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The Effects of Earnings Quality Criteria on the Agency Costs: (Evidence from Tehran Stock Exchange Market)

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Abstract

This research explores the effects of various criteria of the earnings quality on the agency costs of the companies. It attempts to respond to the following queries: “what are the effects of the earnings quality on the agency costs? The results of regression analysis suggest that there is no significant difference between the TSE market and other developed markets in the sense that a reverse significant relationship exists between different criteria of the earnings quality information and agency costs criteria. The results of MANOVA also indicate that when earnings quality information is high, the firms’ agency costs are lower.

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1. Introduction

In the last few decades, with flourishing trade and increasing investments in shares, the issues of separation of management from ownership, agency theory and the role of the financial information, have caught the attention of managers, investors and researchers (Jensen & Meckling, 1976). Consequently, special attention has focused on the costs of the agency. Generally, the costs of the agency are raised because of the existence of a potential conflict of interest which might exist between the managers (agents) and investors (principals). Given the conflict of interests

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and incompatible objectives that might be prevalent between managements and investors, managements may take some actions which may jeopardize the interest of the investors. To eliminate or alleviate this obstacle, managers and investors should jointly agree to establish various costly contractual agreements and to establish appropriate control mechanisms to monitor agents' actions, self-interest behaviour and their performances (Namazi, 2013). Since the actions and effort of the agents are exerted under the condition of uncertainty and these variables are not directly observable by the principals, some costly accounting mechanisms are also required to report and monitor the performance of agents. The control of this behaviour could also be costly. In addition, managers possess access to private information about firms' true financial operations and performance, but stockholders do not maintain such access to firms' information. The agency theory and financial literature (Namazi, 2013) unequivocally reveal that information disclosure can help mitigate principal-agent conflicts and costs. For instance, Ross (1979), via the signalling theory, reveals that a high quality firm can be signalling without any charges. In effect, signalling theory predicts that healthy firms are likely to disclose more information than distressed firms. In this process, information disclosure is one of the monitoring devices which can be adopted to reduce agency costs. Bushman & Smith (2001) explicitly point out that one of the fundamental objectives of the governance research is presenting evidence on the extent to which information provided by firms mitigate agency problems due to the separation of managers and outside investors.

The preceding literatures holistically reveal that accounting information play a significant role in the agency cost relationship, but do not unequivocally demonstrate the precise role of the quality of earnings in this sphere. In addition, the significance of various quality criteria of the earnings information in providing quality information and their effects on the agency costs are unexplored. Furthermore, since the preceding studies have been mainly conducted in the developed countries and stock markets, it is not perceptible whether or not one can generalize the findings to developing nations and stock markets.

2. Theoretical Basis and Literature Review

The theoretical foundation of this research is based upon the concept of the agency theory (Namazi, 2013). Based on the paradigm of this theory, in the managers-owners relation, the demand for financial reporting arises from information asymmetry and agency conflicts which may be prevalent between the managers and outside investors. Hence, the disclosure of quality information by the management would reduce management-stockholder conflicts.

In this study, it was hypothesized that quality earning information would decrease management-stockholders conflicts and agency costs. There is, however, no exact and comprehensive definition in regard to earnings quality. The relationship between earnings quality and information asymmetry within the context of the agency theory, has also been explored in the literature and some interesting results have been reported. For example, Bushman and Smith (2001) found that higher-earnings quality information would lead to decreased information asymmetry and it could be expended as a control mechanism to monitor agents' actions accurately. Similarly, Bushman and Smith (2001) found that providing high-quality earnings information would likely reduce informational asymmetry problems between the firm and its investors, and hence would decrease the agency costs. An (2009) argued that factual and objective earnings information would lead to higher financial information transparency which ultimately would cause a reduction of the agency costs. Evidence of research by Chuang, Xiuhong, & Zhang (2010) showed that earnings quality affects the firm's controlling agency costs significantly. Wei & Chunyan (2010) also showed that the lower the probability of the managers' voluntary disclosure of the information on specific operating cash payments, the lesser is the degree of the voluntary disclosure. Evidence of research by Edelen, Evans, & Kadlec (2011) also suggests the effective role of the transparency in providing earnings information on the agency costs. Finally, Brown, Chen, & Kim (2015) found out that those firms close to the investment –speculative boarder line, would choose the most aggressive income-increasing activities.

The preceding studies unambiguously demonstrate that disclosure and transparency of the earnings information are central factors in the agency relations; and information, particularly accounting information, would reduce the agency costs. Nevertheless, little is known about the precise role of the various criteria of the quality of earnings information in addressing agency costs (Edelen, Evans, & Kadlec, 2011). In this regard, studies concerning the examination of the role of different criteria of the quality earnings disclosure and providing information in reducing agency costs from different perspectives should be conducted. The major aim of this study is to investigate the latter

point. The strong point of the present study, which makes it distinct from prior studies in this sphere, is that it explores the effect of various earnings quality information on the agency costs thoroughly.

Based on the literature review presented, the following research hypotheses are stated as follows:

Main hypotheses: Agency costs are lower for the firms whose information on earnings quality is higher.

Sub-hypotheses:

1. The ratio of operating expenses to sales is lower for the firms whose accruals quality is higher.
2. The asset turnover ratio is higher for the firms whose accruals quality is higher.
3. The Tobin's Q ratio is higher for the firms whose accruals quality is higher.
4. The ratio of operating expenses to sales ratio is lower for the firms whose value of information relevance is higher.
5. The asset turnover ratio is higher for the firms whose value of information relevance is higher.
6. The Tobin's Q ratio is higher for the firms whose value of information relevance is higher.
7. The ratio of operating expenses to sales is lower for the firms whose information disclosure quality is higher.
8. The asset turnover ratio is higher for the firms whose information disclosure quality is higher.
9. The Tobin's Q ratio is higher for the firms whose information disclosure quality is higher.

3. Population and sample study

The population of this study consists of all firms listed on the TSE. Due to the availability of published information, the existing qualified companies for every single year between 2004 and 2011 were selected from TSE. However, the following conditions were considered for selecting companies: 1) Selected firms should their stocks should have been traded in the TSE at least once during the last quarter of each year. 2) Selected firms should not be listed as the investment companies. After considering the preceding limitations, totally 67 firms were found.

4. Variables measurement

4.1. Independent variables

Accruals quality and accruals quality adjusted for performance: In this study, the earnings quality was defined as accruals quality (AQ1) and adopted by Dechow & Dichev's (2002) model to estimate it. Chuang, Xiuhong, & Zhang (2010) indicate that estimation of discretionary accruals might be significantly affected by a company's current and past performance. Hence, in this study similar to Chuang, Xiuhong, & Zhang (2010), and based on Kothari, Leone, & Wasley (2005), accrual quality adjusted for performance was calculated. It was determined as the second criterion of the quality of accrual items (AQ2).

Information relevance: In this study, information relevance (IR) was formed into two of its significant sub-set features: predictive value and feedback value. In this study, to measure the value of the information feedback, the Kormendi & Lipe's (1987) model was employed. Also, the extent of profit components was expensed to predict the future profit. In effect, the absolute prediction error of the following model, as a reverse criterion for measuring predictive power of the current income, was used:

$$NI_{i,t+1} = \partial_0 + \partial_1 CFO_{i,t} + \partial_2 TCA_{i,t} + e_{i,t} \quad (1)$$

Disclosure quality: The indicator of the disclosure quality (DQ) (sub-sets of reliability and timeliness) was the score assigned to each company by the TSE organization. The score is granted by TSE according to its announcement of "Rating of the Firms in terms of the Disclosure Quality and Appropriate Informing".

4.2. Dependent variables

The dependent variable in this research is the firm's agency costs (AC). However, based on the current literature, the following criteria were used:

Performance ratios: They consist of the operating expenses to sales ratio (ES) and asset turnover ratio (AT).

Tobin's Q ratio: Tobin's Q ratio is calculated by consistent with the research by Jurkus, Park, & Woodard (2011).

4.3. Control variables

In this study, the size (the natural logarithm of the average total assets and total sales), Leverage (Lev) ratio (total debts to total assets), board independence (BI), and ownership concentration (OC) (the percentage of shares held by the largest shareholder) was used as another control variables[†].

5. Findings

The results of testing sub-hypotheses 1 to 3 are reported in Table 1. The amount of the F-statistics associated with each of the six models tested is indicating the significance of all models at a confidence level of 95%. The results indicate that there is a reverse significant relationship between accruals quality (AQ1) and accruals quality adjusted for performance (AQ2) with agency costs criteria.

Table 1. Result of regression models 2 and 3

	Operating expenses to sales ratios		Asset turnover ratios		Tobin's Q ratios	
	Model 2	Model 3	Model 2	Model 3	Model 2	Model 3
AQ1	$6.955 \times 10^{-8*}$	-	$-8.165 \times 10^{-7*}$	-	$-1.486 \times 10^{-6*}$	-
AQ2	-	$5.482 \times 10^{-8*}$	-	$-6.130 \times 10^{-7*}$	-	$-1.792 \times 10^{-6*}$
R ² _{adj}	0.052	0.044	0.146	0.091	0.113	0.159
F-statistics	5.398*	4.677*	14.665*	9.073*	11.182*	16.116*
$AC_{i,t} = \beta_0 + \beta_1 AQ1_{i,t} + \sum_{n=2}^5 \beta_n \text{Control Variables} + \varepsilon_{i,t}$			(2)			
$AC_{i,t} = \beta_0 + \beta_1 AQ2_{i,t} + \sum_{n=2}^5 \beta_n \text{Control Variables} + \varepsilon_{i,t}$			(3)			

The results of testing sub-hypotheses 4 to 9 are reported in Table 2. The amount of F-statistics associated with each of the six models tested is indicating the significance of all models at a confidence level of 95%. The results of the table indicate that there is a reverse significant relationship between information relevance (IR) and disclosure quality (DQ) with the agency costs criteria.

Table 2. Result of regression models 4 and 5

	Operating expenses to sales ratios		Asset turnover ratios		Tobin's Q ratios	
	Model 4	Model 5	Model 4	Model 5	Model 4	Model 5
IR	$4.935 \times 10^{-8*}$	-	$-4.723 \times 10^{-7*}$	-	$-7.471 \times 10^{-7*}$	-
DQ	-	-0.001^*	-	0.003^*	-	0.007^*
R ² _{adj}	0.058	0.069	0.125	0.040	0.080	0.052
F-statistics	5.951*	6.967*	12.445*	4.324*	7.982*	5.396*
$AC_{i,t} = \beta_0 + \beta_1 IR_{i,t} + \sum_{n=2}^5 \beta_n \text{Control Variables} + \varepsilon_{i,t}$			(4)			
$AC_{i,t} = \beta_0 + \beta_1 DQ_{i,t} + \sum_{n=2}^5 \beta_n \text{Control Variables} + \varepsilon_{i,t}$			(5)			

The simultaneous effects of accruals quality (AQ1), accruals quality adjusted for performance (AQ2) and information relevance (IR) on the agency costs criteria are shown in Table 3. The amount of F-statistics associated with each of the six models is indicating the significance of all models at the confidence level of 95 %. The results indicate that there is a reverse significant relationship between accruals quality (AQ1) and information relevance (IR) with the agency costs criteria. Also, Table 3 shows that there is a reverse significant relationship between accruals quality adjusted for performance (AQ2) and the agency costs criteria (i.e., asset turnover ratios, and Tobin's

[†] Due to the page limitations, the results of control variables were not presented in this article.

Q ratios), but, there is no significant relationship between accruals quality adjusted for the firm’s performance (AQ2), and the operating expenses to sales ratios.

Table 3. Result of regression models 6 and 7

	Operating expenses to sales ratios		Asset turnover ratios		Tobin’s Q ratios	
	Model 6	Model 7	Model 6	Model 7	Model 6	Model 7
AQ1	4.826×10 ^{-8*}	-	-6.332×10 ^{-7*}	-	-1.223×10 ^{-6*}	-
AQ2	-	4.179×10 ^{-8*}	-	-4.916×10 ^{-7*}	-	-1.630×10 ^{-6*}
IR	3.884×10 ^{-8*}	4.426×10 ^{-8*}	-3.343×10 ^{-7*}	-4.124×10 ^{-7*}	-4.807×10 ^{-7*}	-5.486×10 ^{-7*}
R ² _{adj}	0.066	0.064	0.192	0.170	0.131	0.186
F-statistics	5.689*	5.580*	16.900*	14.729*	11.095*	16.285*
AC _{i,t} = β ₀ + β ₁ AQ1 _{i,t} + β ₂ IR _{i,t} + ∑ _{n=3} ⁶ β _n Control Variables + ε _{i,t} (6)						
AC _{i,t} = β ₀ + β ₁ AQ2 _{i,t} + β ₂ IR _{i,t} + ∑ _{n=3} ⁶ β _n Control Variables + ε _{i,t} (7)						

The simultaneous effects of accruals quality (AQ1), disclosure quality (DQ) (model 8), and accruals quality adjusted for performance (AQ2) and disclosure quality (DQ) (model 9), along with information relevance (IR) and disclosure quality (DQ) (model 10), on the agency costs criteria within the context of the public policy decisions are shown in Table 4. The amount of F-statistics associated with each of the nine models tested is indicating the significance of all models at the confidence level of 95%. The results of Table 4 indicate that there is a reverse significant relationship between accruals quality (AQ1), accruals quality adjusted for performance (AQ2), information relevance (IR) and disclosure quality (DQ) with the agency costs criteria.

Table 4. Result of regression models 8, 9, and 10

	Operating expenses to sales ratios			Asset turnover ratios			Tobin’s Q ratios		
	Model 8	Model 9	Model 10	Model 8	Model 9	Model 10	Model 8	Model 9	Model 10
AQ1	6.165×10 ^{-8*}	-	-	-7.904×10 ^{-7*}	-	-	-1.421×10 ^{-6*}	-	-
AQ2	-	4.807×10 ^{-8*}	-	-	-5.892×10 ^{-7*}	-	-	-1.738×10 ^{-6*}	-
DQ	-0.001*	-0.001*	-0.001*	0.003*	0.003*	0.002*	0.006*	0.006*	0.005*
IR	-	-	3.912×10 ^{-8*}	-	-	-4.447×10 ^{-7*}	-	-	-6.662×10 ^{-7*}
R ² _{adj}	0.085	0.078	0.085	0.159	0.108	0.131	0.131	0.177	0.093
F-stat.	7.200*	6.678*	7.170*	13.667*	9.098*	11.098*	11.066*	15.325*	7.856*
AC _{i,t} = β ₀ + β ₁ AQ1 _{i,t} + β ₂ DQ _{i,t} + ∑ _{n=3} ⁶ β _n Control Variables + ε _{i,t} (8)									
AC _{i,t} = β ₀ + β ₁ AQ2 _{i,t} + β ₂ DQ _{i,t} + ∑ _{n=3} ⁶ β _n Control Variables + ε _{i,t} (9)									
AC _{i,t} = β ₀ + β ₁ IR _{i,t} + β ₂ DQ _{i,t} + ∑ _{n=3} ⁶ β _n Control Variables + ε _{i,t} (10)									

Table 5 presents the results of related simultaneous evaluation of the holistic effects of all earnings information quality criteria together with other controlling factors, on agency costs. It specifically demonstrates simultaneous effects of accruals quality (AQ1), disclosure quality (DQ) and information relevance (IR) (in model 11) and accruals quality adjusted for performance (AQ2), disclosure quality (DQ) and information relevance (IR) (in model 12), on the agency costs criteria. The amount of F-statistics associated with each of the six models tested is indicating the significance of all models at the confidence level of 95%. The results of Table 5 indicate that there is a reverse significant relationship between accruals quality (AQ1) and the agency costs criteria (i.e., operating expenses to sales ratios, asset turnover ratios, and Tobin’s Q ratios). Also, there is a reverse significant relationship between information relevance (IR) and the agency costs criteria (i.e., asset turnover ratios, and Tobin’s Q ratios), but, there is no significant relationship between information relevance (IR) and operating expenses to sales ratios. In addition, there is a reverse significant relationship between disclosure quality (DQ) and the agency costs criteria (i.e., operating expenses to sales ratios and Tobin’s Q ratios), but, there is no significant relationship between disclosure quality (DQ) and the asset turnover ratio. The result of testing regression model 12 also indicates that there is a

reverse significant relationship between accruals quality adjusted for performance (AQ2) and the agency costs criteria (i.e., asset turnover ratios, and Tobin's Q ratios), but, there is no significant relationship between accruals quality adjusted according to performance (AQ2) and the operating expenses to sales ratio. There is a reverse significant relationship between information relevance (IR) and the agency costs criteria (i.e., operating expenses to sales ratios, asset turnover ratios, and Tobin's Q ratios). Also, there is a reverse significant relationship between disclosure quality (DQ) and the agency costs criteria (i.e., operating expenses to sales ratios, and Tobin's Q ratios), but, there is no significant relationship between disclosure quality (DQ) and asset turnover ratios.

Table 5. result of regression models 11 and 12

	Operating expenses to sales ratios		Asset turnover ratios		Tobin's Q ratios	
	Model 11	Model 12	Model 11	Model 12	Model 11	Model 12
AQ1	$4.641 \times 10^{-8*}$	-	$-6.285 \times 10^{-7*}$	-	$-1.208 \times 10^{-6*}$	-
AQ2	-	3.869×10^{-8}	-	$-4.839 \times 10^{-7*}$	-	$-1.608 \times 10^{-6*}$
DQ	-0.001^*	-0.001^*	0.002	0.002	0.005^*	0.005^*
IR	2.914×10^{-8}	$3.462 \times 10^{-7*}$	$-3.096 \times 10^{-7*}$	$-3.884 \times 10^{-7*}$	$-4.063 \times 10^{-7*}$	$-4.791 \times 10^{-7*}$
R ² _{adj}	0.091	0.091	0.212	0.175	0.143	0.196
F-statistics	6.754^*	6.754^*	15.114^*	13.181^*	10.565^*	14.988^*
$AC_{i,t} = \beta_0 + \beta_1 AQ1_{i,t} + \beta_2 IR_{i,t} + \beta_3 DQ_{i,t} + \sum_{n=4}^7 \beta_n \text{Control Variables} + \varepsilon_{i,t}$ (11)						
$AC_{i,t} = \beta_0 + \beta_1 AQ2_{i,t} + \beta_2 IR_{i,t} + \beta_3 DQ_{i,t} + \sum_{n=4}^7 \beta_n \text{Control Variables} + \varepsilon_{i,t}$ (12)						

5.1. Additional analysis

In order to retest the results of the research hypotheses, MANOVA was also employed to examine whether or not the results of the regression analysis are robust. Hence, the research dependent variables were considered simultaneously, and the sustainable quality of earnings data on the public policy decisions was classified into two groups: high quality and low quality. Table 6 show the results of MANOVA for the firms with high and low quality accrual data accordingly (relating to first to third hypotheses). The F-statistics of relating to Pillai's Trace, Wilk's Lambda, Hotelling's Trace and Roy's largest root show that the difference between the two groups of the dependent variables at the 0.0005 level is significant. Table 6 reveals that the amount of the agency costs in those companies, in which the amount of accrual quality earnings is high, is significantly different from that of those companies with low quality accrual information. The descriptive statistics of each of the three agency costs also indicate that in those organizations in which the quality of accrual information is high, the amount of the agency costs is lower.

Table 6. The results of MANOVA for comparing agency costs criterion in two groups of companies with high and low accrual quality

Source	dependent variable	Sum of Squares	Mean Square	F	Sig.	Effect Size	Observed Power	Levene's Test (Sig.)
Group	ES	0.626	0.626	84.542	0.0005	0.174	1	0.072 (0.789)
	AT	40.544	40.544	348.292	0.0005	0.465	1	83.174 (0.0005)
	Tobin's Q	118.962	118.962	156.965	0.0005	0.282	1	0.468 (0.495)

Table 7 show the results of MANOVA for the companies with adjusted high and low quality accrual information based upon their performances accordingly (relating to first to third hypotheses). The F statistics of relating to Pillai's Trace, Wilk's Lambda, Hotelling's Trace and Roy largest root show that the difference between the two groups of the dependent variables at the 0.0005 level is significant.

Table 7 reveals that the amount of the agency costs in those companies, in which the amount of adjusted accrual quality information is high, is significantly different than those companies with low quality accrual information. The descriptive statistics of the each of the three agency costs also indicate that in those firms in which the quality of adjusted accrual information is high, the amount of the agency costs is lower.

Table 7. The results of MANOVA for comparing agency costs criterion in two groups of companies with high and low adjusted accrual quality

Source	dependent variable	Sum of Squares	Mean Square	F	Sig.	Effect Size	Observed Power	Levene's Test (Sig.)
Group	ES	0.187	0.187	21.941	0.0005	0.052	1	0.454 (0.506)
	AT	9.693	9.693	50.693	0.0005	0.111	1	7.752 (0.006)
	Tobin's Q	84.992	84.992	100.844	0.0005	0.201	1	0.844 (0.228)

Table 8 show the results of MANOVA for the companies with the amount of high and low relevant information based upon their performances accordingly (relating to fourth to sixth hypotheses). The F-statistics of relating to Pillai's Trace, Wilk's Lambda, Hotelling's Trace and Roy's largest root show that the difference between the two groups of the dependent variables at the 0.0005 level is significant.

Table 8 reveals that the amount of the agency costs in those organizations, in which the amount of relevant accrual quality information is high, is significantly different than those companies with low quality relevant information. The descriptive statistics of the each of the three agency costs also indicate that in those firms in which the quality of relevant accrual information is high, the amount of the agency costs is lower.

Table 8. The results of MANOVA for comparing agency costs criterion in two groups of companies with high and low relevant information

Source	dependent variable	Sum of Squares	Mean Square	F	Sig.	Effect Size	Observed Power	Levene's Test (Sig.)
Group	ES	1.259	1.259	216.029	0.0005	0.351	1	45.141 (0.0005)
	AT	24.650	24.650	157.865	0.0005	0.283	1	0.400 (0.527)
	Tobin's Q	83.308	83.308	98.354	0.0005	0.197	1	2.238 (0.135)

Table 9 show the results of MANOVA for the companies with high and low quality disclosure information based upon their performances accordingly (relating to seventh to ninth hypotheses). The F statistics of relating to Pillai's Trace, Wilk's Lambda, Hotelling's Trace and Roy's largest root show that the difference between the two groups of the dependent variables at the 0.0005 level is significant. Table 9 reveals that the amount of the agency costs (the ratio of operating costs to sales and Tobin's Q ratio) in those companies in which the disclosure quality is high is different from that of those companies with low disclosure quality. The descriptive statistics relating to these agency costs criterion also reveal that in those companies in which the quality of disclosure is high, the amount of the agency cost is lower. The results of the asset turnover ratio, however, indicate that there exists a difference between the averages of the two groups companies, but this difference is not statistically significant.

Table 9. The results of MANOVA for comparing agency costs criterion in two groups of companies with high and low disclosure quality

Source	dependent variable	Sum of Squares	Mean Square	F	Sig.	Effect Size	Observed Power	Levene's Test (Sig.)
Group	ES	0.081	0.081	9.270	0.002	0.023	1	7.282 (0.007)
	AT	0.537	0.537	2.481	0.116	0.006	1	2.744 (0.098)
	Tobin's Q	8.127	8.127	7.852	0.005	0.019	1	1.291 (0.257)

6. Conclusion and Discussion

To this study, totally 9 hypotheses were presented, and based on the designated dependent (agency costs), independent (quality earnings criteria) and control variables, totally 33 regression models were developed. The main findings of regression models and MANOVA analysis are as follows:

- 1) There was a reverse relationship between various earnings quality criteria and agency costs of the TSE firms. This relationship would hold for all models in which the effect of each earnings quality criteria (accrual quality, accrual quality adjusted for performance, information relevance, and disclosure quality) was studied on the elements of the agency costs (the ratio of operating expenses to sales, asset turnover ratio, and Tobin's Q ratio)

individually. Since management's decisions are affected by companies' agency costs, it can be inferred that higher earnings quality information, will lower the costs of the agency and hence the costs of the decisions.

- 2) When simultaneous effects of the combination of two preceding qualitative characteristics of the earnings quality information were examined on the agency costs of the organizations, again a reverse relationship among selected characteristics of the earnings information and firms' agency costs measures were found. The only exception was the criterion of AQ2 when it was considered with IR, which did not produce a significant relationship with ES. This situation was due to a weak relationship between AQ1 and ES. The implication of this finding on the management's decisions is also the same as the preceding conclusion, but on a lower scale.
- 3) When comprehensive models were exerted in which all independent, dependent and control variables were considered simultaneously, the followings were found for each criterion of the earnings quality :
 - A. There was a reverse significant relationship between AQ1 criterion and agency cost measures.
 - B. There was a reverse significant relationship between AQ2 and agency costs measures (for the asset turnover ratio, and Q-Tobin ratio), but the relationship between AQ2 and ES was not significant.
 - C. There was a reverse significant relationship between IR and agency costs measures (for the asset turnover ratio, and Tobin's Q ratio), but the relationship between IR and ES was not significant. This latter relationship, however, is almost positive at 90% confidence interval. The reason for the weak relationship of the IR lies on the existence of DQ variable and the effect of its components (reliability and relevancy) in the model. Since the reliability and relevancy criterion posit a reverse relationship with each other, the overall role of the IR has been reduced in the model.
 - D. There was a reverse significant relationship between DQ and agency costs (for the ratio of operating expenses to sales, and Tobin's Q ratio); but the relationship between DQ and TA is not statistically significant at 95% confidence interval. This latter relationship, however, is positive and significant at 90% confidence interval. The reason for the existence of a weak relation lies in the points which were raised in part C above. In this case, disclosure of earnings quality affects management's decisions via agency costs.
- 4) The extent of the effect of each information quality criteria on earnings quality criteria on the agency costs is different. Since, the effect of each information quality criteria on the companies' agency costs are different, their implications on the management's decisions would also be different.

This study provides several contributions. First it presents vivid empirical evidence concerning major effects of the earnings information in a developing market. It clearly reveals that, in the TSE, just like developed markets, even though most of its companies are governmental oriented, there is a reverse effect between earnings information criteria and firms' agency costs. Therefore, there is no significant difference between this market and other developed markets from this aspect. It also unambiguously showed that the effects of the information of earnings quality criterion on the firms' agency costs depends on: 1) identifying detailed characteristics of the earnings information criterion, 2) designating various components of the agency costs, 3) considering appropriate extraneous variables, and 4) designing appropriate models to capture the relation between financial earnings quality criteria and agency costs. Finally, this study extended the concepts of the quality of earnings and agency costs, and has therefore, moved the frontier of the knowledge in the domain of accounting, management, and finance decisions.

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