

## Compare the Quality of Earning Methods (Case Study of Firms Accepted in Listed Firms of Tehran Stock Exchange)

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### ABSTRACT

Although the academic research on the quality of earnings has been improved by presenting different approaches of measurement, there is no agreed-upon generally accepted approach to measure the earning quality. General Aims represented results of an empirical study measuring the quality of earnings on three groups' Security market of Tehran during 2003-2009. Uses a population of 82 companies listed in the Security market of Tehran. The analysis is directed to reach a general assessment of the quality of earnings if there is a complete consistency among the three approaches, and if not, the quality of earnings is questionable and needs further analysis and investigations. The results was showed that different approaches of measuring the quality of earning lead to different assessment, and one group or one company cannot be labeled as having low or high quality of earning based on the result of one approach only. The results also suggest that the stakeholders before making any financing, investing decision or taking any corrective action have to use more than one approach to assess the quality of earnings.

**KEY WORDS:** earning Quality, Evaluation, Financial analysis, Security market.

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### 1. INTRODUCTION

One of the accounting items, presented in income statements, is net income. Profit is usually an important factor in dividends' identification policies and is considered as a guide in funding and finally it is a factor in estimations. Because net income calculation in a business entity is affected by the accounting methods and estimations, the firms' net income may change due to the operations and performances of the management in order to show the financial status better and thus profit quality will decrease. The management's goal is to achieve his/her goals by manipulating the profit and this not only does not accord with stockholders' goals but also it is in opposition with these goals most of the times. The above-mentioned proof causes doubts about the informative value of net income which is one of the most important criteria in determining stock cost and firm's value and thus profit quality lessens. So, assessing the quality of profit making in firms is considered as one the most important factors in supply and maintaining the profits of both parties in primary stock supply. Profit quality assessment helps users of financial statements in judging the certain current profit and predicting future profits. So, a lot of researchers have studied the outcomes and results of lack of realization of accounting profit. In this field, profit quality is one of the most important research areas which have been noticed.

### 2. Theoretical background:

Nowadays, the concept of profit quality is considered to be important in accounting researches and management. The reason to notice profit quality by accountants is to reflex the reported net income, and operating performance of business entity fairly. Financial analysts assess profit quality in order to predict net income and thus determine the cost of stocks in a firm.

Although accountants consider accounting profit as a criterion to interpret the events in real world (economical profit) and emphasize on its effect in users' behaviors (prediction ability or relatedness in the process of decision-making), they base principles and structures of accounting on presuppositions which may not be related to the phenomena in real world or the related behaviors.

The investment developments absorbs people's capitals and directs them into economically generative sections from one hand, and regarding the policies of stockholders (based on risk and yield) investments will be directed towards industries which benefit more profit with less risks and this will finally cause the optimal appropriation of resources.

The calculation of net income in a business entity is affected by accounting methods and estimations. Thus, there would be probability of manipulations or profit management. The probability of manipulations in profits is due to the opposing advantages. Also there are some inherent limitations of accounting such as (1) defects in the process of later estimations, (2) the ability to use different accounting methods by business entities.

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Because profit is one of the most important criteria in performance assessment and it determines the business entity's value, quality of profit is noticed by researchers and professionals in accounting and investment. Although there is not any concise definition of quality of profit, in this research it is defined as follows: "The investor's ability to predict later profits using the reported profit in the present year."

### 3. LITERATURE REVIEW

In recent years and especially due to the recent financial scandals, there have been increasingly more attentions towards quality of profit. Quality of profit is a concept with different dimensions. So, there are different definitions and measurement criteria and many researches have been suggested in this area of accounting studies, some of which are listed below:

Rosayn (1999) considers a profit more qualified when it is more consistent [12]. Richardson & et al (2001) believe that quality of profit is the consistency degree performance of incomes in next period [11]. Benish & Wargass (2002) define quality of profit as the probable consistency of current incomes in the future [3]. Pennman & Jung (2002) identify quality of profit as the ability of profit to show future incomes [10].

Skipper & Winsent (2003) state quality of profit the same as Hiks. That is, they believe quality of profit is a degree of honesty which shows the reported incomes in Hiks's profit report [13]. Haj (2003) believes quality of profit is the difference between reported net income and real income [6]. Micheal & et al (2003) identify quality of profit as amount of relations between past incomes of a firm and its current and future cash flow [8]. White (2003) views quality of profit as the amount of conservancy used in reported income [16].

One of probable reasons to have different definitions for quality of profit is that researchers view different dimensions of this concept differently. Thus, quality of profit seems to be a complex concept and none of researchers have ever succeeded to present a concise definition or complete criterion for it. Some of the most important researches done regarding quality of profit are as follows:

Schooler (2004) examined quality of profit regarding the conceptual framework of Financial Accounting Standards Board (FASB) and concluded that the firms' quality of profit will improve when organizational ownership increases. In this case the items forming the firms' profits will benefit more relatedness and more reliability [15].

Richardson et al. (2005) classify accruals comprehensively (not only operating accruals) and report that lower reliable accruals bring about lower persistence of earnings[14]. In Drake et al. (2007) which verifies the relation between persistence and information disclosure, it is shown that persistence of cash flow and accruals are reflected in stock return in situations where the information disclosure is of high quality[5].

Chan & et al (2006) studied the relation between promissory goods (difference between profit and cash flows) and future stocks yields and showed that in firms with high amount of promissory goods in the period after financial data reporting, stock yield will decrease. An interpretation of these results is that firms with low quality of profit (i.e. firms with high promissory goods) incur a decrease in yield in the period after profit reporting, because stockholders find out about low profit quality of the firms and equilibrate the stocks' value accordingly [4].

Baroa (2006) has studied the criteria for measuring quality of profit, using quality characteristics of financial data included in theoretical framework of FASB. The results of studying the characters of each dimension of quality of profit showed that firms with high relatedness and high reliability of profit have higher profits, profit reaction coefficient and descriptive power of value regression than those which benefit lower relatedness and reliability of profit[2].

#### 4. The research model:

Although the expression "quality of profit" has been utilized widely in the field of accounting, there is not any acceptable meaning or conception for that. Also there is no acceptable criterion for this expression. There are three main ideas to assess quality of profit which studies profit management in three different dimensions.

The first idea concentrates on changeability of the profit which is based on the idea of the tendency among managers to smooth out the profit, because they believe that stockholders prefer the kind of profit which increases evenly. The theoretical school of thought related to this idea is relative changeability which is related to some other more qualified profits, sometimes. Luez & et al (2003) measured profit changeability by calculating the ratio of standard deviations in performance profits with the standard deviations of performance cash flows [7]. (The low amount of this ratio is the reason for more smooth profits)

The second idea was proposed by Barton & Simko in the year 2002, which is concentrated on profit wonder idea, and is the ratio of performance assets' net remainder at the start of the period with sales. They provided conditions in which the firms with low ratio of this idea encounter the report of wonders in the predefined profits [1].

The third idea studied in this article is concentrated on the ratio of performance cash flows with concentrated profit. This criterion of profit quality is based on a theory which prefers cash flows which mean those more qualified profits. This simple view was proposed by Penman in the year 2001 [9].

In our model in this research all three viewpoints will be used to assess quality of profit which will be tested among all accepted firms in Tehran bonds bourse. If in an industry (or a firm) we can see a lower profit quality, according to these three ideas, there surely is a profit management in that industry or firm. On the other hand, if there is not any homogeneity among these three criteria for achieving more qualified profit for an industry or a firm, it is proved that accounting data report the real economical performance of the industry or firm without any ethical mode implemented by the management. Table 1 presents the three dimensional model of profit quality.

**Table1**

Leuz et al. (2003)	Barton and Simko (2002)	Penman (2001)
<b>approach</b>	Approach	approach
<b>Quality of earnings is measured</b>	Quality of earnings is measured	Quality of earnings is measured
<b>by variability of earnings which</b>	by the earning surprise indicator	by the ratio of cash flow from
<b>is equal to the standard</b>	which is the ratio of the	operation divided by the net
<b>deviation of operating income</b>	beginning balance of net	income
<b>divided by the standard</b>	operating assets relative to sales	The smaller the ratio the higher
<b>deviation of cash flow from</b>	The smaller the ratio the higher	the quality of earnings
<b>operation</b>	the quality of earnings	
<b>The smaller the ratio the lower</b>		
<b>the quality of earnings</b>		

**4. The statistical society and statistic results:**

82 firms (drug group, main metal group and ciment, lime&chalk group) comprise the statistical society in this research. The research period includes the years between 2002 and 2009.

Table 2 shows a brief account of our study variables.

Table2-Classification variables used in the study
Net sale
Net profit
Operating profit
Operational assets*
Operating cash flows

\*Operational assets=Fixed assets + current assets - current liabilities

**Table3- drug group(n=29)**

General Assessment	Penman approach Earnings quality	measure	Barton&simko approach Earnings quality	measure	Luez et al approach Earnings quality	measure	Company name	row
high	high	0.656	high	0.408	high	1.2	Dejaber	1
questionable	high	0.800	high	0.335	Low	0.88	Dabur	2
high	high	0.249	high	0.445	high	2.249	Dekimi	3
questionable	high	0.794	high	0.246	Low	0.554	Derazak	4
questionable	high	0.869	high	0.109	Low	0.87	Delogma	5
questionable	high	0.646	high	0.229	Low	0.261	De hakim	6
high	high	0.574	high	0.394	high	2.669	De osve	7
high	high	0.654	high	0.231	high	1.022	Va pakhsh	8
questionable	high	0.498	high	0.261	Low	0.796	De kosar	9
questionable	high	0.092	high	0.223	Low	0.244	De shiri	10
questionable	high	0.751	high	0.267	Low	0.694	De dam	11
high	high	1.416	high	0.137	high	1.158	Shatatran	12
questionable	high	1.013	high	0.48	low	0.412	De pars	13
questionable	high	0.622	high	0.381	low	0.689	De fara	14
questionable	high	1.128	high	0.307	low	0.547	Damin	15
questionable	high	1.121	high	0.49	low	0.847	De sina	16
high	high	0.803	high	0.258	high	1.598	Dalber	17
questionable	high	0.987	high	0.569	low	0.894	De abid	18
questionable	high	2.436	high	0.117	low	0.409	De Tehran	19
questionable	low	3.233	high	0.429	low	0.209	Defra	20
high	high	0.669	high	0.3	high	1.254	Delor	21
high	high	0.963	high	0.3	high	1.125	De zahravi	22
questionable	high	1.053	high	0.326	low	0.576	Deiran	23
questionable	high	1.143	high	0.312	low	0.867	Daru	24
questionable	high	0.832	high	0.211	low	0.991	De nemad	25
high	high	0.484	high	0.07	high	9.417	De shimi	26
questionable	high	0.846	high	0.232	low	0.631	De sobha	27
questionable	high	1.08	high	0.581	low	0.772	De ruz	28
questionable	high	0.295	high	0.526	low	0.849	Valber	29

The design of our research was classified first by calculating three different criteria for quality of profit in two levels of industry and firm. These calculations were done by Excel software. To analyze the research design, we defined that if there is homogeneity between three different ideas of profit quality, we have strong evidences proving that profit has low or high quality and if there is not any homogeneity between these three different ideas, the quality of profit is questioned and we need more analyses.

Classifying the variables used in this research:

Table 3 above shows the experimental results of firms in drug group. 9 firms out of drug group (%31) have high profit

Quality and the rest (%69) have questionable profit quality and need more analyses.

Table 4 shows the experimental results of firms in main metal group. 13 firms out of main metal group have high profit quality and the 12firms have questionable profit quality and need more analyses.

General Assessment	Penman approach Earnings quality	measure	Barton&simko approach Earnings quality	measure	Luez et al approach Earnings quality	measure	Company name	row
questionable	high	0.411	high	-0.977	low	0.334	Fahvaz	1
questionable	high	2.286	high	0.181	low	0.538	Fepanta	2
high	high	1.663	high	0.298	high	1.025	Fenazard	3
high	high	0.951	high	0.494	high	1.895	Fe lule	4
high	high	0.144	high	0.059	high	2.264	Femnal	5
high	high	1.765	high	0.608	high	1.991	Feros	6
questionable	high	1.632	high	0.205	low	0.251	Fespa	7
questionable	high	2.101	high	0.17	low	0.477	Fuka	8
questionable	high	1.872	high	0.064	low	0.318	Fasdid	9
high	high	0.408	high	0.803	high	1.027	Fajr	10
high	high	0.851	high	0.696	high	2.327	Fulad	11
high	high	1.053	high	0.35	high	1.018	Fekhuz	12
high	high	0.720	high	0.265	high	1.198	Falum	13
questionable	high	0.273	high	0.204	low	0.151	Fenval	14
questionable	high	1.007	high	0.845	low	0.302	Fabahonar	15
questionable	high	0.600	high	0.244	low	0.341	Fepars	16
high	high	1.018	high	0.334	high	2.016	Fasmin	17
high	high	1.209	high	0.572	high	1.498	Fabra	18
high	high	1.378	high	0.125	high	1.411	Fasorb	19
high	high	0.776	high	0.481	high	2.949	Faravar	20
questionable	high	0.554	high	0.922	low	0.915	Famrad	21
high	high	-0.689	high	0.209	high	1.521	From	22
questionable	high	1.181	high	0.717	low	0.942	Famly	23
questionable	high	-0.858	high	0.137	low	0.312	Vasad id	24
questionable	high	0.439	high	0.496	low	0.541	Va tuka	25

Table 5 shows the experimental results of firms in ciment,lime&chalk group. 10 firms out of ciment,lime&chalk group have high profit quality and the 18firms have questionable profit quality and need more analyses.

General Assessment	Penman approach Earnings quality	measure	Barton&simko approach Earnings quality	measure	Luez et al approach Earnings quality	measure	Company name	row
questionable	high	1.088	high	0.424	low	0.863	Setran	1
questionable	high	0.44	low	2.352	high	1.029	Seshmal	2
questionable	high	0.987	high	0.215	low	0.766	Sekorma	3
questionable	high	1.099	high	-0.306	low	0.803	Sasufi	4
high	high	0.529	high	0.538	high	1.049	Safares	5
questionable	high	0.849	high	-0.109	low	0.706	Sesharg	6
questionable	high	0.731	high	0.858	low	0.592	Kapgaj	7
questionable	high	2.22	low	2.071	low	0.649	Sakhzar	8
questionable	high	1.714	high	0.957	low	0.854	Sagrab	9
questionable	high	1.869	high	1.83	low	0.436	Samazen	10
questionable	high	1.043	high	1.258	low	0.908	Sarum	11
questionable	high	1.133	high	0.787	low	0.525	Sepaha	12
high	high	1.109	high	0.36	high	1.094	Safayen	13
high	high	1.224	high	0.87	high	1.079	Sarud	14
high	high	1.291	high	0.351	high	1.061	Sadur	15
questionable	high	1.402	high	1.868	low	0.994	Sahgant	16
questionable	high	1.091	high	0.451	low	0.97	Sobhan	17
high	high	1.362	high	0.591	high	1.174	Sakhash	18
questionable	high	0.981	high	0.067	low	0.772	Sekaron	19
high	high	0.97	high	0.734	high	1.417	Sasofha	20
questionable	low	3.346	high	1.636	high	2.067	Sarbil	21
questionable	high	1.199	low	2.333	low	0.63	Silam	22
questionable	high	1.288	low	2.801	high	1.841	Sabajnu	23
high	high	1.098	high	0.61	high	9.43	Sahormoz	24
high	high	1.113	high	0.215	high	1.516	Safar	25
high	high	1.193	high	0.98	high	1.528	Sarab	26
high	high	1.641	high	0.811	high	0.652	Saner	27
questionable	high	1.724	low	2.035	low		sadasht	28

32 firms (39% in 3 groups) have high profit quality and the 50 firms have questionable profit quality and need more analyses. In this tree group there are not company have low profit quality.

We suggest financial analysts and stockholders to assess quality of profit in a firm before they make any decisions, by using three ideas presented in this paper.

## 5. Conclusion:

This research is Compare the quality of earning methods (Case study of firms accepted in Tehran-Iran bonds bourse). Because there is not any accepted definition or criterion for quality of profit, we can not judge quality of profit in a firm or industry based on a certain criterion. In this research it is concluded that financial analysts and investors should take into consideration more criteria and should not confine themselves to any one criterion. If the profit of one firm has a low quality of profit based on a criterion and a higher quality of profit based on another criterion, the stockholders and creditors can not rely on these criteria in their decision-makings and need more studies.

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