

The Impact of Accounting Standard Setting on Earning Response Coefficient (ERC): Evidence from Iran

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Abstract: This study investigates the impact of standard-setting over the past ten years on ERC as proxy criteria for assessment of earnings quality. The study examines the impact total accounting standards promulgated by the accounting standards board of Iran on ERC. Based on our sample, we chose two separated periods before and after requirement of accounting standards. In order to test hypothesis, we used from regression models and correlation analysis test. We found that there are significant relation between dependence variable and independence variables.

Key words: Accounting standards • Earnings quality • Earnings response coefficients • Tehran stock exchange (TSE).

INTRODUCTION

This study examines the impact of standard-setting over the past ten year ERC. As we know the accuracy of the information increases the qualities (e.g. relevance and reliability comparability). So stakeholder can make better decisions based on qualified in formation.

The useful information leads to predicting ability for users of information. Although earnings per share seems a suitable index prediction of future cash flows, but some restrictions have negative effect on such indexes. Therefore analysts try to use some indictors for assessment of earnings quality (EQ). The many factors in influence in (EQ) Such as ERS, accrual quality, earnings presence, forecast error. In this research, we used ERC as proxy for evaluating EQ. thus; information is needed on the quality attributes of accounting reports resulting from the application of GAAP and whether variation in equality is associated with variation in relevant attributes of the standard. That is information on the quality of Iran GAPP statements and variation in quality conditional on standard attributes can be used to assess whether criticisms of GAAP havement. This study first document attributes of the general purpose accounting standards

issued by Iran's accounting standards board over the last ten year. Based on recent evaluations of standard-setting systems.

The researchers of this study evaluate all accounting standards that investigate as to whether the standard affects disclosure levels was income statement or balance sheet-base.

We examine variation in accounting attributes, before and after implementation of accounting standards. We determine the effect of accounting standard after controlling for now ERC.

These studies focus on the value relevance of information provided by the standards or examine the economic consequences of a adaption our study provides on over-time assessment of the collective accounting quality affects of all accounting standards that were implemented over a long period of time. Specifically we provide evidence on the merits of the Iran standard setting process based on existing standard. The paper is organized as follows: firstly it gives literature review in section2. Section 3 related to methodology.

Testing ERC model and finding represented in section 4. Finally, section 5 indicted the summering and conclusion.

Literature Review: Based on literature, there are two altitudes toward EQ, decision usefulness and Hicksian view to the earnings definition. Based on the first view different users should assess the quality of earnings before making decisions. On the other hand “quality for whom” and the “quality for what” is the main subject in the first view. In the second view earnings quality is assessed by comparing earnings and Hicksian definition for earnings. [11]

Much prior research has examined the accounting quality improvements associated with the promulgation of individual standards. For example, Barth [5] examined alternative pension asset and liability measurements while Choi *et al.* [10] examined measurement of other post retirement Benefits. Kohl belck [10] investigated the accounting quality attributes of nineteen general purpose accounting standards implemented over the past thirty years. Fathi [8] examined the impact total accounting standards promulgated by accounting standard board Iran on accounting quality. Amir [3] also investigated post-retirement benefits and found that the liability and expense components are value relevant conditional on sensitivity disclosures. The majority of the these and other studies considered the economic consequences of individual accounting standards, the decision to adopt early where permitted and the value relevance of the related recognized amount or disclosures. Notable exceptions are Barth [5] and Choi *et.al* [10] which addressed reliability of the post retirement of the post retirement measures and ayers [4] that examined value relevance incremental to the previous accounting methodology. Also Taheri [13] argued that accounting and auditing standards are used for preparing of financial statements and auditing reports. However Amiri [2] found that financial statements that are prepared based on accounting standards are not consistent with the objectives of financial reporting in conceptual framework of national standards. These contrary findings raised some question such as: Do national accounting standards affect earnings qualities in listed entities. We had some domestic evidence of the impacts of conceptual framework on ERC s a proxy for earnings quality. Ahmadi [1] and shoorvarzy [12] found evidences that ERC is higher in higher earnings quality portfolios that established based on qualitative characteristics of financial statements. However, evaluation at the individual standard level does not permit a collective

evaluation of the standard setting process. We conduct an expanded investigation of accounting standards over two decades to provide evidence of the impact of the accounting standards on ERC. We evaluated the thirty on accounting standards Iran on one dimensions (ERC). In this study hypothesis express that accounting standard is influence on ERC.

Earnings Response Coefficients (ERC): ERC have been used as a proxy for information content of accounting earning [6,7,9]. An ERC is the slope coefficient on the regression of returns on change in earnings. ERCs may therefore be used as a proxy for accounting quality because it measures the mapping of earnings in to returns and provides decision useful information from an equality investor perspective [11]. The ERC represents the coefficient on the change in earnings.

The State of Accounting Standards in Iran Effects on Accounting Qualities: Up to now Audit organization as an authorized standard setter promulgated 31 standards. It tries to harmonize the national standards with international accounting standards. As senior manager of standards setting with the department of audit organization argued:

"We have 31 standards that are significantly based on international accounting standards, so. We are very closed to this standards but there is a gap in financial instruments"¹

So, when we review the national standards, we find that some standards affect more accounting qualities. Table 1 compares the standards and impacts on earnings quality.

Methodology: This study is empirical-comparison research also it described the events in Tehran stock exchange (TSE) and investigated the correlation of variable by regression analysis. We chose TSE listed companies as a population (including 444 companies) and then select some samples based on the following conditions:

- The entities should be listed before 1993.
- The entities should not activate in investing and insurance and building financial company.
- The entities should be activating during 1993-2006.
- The entities should not change their financial period.
- The entities availability of information is required.

¹Association of certified chartered accountants, the Accounting Evolution, 1, pp.18-21, 2010.

Table 1: Iranian Accounting standards and the impacts on accounting qualities.

No.	Accounting standards	The impact on earnings quality
1	Financial information presentation	Paragraph 7, 49; this standard improve earnings quality because of introduction of the concepts of conservatism, neutrality, completeness and timely providing information.
2	The statement of cash flows	N/A
3	Operating income	The basic subject in these standards is about income recognition from operating activities.
4	Provisions , contingent assets and contingent liabilities	It relates to accounting quality because of requirement in determining provisions that cause expenses at the end of each year.
5	Post event balance sheet	N/A
6	Financial performance reporting	The basic subject in this standard is related to reporting earnings number in the basic financial standards, so it is attributed to earnings quality .
7	R&D expenditures	Amended by NAA 17.
8	Inventory	The effects of impairment on net income illustration this standard.
9	Long-term contracts	Contractors should recognize revenues and expenses based on this standard.
10	Governmental grants	It illustrates the process of recognizing revenues received from government bodies based on terms and condition required by the government
11	Fixed assets	It illustrate the concepts of depreciation and revaluation, so it tow effects the in come statement.
12	Related party disclosure	N/ A
13	Financial expenditures	It illustrates the calculation of interest of loans and its affects costs of assets and income statement
14	Current assets / current liabilities presentation	N/A
15	Investment	It is based on the first revision of standard promulgated by IASB and it is related to financial instruments and accounting treatment of gains/losses and revenues expenses of these instruments.
16	Foreign exchange currency	The effects of exchange foreign transactions and how to compute revenues / expenses from fluctuating foreign currency are illustrated in this standard.
17	Intangible assets	It illustrates the concept of amortization and revaluation so it affects this income statement.
18	Consolidated financial statements	The consolidated income allocation between majority and minority groups.
19	Business combination	The amortization of goodwill is required in this standard.
20	Investment in associates	The concept of equity method for reorganization income from investment is required in this standard.
21	Leases	The recognition of income and expenses based on different types of leases is illustrated in this standard.
22	Interim reporting	The requirement of reporting interim revenues and expenses are required in this standard.
23	Join ventures	The computation of revenues and expenses from joint ventures are required in this standard.
24	Financial reporting of entities before starting operations (pre-establishment)	N/A
25	Segmental reporting	N/A
26	Agricultural activities	The recognition of income from agricultural activities illustrated in this standard.
27	Pension benefits plans	N/A
28	Insurance activities	It illustrates the reorganization of income for insurance companies.
29	Real-estate activities	It required income recognition for real-estate entities.
30	EPS	The computation of basic and dilutive EPS is in this standard.
31	Non-current assets held for sale and discontinued operation.	The presentation of discontinued operations is required in this standard.

Table 2: The results of test the effects of accounting standards on the ERC.

Independ variable	Coefficient	T	p-value	Regression statistics
$\Delta EARN_{i,t}$	0/058	1/293	0/197	p-value 0/000 F:4/117 Adj R ² 0/034 Durbin Watson: 1/958
Trend	-0/410	-3/489*	0/001	
Standard	0/329	3/02*	0/003	
$\Delta Earn_{i,t} \times \text{standard}$	0/108	0/522	0/602	
Event	-0/045			
Event $\times\Delta Earn$	0/04	0/190	0/850	* indicate significant in %95 confidence level.

Table 3: The results of test ERC in before and after standard

Waled statistic	Other regression statistics	p-value	Se	B	Variable	
1/01 (1/96)	Adj R ² 0/016 F: 3/729* (0/025)	0/058	0/167	0/143*	Δearn	Before
		0/472	0/017	(2/656)	Trend	Standard
				-0/039		T-statistic
	Adj R ² 0/041 F=6/493* (0/002)	0/527	0/063	0/039	Δearn	After Standard
		0/000	0/036	(0/633)	Trend	T-statistic
				-0/22		
				(-3/578)*		

* indicate significant in %95 levels.

Table 4: The summering of the result

	Standard test	Result	R ² before standard	R ² after standard
Model (1) (lack control variables)	Correlation	Non confirmed	0/260	0/111
	Coefficient (Pierson)	(Null hypothesis)		
	- Line regression			
Model (2) (with control variables)	Correlation coefficient (Pierson)	Non confirmed	0/262	0/295
	- line regression (Null hypothesis)			

Based on these conditions 90 companies quality and choose as the samples in this study.

As we wanted to investigate the effects of accounting standards on ERC we use the following multiple regression:

$$\text{RETURN}_{i,t} = \alpha_0 + \alpha_1 \Delta \text{EARN}_{i,t} + \alpha_2 \text{TREND}_t + \alpha_3 \text{STANDARD}_t + \alpha_4 (\Delta \text{EARN}_{i,t} * \text{STANDARD}_t) + \epsilon_{i,t+1}$$

In our settings, we measure returns as annual shareholder return and earnings as the change in earnings during the year. We also include a trend variable to capture overtime change in ERCs unrelated to the implementation of the accounting standard. We then include an interaction with change in earnings to capture the incremental effect on ERCs.

In top model, return is the annual return on shareholder equity, ΔEARN is the change in earnings before extraordinary items divided by beginning of year market value of equity and standard is an indicator variable equal to one if the year identified standard is effective and zero otherwise.

Testing of Model and Findings: ERC is the slope coefficient on the regression of return (or abnormal returns) on change in earning (or unexpected earnings) that is as following:

$$\text{Return}_{i,t} = \alpha_0 + \alpha_1 \Delta \text{EARN}_{i,t-1} + \alpha_2 \text{TREND}_t + \alpha_3 \text{STANDARD}_t + \alpha_4 (\Delta \text{EARN}_{i,t-1} * \text{STANDARD}_t) + \alpha_5 \text{EVENT}_t + \alpha_6 (\text{EVENT}_t * \Delta \text{EARN}_{i,t-1}) + \epsilon_{i,t+1}$$

We reported the results of test the effects of accounting standards on the ERC in the table 2.

Based on top table, the two trend and standard variable have significant coefficient because p-value <0/50.

Also we report the results of test ERC in before and after standard in the table 3.

According to top table, there is a few relevance among ERC, trend and stock earn variables. The top results indicate that waled statistic is equal 1/01. That it is less than 1/96. Therefore we cannot confirm significant division between ERC in two Periods.

Summering and Conclusions: We examined the impacts of accounting standard setting on ERC. In order to testing hypothesis, model tested before and after implementation standards two again second test doing order to controlling the effect firm size variable and rate opportunities of grow on ERC. We reported The summering of the result in table 6.

According to table 4, the research hypothesis confirmed with application each two model. We provided evidence consistent with the kohleck and warfield [10] in us market with testing model (1), also the factor rate opportunities of grow is influence on ERC.

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