional accountant should settle some services that can do them and can use others' consultant in case.
- 4- Confidentiality: A professional accountant should consider the information which obtains in the trend of proposing professional services confidential and doesn't reveal them without the permission of a person which is in charge unless legal task or right has permitted revealing mentioned information.
- 5- Professional behavior-courtesy: A professional accountant should respect others while he is doing his tasks. He should also avoid doing the things which can discredit the profession. (Iran financial managers association, 2011)

### 2.1 History

- Etemadi et al (2010) in an article named "investigating the effect of firm ethical values on perceiving interest management" has investigated the firm ethical values as a potential criterion of interest management ethical principles. The goal of this study is paying attention to significant role of firm ethical values in the scandals of companies and interest management. Various job opportunities of accountants and their different attitudes about their organization's ethical values are also investigated in this study. The statistical population of this study is al academics and members of the accounting profession. The results show that accountants in companies with high ethical values (low), perceive the activities of interest management as more unethical activities (more ethical). Perceiving ethical values of women compared to men was significantly higher; in another word, women are more adhere to firm ethical values. Among academics, young people have better perception of firm ethical values. Higher educated people also believe higher ethical values in company as well as accounting professional community, big companies have higher ethical values than small ones (Etemadi et al, 2010).
- Etemadi and Rahimian in an article named "empirical investigation of ethics in managing the interest" investigated the role of ethical judgments in managing the interest. In order to this a questionnaire was

distributed among 200 university students of BA accounting. Based on the obtained results, using two-factor analysis of variance and t-student test, the motivation of managing interest and the method of interest management has significant effect on ethical judgment in confident level of 99 percent. As results the motivation of managing interest is very important that is interest management with the motive of "opportunistic" is more unethical than interest management with the motive of "increasing company's value". Moreover the method of managing interest is also important so that the method of "manipulating accruals" has been more unethical than other methods and then the method of "changing in timing economic exchanges" is unethical. The method of changing in accounting methods is less unethical than the other two methods. (Etemadi and Rahimian, 2009)

- Bolo and Sadeghi in a research named "the effect of ethical Characteristics of individual auditors on using the guideline of decision in discovering management cheating" has investigated the effect of ethical Characteristics of individual auditors on using the guideline of decision in discovering management cheating. Moreover the current research has been done in order to find the barriers of using decision guideline and rank the effective factors on it. The findings of research show that the most important effective individual characteristics on using the guideline of decision by auditors include lack of membership in formal account community, professional work experience more than 20 years, bachelor educational degree, enterprise-class senior curator, management academic degree. The evidences derived from the study say that the barriers of using decision guideline in terms of accounts in enterprise-class senior curator and senior curator is lack of above ethical characteristics. The relationship of independent variables with dependent variables is also direct that the most effectiveness is by the variable of membership in formal accountants' community (Bolo and Sadeghi, 2010).
- Mahdavi and Alipur (2010) in an article have identified the approaches of ethical decision making of financial managers in listed companies in Stock Exchange and effective factors on them. The required data for statistical analyses of research hypotheses from 63 companies have been collected by questionnaires containing 24 questions. The results show that financial managers of listed companies in Tehran Stock Exchange believe the approaches of ethical decision making which include profit-oriented, religious and conscientiousness but interpretive ethical decision making approaches don't believe non-ethical and pragmatism. Moreover in terms of financial managers of listed companies in Tehran Stock Exchange, the strongest ethical decision making approach is profit-oriented and the weakest one is pragmatism. Finally statistical analyzing the seventh hypothesis to twelfth showed that except the effect of age on religious approach, other assumed factors which were expected to affect the approaches of ethical decision making weren't significant statistically (Mahdavi and alipur, 2010).
- HassasYeganeh and Maghsoudi in an article named "ethical values in professional judgment of accountant" investigated the effect of professional behavioral regulation on the way of accounting judgments in two steps of motivational and pragmatically. In this research, survey method has been used with independent empirical plan included four empirical statues. Data are collected using questionnaire and in the form of posttest plan with control group in field method. The results of statistical analyses represent that the effect of professional behavioral regulation on motivation and the performance of accountants is significant. The gender has been also effective on accounting judgment and women have had more ethical judgments (HassasYeganeh and Maghsoudi, 2011).
- Esta in a research named "investigating the relationship between the structure of ownership and interest management" has investigated structure of ownership on interest management. In this research the structure of ownership has been classified into four classes of institutional, incorporation, management and foreign ownership. In research sample related information to the ownership of foreign investors has not been found therefore the type of ownership has not been investigated. For each one of other classes of ownership, a hypothesis is developed and its effect has been tested on interest management. The statistical population of research is listed companies in Tehran Stock Exchange during 2004-2008. The statistical sample of study includes 95 companies. Correlation and multi cross-sectional regression tests have been used for investigating the hypotheses. The results represent that there is a negative relationship between institutional ownership and management ownership with interest management but there is a positive relationship between incorporation ownership and interest management (Esta, 2010).
- Kavian in an article named "investigating work ethics in state and private section" investigates work ethics and its aspects in two state and private sections of Isfahan Zobeahan. The required data have been collected

using a sample of 14475 people that 5307 of them are employed in private section and 9168 in state section. In order to evaluate work ethics, an index has been used that measure work ethics in four aspects of financial and spiritual. This index is usable in the researches of work international organization. The results show that privatization is effective on two material aspects of work ethics which include attachment to work as well as staff perseverance and efficiency but it doesn't have any effects on spiritual aspects of work ethics such as human health relationships as well as collective spirit and participation at work. Moreover the effect of rate of salary and education on work ethics is negative and there is a positive relationship between work experience and work ethics (Kavian, 2006)

### 3. Methodology

#### 3.1 The type of methodology

This study is descriptive methodologically because it tries to describe the relationship among variables (independent and dependent) using statistical tests; therefore methodology is descriptive in correlation branch. This study is also deductive in terms of logic and functional in terms of goal.

#### 3.2 Research hypotheses

Considering the initial model of study, below hypotheses have been considered in this research:

- ✓ There is a significant relationship between professional ethics with financial performance of listed companies in Tehran Stock Exchange.
- ✓ There is a significant relationship between professional competence and care of financial managers with professional ethics.
- ✓ There is a significant relationship between financial managers objectivity with their professional ethics.
- ✓ There is a significant relationship between financial managers integrity with their professional ethics.
- ✓ There is a significant relationship between financial managers confidentiality with their professional ethics.

#### 3.3 Statistical population and sample

Statistical population of the study includes financial managers of listed companies in Tehran Stock Exchange. The samples of study have also been chosen through below formula ... people among statistical population:

Considering that the volume of statistical population is specified; therefore in order to determine the sample volume in this study, Cochran formula has been used in the conditions of statistical population volume.

$$n = \frac{Nz^2pq}{Nd^2 + z^2pq} = \frac{447 \times 1/96^2 \times 0/5 \times 0/5}{447 \times 0/071^2 + 1/96^2 \times 0/5 \times 0/5} = 206$$

N: statistical population volume

Z: the value of normal change in accordance with confident level (1- $\alpha$ ) that in this study, confident level is considered as 95 percent which is equal with 1.96.

P: it will be estimating the ratio of variable adjective using previous studies and  $q=1-p$ , if the value of P isn't available, it can be considered as 0.5. In this mode the value of variance will reach to its maximum that is 0.25.

D: the value of permitted error which is considered as 0.05.

Of course finally, the calculated value has been compared with the value of Morgan table that is proposed considering statistical population, using formula and was confirmed.

#### 3.4 Questionnaire validity and reliability

The validity of questionnaire was confirmed by 5 experts and elites so that using experts' ideas some of questions were modified and some of them were converted to more understandable questions for statistical population and questionnaire validity was provided. In order to determine the reliability of questionnaire, Cronbach's alpha coefficient and SPSS software have been used that the value of  $\alpha$  was obtained as 0.846 and as result the reliability of questionnaire was confirmed.

## 4. Research Findings

In this section, research hypotheses are investigated and tested, considering research model; five hypotheses are defined for research information that in this section it has been tried that meanwhile the model is estimated, the hypotheses of research are also investigated.

In order to investigate the relationship between professional ethics and financial performance in this study, listed companies in Tehran Stock Exchange have been investigated as sample. In order to this, 6 variables (including integrity, objectivity, confidentiality, professional competence and care, professional ethics and companies' financial performance) have been used. Since the main variables cannot be measured automatically some indexes are defined for measuring these variables in model and appropriate with each index, a question or some questions were discussed as 5 Answer (Likert scale). The designed questionnaire was distributed among 206 people of financial managers in listed companies in Tehran Stock Exchange. The information of collected questionnaires after completion, were extracted and stored in Excel file. The stored information in Excel file were transferred to VPLS software and analyzed through this software. Following that the stages of analyzing data are shown:

### 4.1 Investigating the relationship among research variables

#### 4.1.1 Investigating the relationship between the indicators' variables with related main variable

Each main variable  $\mu_{jh}$  is describable by a set of indexes  $X_{jh}$  indirectly and each variable of indexes is related to its main variable by a simple regression. Below equation shows the relationship between one variable of indexes (indexes) with its main variable (Bayol 2001):

$$X_{jh} = \alpha_{jh0} + \alpha_{jh} \cdot \mu_{jh} + \varepsilon_{jh}$$

For example, objectivity variable was questioned in questionnaire by 3 indicators, therefore the relationship between this main variable and its 3 indexes can be written as below:

$$X_{11} = \alpha_{10} + \alpha_{11} \cdot \mu_{11} + \alpha_{12} \cdot \mu_{12} + \alpha_{13} \cdot \mu_{13} + \varepsilon_{jh}$$

#### 4.1.2 Investigating the relationship among main variables of model

A model which was introduced in previous section is a collection that has been formed by linear equation among main variables. The total shape of these equations is as follows:

$$\mu_j = \beta_{j0} + \beta_{ji} \cdot \mu_j + \varepsilon_j$$

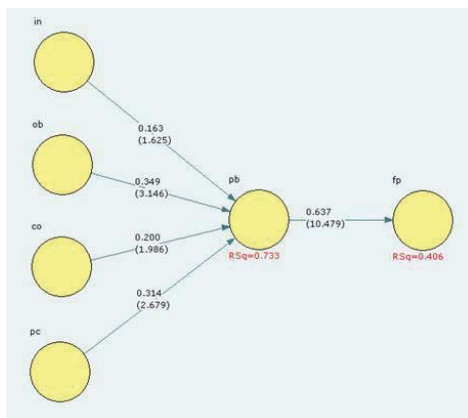
Considering this equation, below structural equation can be written for relationship among model variables:

$$Pb = \beta_{10} + \beta_{11} \cdot In + \beta_{12} \cdot Ob + \beta_{13} \cdot Co + \beta_{14} \cdot Pc + \varepsilon_{11}$$

$$Fp = \beta_{20} + \beta_{21} \cdot Pb$$

### 4.2 Interpreting the results obtained from model estimation and testing research hypotheses

In this section the goal of PLS model is in fact estimating the relationship between hidden variables of problem considering above relationships. In order to this various software such as SMARTPLS, VISUALPLS, LVPLS and so on are proposed that in this project, VPLS software has been used in order to estimate the relationship among hidden variables of problem. The software output of model has been brought in appendix 1. Based on obtained results, final model and the relationship among hidden variables will also been as follows:



**Figure 1:** Research conceptual model after estimation by VPLS software

#### 4.2.1 Investigating the accuracy of structural model

In order to investigate the accuracy of structural model in this study,  $R^2$  has been used. Based on Chin theory,  $R^2$  which is estimated only for introverted variables and represent the variance of introverted hidden variables, with values bigger than 0.67 are significant, among 0.67 to 0.33 is average and less than 0.19 is considered weak. Also if in a specified model which is a combination of introverted hidden variables with only one or two extroverted hidden variables, the value of "average  $R^2$ " is acceptable. Considering that in this study the variables are combination of introverted and extroverted and the value of  $R^2$  is equal to 0.570 so the value of  $R^2$  is acceptable (Trujillo, 2009).

#### 4.2.2 Investigating the accuracy of measured model

In analyzing structural models, in order to investigate the accuracy of measured model, three below indicators are mentioned:

##### 4.2.2.1 One-dimensionality of indicators

For measuring one-dimensionality of indicators, Cronbach's alpha has been used in this study. Alpha coefficient of Cronbach is a criterion for measuring inside compatibility. If this coefficient is bigger than 0.7 it will show high reliability of model and if the value of alpha is less than 0.6 it shows low reliability of model (Henseler et al, 2009). In this study the average coefficient of Cronbach's alpha has been upper than 0.7 and the reliability of model is totally confirmed.

**Table 1:** The mean of model's Cronbach's alpha coefficient

Latent Var	Cronbach's $\alpha$
In	0.779
Ob	0.824
Co	0.732
Pc	0.831
Pb	0.776
Fp	0.81
AVERAGE	0.792

##### 4.2.2.2 Checking if the indicators are explained well by their hidden variables

In PLS methods there are three criteria for investigating the power of indicators explanatory by their hidden variables that in this section, two of them are investigated:

- a) **Composit reliability:** this criterion is a criterion for measuring model reliability which is also called as composite reliability. If the value of this criterion is less than 0.6 shows lack of model reliability (Henseler et al, 2009). In estimated model in this project, the mean of this criterion has been upper than 0.6 which shows high reliability of model.

**Table 2:** The mean of composite reliability of model

Latent Var	Composit Reliability
In	0.62
Ob	0.79
Co	0.76
Pc	0.72
Pb	0.68
Fp	0.64
AVERAGE	0.70

- b) **AVE:** in order to calculate the convergent validity, Fornell and Larcker have suggested AVE (Average Variance Extracted) criterion. In AVE at least 0.5 of indicators have appropriate convergent validity that is a hidden variable can explain more than a half of its indicators variance (overt variables) averagely (Henseler et al, 2009). Considering that in this project the mean of AVE is also more than 0.5 so convergent validity of model is confirmed.

**Table 3:** The mean of convergent validity of model

Latent Var	AVE
In	0.85
Ob	0.87
Co	0.85
Pc	0.87
Pb	0.58
Fp	0.84
AVERAGE	0.81

#### 4.2.2.3 Evaluating the distinctiveness of a variable from other variables.

In order to calculate divergent validity of model, there are two criteria of Fornell-Larcker and Cross Loading that Cross Loading has been used in this study. Based on this criterion, it is expected that correlation coefficient of one index (overt variable) with its hidden variable to be bigger than correlation coefficient of that index with other hidden variables (Samimi and Mohammadi, 2011). This case is completely obvious considering below table and therefore model divergent validity is also confirmed.

**Table 4:** Correlation coefficient between overt variables and hidden variables

Factor Structure Matrix of Loadings and Cross-Loadings						
Scale Items	In	ob	Co	pc	pb	fp
A4	<b>0.7496</b>	0.3388	0.5096	0.5913	0.5053	0.3804
A5	<b>0.6099</b>	0.2543	0.3499	0.4110	0.4317	0.2005
A6	<b>0.6722</b>	0.5010	0.3821	0.4586	0.5792	0.5612
A7	<b>0.6358</b>	0.5789	0.6877	0.4446	0.5461	0.4869
A9	<b>0.6412</b>	0.3257	0.4216	0.5314	0.4112	0.3511
B1	<b>0.8347</b>	0.4583	0.5734	0.5803	0.5764	0.5677
B2	<b>0.5285</b>	0.2259	0.4571	0.3022	0.3593	0.3971
F2	0.1120	<b>0.7906</b>	0.2388	0.0496	0.2848	0.2710
F7	0.1969	<b>0.7908</b>	0.4010	0.0683	0.2092	0.0537
F9	0.5498	<b>0.8436</b>	0.5223	0.4386	0.6859	0.6628



F10	0.1337	<b>0.4775</b>	0.2519	0.0368	0.0970	0.1141
F11	0.4257	<b>0.5951</b>	0.2906	0.2950	0.3424	0.3738
C1	0.6045	0.3796	<b>0.8016</b>	0.5273	0.5548	0.4498
C3	0.3965	0.3462	<b>0.6100</b>	0.2273	0.3287	0.5515
D3	0.4780	0.5378	<b>0.7821</b>	0.4329	0.5635	0.4531
F1	0.5111	0.4301	<b>0.5770</b>	0.5210	0.5397	0.4488
B3	0.0848	-0.1761	0.0119	<b>0.7556</b>	0.1168	-0.0787
E1	0.1285	-0.0064	0.0989	<b>0.3908</b>	0.1297	0.1839
E2	0.5762	0.3641	0.5385	<b>0.7355</b>	0.5669	0.4737
E3	0.3832	0.1065	0.2527	<b>0.6058</b>	0.1378	0.2657
E4	0.4671	0.2586	0.2840	<b>0.5821</b>	0.3525	0.3142
F5	0.0684	0.2139	0.2416	<b>0.5214</b>	0.3113	0.0384
F6	0.2792	0.1364	0.2567	<b>0.3869</b>	0.2544	0.0610
B4	0.1333	0.4325	0.2437	-0.0059	<b>0.5581</b>	0.0694
B5	0.5823	0.5023	0.5221	0.4799	<b>0.7558</b>	0.4841
F3	0.3571	0.4401	0.4611	0.5084	<b>0.5840</b>	0.4123
F4	0.6102	0.4463	0.5364	0.5567	<b>0.7187</b>	0.4712
H2	0.2694	0.1923	0.1941	0.2074	0.1764	<b>0.6233</b>
H3	0.4613	0.5023	0.5633	0.3179	0.5001	<b>0.7191</b>
H4	0.4219	0.4805	0.5159	0.4278	0.4822	<b>0.6898</b>
H5	0.4274	0.4678	0.3881	0.2307	0.4241	<b>0.7413</b>
H6	-0.1120	0.0042	-0.0371	0.0573	-0.0202	<b>0.4424</b>
H7	0.4091	0.3244	0.4509	0.1969	0.3655	<b>0.5779</b>
H8	0.3740	0.2367	0.3202	0.2506	0.2697	<b>0.4534</b>
H9	0.3139	0.4114	0.3100	0.4323	0.3308	<b>0.6149</b>
H10	-0.0785	-0.2665	-0.0181	0.0298	-0.1221	<b>0.2126</b>
H11	0.0676	-0.1026	-0.1416	-0.0175	0.0201	<b>0.3084</b>
H12	0.1352	0.1284	0.0095	0.2050	0.1239	<b>0.4616</b>

## 5. Conclusion

One goal of professional financial managers association is qualitative and quative expansion of professional services of financial management. Achieving this goal and other goals applied in association constitution, in addition to having scientific, specialized and functional competence requires meeting public ethics as well as particular professional ethics of financial managers.

Provisions of a professional regulation include integrity, objectivity, professional competence and care and confidentiality and its effect was investigated on professional ethics of financial managers.

Based on obtained results of structural model, the relationship among model hidden variables (except integrity) is confirmed in confident level of 95 percent. (In confident level of 95 percent, t-statistic of model should be more than 1.96) of course integrity variable is also significant in confident level of 90 percent.

Below table shows the relationship among the variables of research:

**Table 5:** The relationship between model's variables

<u>Structural Model--BootStrap</u>				
	Entire Sample estimate	Mean of Subsamples	Standard error	T-Statistic
in->pb	0.1630	0.1703	0.1003	1.6253
ob->pb	0.3490	0.3354	0.1109	3.1457
co->pb	0.2000	0.2374	0.1007	1.9857
pc->pb	0.3140	0.2973	0.1172	2.6794
pb->fp	0.6370	0.6757	0.0608	10.4793



Based on the obtained results in confident level of 90 percent, the effect of integrity, objectivity, confidentiality, professional competence on professional ethics is positive and significant. Among this the variables of objectivity and professional competence have had the most effect on managers' professional ethics. Based on obtained results, a significant relationship can be also seen between professional ethics of financial managers and financial performance of listed companies in Tehran Stock Exchange.

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