

*Full Length Research Paper*

# Wide-spreading accounting education and governmental supervision to reduce information asymmetry: Empirical evidences of Iran

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This paper attempts to evaluate the role of wide spreading accounting education and strengthens the governmental supervision for accounting disclosure process to reduce information asymmetry level in capital market and also increase the protection of stockholders and other financial information users' rights. In order to test the hypotheses, a suitable questionnaire with some questions about current conditions of forging factors' role in highlighting and improving understandability of accounting information for different users was used. A total of 281 questionnaires were distributed among agents of Iranian financial society after assuring of its validity and reliability. Collected data is tested by Mann-Whitney and Spearman's correlation statistical methods. The results show that in comparison with the academics, practitioners and professionals are more willing to wide spreading general accounting education and increasing governmental supervision and also practitioners complain more about lack of adequate governmental supervision, the same as stockholders' weak protection laws and also inconvenience of current general education of accounting information usage. The results also revealed that in contrast to experience, education, and gender variables as fields of education which do not have significant effect on the perceiving importance of role of two forgoing factors, but participants' age are reversely related to the perceiving importance of those factors. This result is in accordance with preceding findings which finally leads SEC to issue Regulation Fair Disclosure Rule in October 2000 (Previts et al., 2005). This regulation prohibits firms from disclosing value relevant information to selective capital market participants without simultaneously disclosing the same information publicly. A key technical result is that the primary condition to improve accounting system usefulness, needs concentrating not only on the quality of information or optimal level of accounting disclosure, but also on the increasing efforts to improve education of accounting information application ways and strengthen accounting regulating authorities for assuring the perpetual and the fairness manner of releasing accounting information to meet all users' and market contributors' needs. The paper will be of interest to professional bodies to support and empower their accounting regulatory bodies' activities in order to assure fairly releases of accounting information and also to academics investigation of the condition and value of accounting education and its prescribed rules. The paper reports an original application of the role of wide spreading accounting general education as well as strengthening government presence in the capital market to improve financial wisdom in Iran's financial society.

**Key words:** Information asymmetry, accounting general education, governmental supervision, personality and professionally qualities.

## INTRODUCTION

In order to improve the financial reporting quality and

provide useful information for investors and other entitled users in all countries worldwide, necessary regulations have established professional authority's bodies which over time changed their structure and duties due to the environmental change. For a long time in the United

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States, Committee on Accounting Procedure (CAP), Accounting Principles Board (APB) and Financial Accounting Standards Board (FASB) respectively had the accounting standard setting steverage. Operation of forgoing bodies resulted in increases of transparency and reduction of information asymmetry level which leads to optimal resource allocation by enhancing market efficiency in the end. Critical role of accounting and financial reporting as a formal source of entities financial information is providing useful information for different and entitled users to help them make economical decisions. Releasing accounting information and assuring perpetual presenting of this information in the unbiased and fair manner is necessary for capital markets' health or soundness and also its efficiency highly depends on those released information (Hendriksen and Van berda, 1991). Thus, each of the bodies and organizations engaged in accounting standard setting process tries to organize the conditions of releasing information to the entitled users. In this regard, other countries take steps towards more regulation of financial information releasing process for their capital markets and similar institutions were formed. In most of these countries along with capital market enlargement and financial reporting improvement, it also seems that the level of the public financial wisdom has had increased and has formed a sophisticated and correct perceptive about vital role and duties of accounting regulatory authorities and standard setting bodies such as Governmental Accounting Standards Board (GASB) and International Accounting Standards Board (IASB).

### **Research problem**

Accounting information as the main connection tools of corporations with its owners has a rigid role in providing informative needs of contributors in capital markets. While presenting this information in a timeliness and reliable manner is necessary for optimal performance of those markets, there are various unwanted factors which prevent accounting from achieving its goals and at the same time, huge cost has been paid for preparing that information. Two main cases of those factors are related to inabilities of investors to correct interpreting of content and meaning of released accounting information, besides management's attempts to influence the process of reporting this information and manipulation of reported earnings. Moreover, by considering the quality of accounting information which the users of those information don't pay costs for it's usage, so in the absence of regulatory force, providing and supplying this information may decrease which in the end, causes to the creation and deeping of information asymmetry and accordingly raise and permanence of information asymmetry ultimately leads to market failure (Salehi and Azary, 2008). Thus, the presence of supervising organization

with strong operational power assures of sufficient information presenting is necessary. Besides the formation and establishment of the various accounting standard setting and regulatory authority's bodies in worldwide, it is also intentioned that these organizations to have sufficient power to enact their issued rules for achieving the accounting main objective. The subject of enforcement of accounting standards has attracted increased attention in recent years and also supervision mechanisms continues to differ significantly across countries, even being non-existent in some countries (Fee, 1999). Many scholars argue that the extents to which standards are enforced and violations prosecuted are as important as the standards themselves (Sunder, 1997). In particular, the quality of financial information is a function of both the quality of accounting standards and the regulatory overseeing (Kothari, 2000). In absence of adequate enforcement, even the best accounting standards will be inconsequential. If nobody takes action when rules are breached, the rules remain just as requirements only on a paper. It seems there is weakness about forgoing two factors in our capital market (Salehi, 2008c), so current study tends to trace professional specialists' and experts' viewpoints about the effect of wide spreading accounting general education to those users that don't have accounting knowledge and also increasing governmental supervision to assure and protect small stockholders interests in order to achieve the purpose of more efficiency in capital markets.

### **Research questions**

1. Do practitioners perceive the importance of increasing the general accounting education as a vital factor to enhance accounting usefulness and reduce information asymmetry?
2. Do practitioners perceive the importance of wide spreading governmental supervision as a vital factor to enhance accounting usefulness and reduce information asymmetry?

### **Objectives of the study**

The aim of the present study is to recognize the various groups viewpoints' engaged in accounting process in relation to determining convenience of wide spreading general accounting information learning for those who don't have accounting knowledge, besides determining also their viewpoints' about increasing governmental supervision to overall accounting activities with purpose of decreasing the level of information asymmetry and optimal allocation of resource in capital markets.

It must be noted that the active heart of the capitalist countries does appear in their capital markets and the running engine of economic of these countries is also

depending on optimal performing of those markets. However, knowing that receiving the sound and reliable information which is useful and easily understandable by current users and investors is the only factor for efficient operating of such markets, the importance of the preparing and releasing such information gets evident and each research that tends to be done in this area and is done to achieve those goals, needs to be supported. While the academic literature is intended foremost to inform the academic community, findings in the academic literature can certainly be relevant to the regulators as well.

### Literature review

Three researchers by the name of Michael Spence, George Akerlof and Joseph Stiglitz created a theory about the information economic area during 1970s that later became known as information asymmetry theory. Based on this theory, Akerlof (1970) considers a market condition in which sellers have more information about traded commodity than buyers. Certainly in this condition, the price of traded commodity isn't reflecting its fair and intrinsic value and informative awareness' difference level is either higher or lower than its fair values. Similarly in those capital markets which information is distributed unequally, sellers are willing to sale their stocks and securities in high price, while on the other side, buyers because of inability to access the sufficient information to evaluate those stocks and uncertainty about those securities, suggest low price for acquiring those stocks. In financial literature, the abnormal Bid-Ask spread is proposed as a position of dominant information asymmetry between buyers and sellers of securities and also the level of this spreading is reflecting the level of information asymmetry among dealers. However it is known that the higher the information distributing unequally and releasing in informal ways such as inside information, the higher the level of information asymmetry and the Bid-Ask spread prices would be (Lafond and Watts, 2008). This topic is shown in the model below:

$$\text{SPREAD} = \frac{\text{AP} - \text{BP}}{\frac{(\text{AP} + \text{BP})}{2}} \times 100 \quad (1)$$

Where, Spread= the level of difference between ask and bid prices; AP= Ask Price; BP= Bid Price.

Under this circumstance, inside information holder deals upon those information and earns abnormal return in others' loss, accordingly the result is that the trading prices are created on the basis of market reluctance collapse instead of real quality of those securities and those prices are very far from their intrinsic values. In these markets, except to a few people who have access to inside information because of the "adverse selection" driven from inability of correct decision, dealers lose. This

concept is explained in the function below:

Index of information asymmetry level= (inherent value-trading price)

Responsible governmental bodies in most countries reducing the level of information asymmetry that in extreme manner leads to market failure, seek to find and remove irregular and informal releasing information channels. For this purpose, in addition to provide rigid laws and heavy penalty for dealers upon inside information and to concentrate on companies accounting system as the formal channel to release information, they are given a duty to handle and disclosure necessary information in a timeliness and best quality for decision making. For the first time, to protect the investors and strengthen the capital market, the US government issued the Truth-in-securities act in 1933 and established the Securities and Exchange Commission (SEC) in 1934. In 1957, APB as an important standard setting body was replaced with CAP and issued the prime principles of accounting. From its beginning, APB was willing to provide conceptual postulate for its decisions and it had to work in standard and concepts simultaneously, to be able to provide meaningful basic concepts for standards. The motive of FASB for preparing conceptual framework, which was replaced by APB in 1973, could be seen in the engagement of problems that its pervious candidate, APB, experienced (Belkaoui, 2000). Insider trading laws may deter managers from manipulating earnings to profit from trading in the firm's stock. Beneish and Vargus (2000) provide evidence that insider trading is related to earnings management. Bhattacharya and Daouk (2002) document that insider trading laws existed in 87 out of 103 countries in their sample, but enforcement (i.e. prosecutions) occurred in only 38. Finally, Hung (2000) and Ball (2001) argue that strong shareholder protection should attenuate management opportunism in financial reporting. Managers in weak shareholder protection environments are more likely to manipulate earnings than managers in strong shareholder protection environments. For example, mechanisms by which shareholders might sue directors for losses incurred due to manipulated financial reports are more plentiful in the U.S. than in Germany (La Porta et al., 1998; Hung 2000). Hence, the higher anticipated cost to the managers of engaging in manipulation in the U.S. might be expected to deter such behavior. Rezaee (2004) argues that conformity with existing regulations as well as recent reforms may not be sufficient to restore investor confidence. The author provides a supply chain paradigm with interrelated controls to make the reporting process more effective. Using a sample from 22 countries, Hope and Rotman (2002) investigated the relations between EPS forecast accuracy and the degree of enforcement of accounting standards. They constructed a comprehensive measure of enforcement of five countries levels factors including audit spending, insider trading laws, judicial efficiency, rule of

law, and shareholder protection law and found that strong enforcement is associated with higher forecast accuracy. This finding is consistent with the hypothesis that enforcement encourages managers to follow pre-scribed accounting rules, which in turn, reduces analysts' uncertainty about future earnings. They also found the evidence consistent with enforcement being more important when more choice among accounting methods is allowed. Cohen et al. (2004) examined whether financial reporting appears to have improved post-Sarbanes–Oxley. The authors have studied earnings management and relative earnings informativeness in two time-period regimes that they called the “pre-Sox” period (1987 through the second quarter of 2002) and the “post-Sox” period (the third quarter of 2002 through the end of 2003). The “pre-Sox” period is then further divided into two periods: the “pre-scandal” period (1987 through the time of the Enron collapse) and the “scandal” period (the time of the Enron collapse through the passage of Sarbanes–Oxley). The authors find evidence of increasing earnings management throughout the “pre-scandal” and “scandal” time periods, with the increases found primarily in poorly performing industries. The authors further found that the earnings management is positively associated with compensation derived from bonus and option compensation. Following the passage of Sarbanes–Oxley, they found that the trend of increasing earnings management reversed abruptly.

Bharath et al. (2009) investigated the effect of capital structure decisions on level of information asymmetry by using a novel information asymmetry index based on measures of adverse selection developed by the market microstructure literature. Their index relies exclusively on measures of the market's assessment of adverse selection risk rather than on ex-ante firm characteristics. They find that information asymmetry does affect the capital structure decisions of the U.S. firms over the sample period 1973–2002. Copeland and Galai (1983) focusing on adverse selection, argued that in markets which there are presenting many unaware dealers, market-makers increase Bid-Ask spread of stocks to cover adverse selection risk. On the basis of the Copeland and Galai's information asymmetry model, there are two kinds of dealers in markets: Liquidity dealers and informed dealers. Informed dealers are dealing only because they have inside information that isn't reflected in market prices yet. While liquidity dealers (uninformed dealers) begin to deal because they have cash in hand. However these models are focusing on relations between Bid-Ask spread and informed dealers. Market-makers incur loss by dealing with informed dealers.

According to this model, presence of information asymmetry in the market leads to the increasing level of Bid-Ask spread (Glosten and Milgrom, 1985).

Kim and Verrechia (1994) focused on the effect of information asymmetry on trading informed dealers at the

time of earning announcement and documented that some informed dealers such as main stockholders have informative advantageous to others and upon that have ability to well evaluation of company's performance from earning announcement. They discuss the effect of these announcements in these two ways:

Firstly, the market is constituted from individuals that have different abilities to handle information. Based on this approach, information asymmetry has no increases before earning announcement. Because some dealers are able to better discover the content of the information and this handling of information, not necessary information asymmetry, makes increases the level of the transaction in a poor liquidity environment. Under this condition, uninformed dealers don't engage in transaction because of increasing of Bid-Ask spread (Ho and Stoll, 1981). Kyle (1985) and Easley and O'Hara (1992) in their studies, found that at the time of increasing of information asymmetry, increases in level of the transaction. Demski and Feltman (1994) and also Mc Nichols and Trueman (1994) concluded that it is important to consider period before earning announcement beside the period after earning announcement. They believe investors who have short term period investment perspective are seeking for inside information before earning announcement. So it means before earning announcement we can see high level of information asymmetry. Other studies showed similar results. Libby et al. (2003) considering companies listed in Toronto Stock Exchange found that before the earning announcement, the level of Bid-Ask spreading has increased. Uysal (2008) regarding the relations between Audit's fee and information asymmetry, documented that increase in the demand (supply) of auditing services, holding all else constant, is associated with a decrease (increase) in information asymmetry and credit risk. In summary, Zhou (2004) investigated the association between increased accounting disclosures and bid-ask spreads based on the implementation of new auditing standards in China. He found that in the cross-sectional analysis, Chinese companies experienced significant reduction in bid-ask spread subsequent to their adoption of new auditing standards after controlling various firm characteristics and other market liquidity variables. Moreover, Almutairi et al. (2006) studied the relationship between audit quality and information asymmetry. Using data from 38,187 firm-years in period 1992 to 2001, they documented that information asymmetry is negatively related to the employment of an industry specialist auditor and positively related to audit firm tenure. On the other hand, Bhattacharya et al., (2009) in a similar study evaluated the relationship between earnings quality and information asymmetry. Considering data from all New York Stock Exchange and National Association of Securities Dealers Automated Quotation firms between 1997 and 2004, they find that poor earnings quality is significantly and incrementally associated with higher information asymmetry. Both innate and discretionary

components of earnings quality contribute significantly to the information asymmetry and further, poor earnings quality exacerbates information asymmetry around earnings announcements, especially for firms where earnings represent the principal source of information. The SEC implemented Regulation Fair Disclosure in October 2000.

This regulation prohibits firms from disclosing value relevant information to selective capital market participants without simultaneously disclosing the same information publicly. Some were concerned that Regulation Fair Disclosure would cause a decrease in the quality and quantity of information about firms because managers: (1) would not want to divulge too much information broadly and risk that competitors would exploit the information and (2) would not want to risk legal liability from inappropriate disclosure. Studies published in the academic literature have provided some information about this issue.

Gintschel and Markov (2004) use a sample of financial analysts' earnings forecasts and stock recommendations between October 1999 and October 2001 to investigate whether Regulation Fair Disclosure affected how information is communicated to capital market participants. They found that the stock price impact associated with analysts' information dropped by an average of 28% from pre-Regulation levels for the same analysts. They interpret this finding as consistent with a reduction in the flow of private information from managers to analysts. The stock price impact reduction is significant for both stock recommendations (22%) and earnings forecasts (34%).

The authors also found that the price impact for information from prestigious analysts and optimistic analysts decreased the most. The authors believe this is a support for the change being caused by Regulation Fair Disclosure rather than other confounding changes and because prestigious analysts and analysts providing optimistic outlooks were more likely to be receiving valuable private communications in the pre-Regulation Fair Disclosure era. Also, the stock price impact drop was especially large for stocks with the highest market-to-book ratios. The authors believe that analysts would have required and received more specific and firm-internal knowledge from these high growth firms pre- Regulation. The authors interpret their findings in totality as evidence that regulation fair disclosure has reduced selective disclosures to financial analysts.

However, compared with huge amount of researches which were done in various areas that indirectly caused to creation of information asymmetry, a few studies are traceable on direct mechanism to decrease the level of information asymmetry.

## Research hypotheses

Due to the importance of the study, research problem,

and research objectives, the following hypotheses are postulated:

**H<sub>1</sub>**: There is a difference between different respondents' viewpoints on the perceiving importance of wide spreading general accounting education to reduce information asymmetry.

**H<sub>1a</sub>**: There is a difference between the high and low expert respondents' viewpoints on perceiving importance of wide spreading general accounting education to reduce information asymmetry.

**H<sub>1b</sub>**: There is a difference between the high and low educated respondents' viewpoints on perceiving importance of wide spreading general accounting education to reduce information asymmetry.

**H<sub>1c</sub>**: There is a difference between the practitioners oriented and academic oriented respondents' viewpoints on perceiving importance of wide spreading general accounting education to reduce information asymmetry.

**H<sub>1d</sub>**: There is a difference between the male and female respondents' viewpoints on perceiving importance of wide spreading general accounting education to reduce information asymmetry.

**H<sub>1e</sub>**: There is a difference between the young and adult respondents' viewpoints on perceiving importance of wide spreading general accounting education to reduce information asymmetry.

**H<sub>1f</sub>**: There is a difference between the Accounting field educated and management field educated respondents' viewpoints on perceiving importance of wide spreading general accounting education to reduce information asymmetry.

**H<sub>2</sub>**: There is a difference between different respondents' viewpoints on perceiving importance of increasing governmental supervision to assure and protect small stockholders interests and to reduce information asymmetry.

**H<sub>2a</sub>**: There is a difference between the high and low expert respondents' viewpoints on perceiving importance of increasing governmental supervision to reduce information asymmetry.

**H<sub>2b</sub>**: There is a difference between high and low educated respondents' viewpoints about the perceiving importance of increasing governmental supervision to reduce information asymmetry.

**H<sub>2c</sub>**: There is a difference between the Practitioner oriented and academic oriented respondents' viewpoints on perceiving importance of increasing governmental

supervision to reduce information asymmetry.

**H<sub>2d</sub>:** There is a difference between the male and female respondents' viewpoints on perceiving importance of increasing governmental supervision to reduce information asymmetry.

**H<sub>2e</sub>:** There is a difference between the young and adult respondents' viewpoints on perceiving importance of increasing governmental supervision to reduce information asymmetry.

**H<sub>2f</sub>:** There is a difference between the accounting field educated and management field educated respondents' viewpoints on perceiving importance of increasing governmental supervision to reduce information asymmetry.

**H<sub>3</sub>:** There is a relationship between the level of experience of respondents' and their perceiving importance of wide spreading general accounting education to reduce information asymmetry.

**H<sub>4</sub>:** There is a relationship between the age of respondents' and their perceiving importance of wide spreading general accounting education to reduce information asymmetry.

**H<sub>5</sub>:** There is a relationship between the level of experience of respondents' and their perceiving importance of increasing governmental supervision to reduce information asymmetry.

**H<sub>6</sub>:** There is a relationship between the age of respondents' and their perceiving importance of increasing governmental supervision to reduce information asymmetry.

**METHODOLOGY**

Since this study tends to recognize the effects of two main factors to reduce information asymmetry and describe current overall knowledge about them perceiving importance, it is classified as an applied research. Moreover, by considering that the current research investigates differences in respondent's perceptions of suitable information asymmetry reduction ways, and we are associated with numerous individuals of accounting environment and system, hence the research method of current study is descriptive. To determining study domain, social theories in general and organization theories in particular are analyzed in three levels including micro, macro and medium. The level of analysis of this study upon which it has captured individuals is macro. Also for handling troublesome attitudes which is the case of hypotheses in this study, the focus of the analysis is determining the level of variation in respondents' perceiving importance of convenient information asymmetry ways on the basis of their experience and personal attitudes.

Finally similar to other survey studies (Salehi et al., 2008 a, b; Salehi and Azary, 2009) in which the unit of analysis is human; in current study also the unit of analysis is the entire engaged individuals in providing, handling, controlling, disclosing and using

accounting information process.

**Population of the study and data collection**

In order to test the hypotheses of the study, financial society constitutes our statistical population. We specially, use the response of accountants, auditors, bank specialists, stock analysts, and accounting students as five agents of that society that may cover our sample. Regarding the research methodology, the suitable instrument for gathering such data is questionnaire. Therefore, to get accurate answers for the research questions, the authors designed and developed the most suitable questionnaire for this study. The questionnaire contained two parts namely (A) bio-data and (B) this section included several questions regarding the conditions of current accounting general education and also governmental supervision in Iran. Five-Point Likert Scale questionnaire was employed in this research. The Five-Point Likert's scale having the ratings of "strongly disagree" (1) and "strongly agree" (5) were used. Before distributing the questionnaires, the validity of the questionnaire was assured by the help of some experts. However to decide on reliability, Cranach's Alpha tests showed value of 0.89 which is higher than the minimum necessary level of 0.70.

**RESULTS AND ANALYSES**

Out of 400 questionnaires distributed among the various respondents, only 281 usable questionnaires were collected from the different participants. 233 questionnaires were collected from BA level students and 48 questionnaires were collected from MA and PhD students. Table 1 shows the general information of the participants.

As this table indicates, the majority of participants, i.e., 109 participants, were between 26 to 30 years old (39 per cent); further 63 per cent of participants were male compared with only 37 per cent of participants who were female. Also 194 participants were working as accountants and financial managers (69 per cent). To conclude, one can say that the majority of the participants were male and they were accountants of entities as well.

**Testing of H<sub>1</sub>**

As mentioned before, in present study six main hypotheses were postulated; hereunder the testing of hypotheses is elaborated.

**Testing of the first hypothesis  
Test of the sub-hypotheses**

$$\begin{cases} H_0: \mu_1 = \mu_2 \\ H_1: \mu_1 \neq \mu_2 \end{cases}$$

For H<sub>1a</sub>, H<sub>1</sub> claims that there is a meaningful difference between high and low expert respondents' viewpoints about perceiving importance of wide spreading general accounting education to reduce information asymmetry. Based on the variable structure of the study, we use the

**Table 1.** Demographic information of participants.

Demographic	Overall frequency	Percentage
<b>Age of participants</b>		
Under 25	25	9
Between 26 to 30	109	40
Between 31-35	84	30
Over 35	63	21
<b>Gender of participants</b>		
Male	176	63
Female	105	37
<b>Educational background</b>		
Bachelor degree	233	83
Master & PhD degree	48	17
<b>Experience</b>		
Less than 5	98	35
Between 6-10	106	38
Between 11-15	42	15
More than 15	35	12
<b>Work area</b>		
Accountant and manager	194	69
Stockholder and analyst	10	4
Bank specialist	26	10
Auditor	35	12
Accounting student	16	5

Mann-Whitney nonparametric method to test this sub-hypothesis. The results of testing of  $H_{1a}$  are shown in Table 2.

As a result of inferential statistics for sub-hypothesis 1,  $H_1$  was rejected in 95% meaningful levels ( $\alpha=0.05 < P\text{-Value}=0.197$ ). On the other hand, there is no meaningful difference between high and low experts' viewpoint about perceiving importance of wide spreading general accounting education to reduce information asymmetry. Similar test done for sub-Hypothesis 1 was also repeated for each of the  $H_{1b}$  to  $H_{1f}$ . As the results of the statistical tests show in Table 2, for each of  $H_{1b}$ ,  $H_{1d}$ ,  $H_{1e}$  and  $H_{1f}$ , since their P-Values are higher than meaningful level of 0.5, therefore for all of the above hypotheses,  $H_1$  was rejected so there is no meaningful difference between the investigated groups' viewpoint. However, for  $H_{1c}$ ,  $H_1$  was accepted in 95% meaningful levels ( $\alpha=0.05 > P\text{-Value}=0.041$ ) thus, at last, practitioners' viewpoint about perceiving importance of wide spreading general accounting education to reduce information asymmetry is different from academic's view and based on Table 2, practitioners are more willing to increase general accounting education for non-accountants users.

## Testing of $H_2$

Similar test which was done for the first sub-hypothesis also was done for the sub-hypotheses of second main hypothesis with the aim of Mann-Whitney test. The results are summarized in Table 3.

$$\begin{cases} H_0: \mu_1 = \mu_2 \\ H_1: \mu_1 \neq \mu_2 \end{cases}$$

In this hypothesis,  $H_1$  claims that there is a meaningful difference between various respondents' viewpoints about perceiving importance of increasing governmental supervision to reduce information asymmetry.

As can be seen from Table 3, each of  $H_{1a}$  to  $H_{1f}$ , P-values' of  $H_{1a}$ ,  $H_{1b}$  and  $H_{1f}$  are higher than the meaningful level of 0.5, therefore, for all of these hypotheses,  $H_1$  was rejected. Thus there is no meaningful difference between investigated groups perceiving importance of increasing governmental supervision. While on the other hand, for sub hypotheses 3, 4 and 5,  $H_0$  was rejected in 0.95 meaningful levels ( $\alpha=0.05 > P\text{-value}=0.048$  and  $0.030$

**Table 2.** Results of testing of sub hypotheses of first main hypothesis.

hypotheses	Variables	Compared groups	Respondents	Sum of rank	Mean Rank	Z	P-value	Result of test
H <sub>1a</sub>	Experience	Low Experiences High experiences	204 77	27993 11628	137.22 151.02	-1.289	0.197	H <sub>1</sub> rejected
H <sub>1b</sub>	Education	Bachelor Master and PhD	233 48	33216 6405	142.56 133.44	-.719	0.472	H <sub>1</sub> rejected
H <sub>1c</sub>	Work area	Practitioner Academic	194 16	20936 1219	107.92 76.19	-2.042	0.041	H <sub>0</sub> rejected
H <sub>1d</sub>	Gender	Male Female	176 105	23982.5 15638.5	136.26 148.94	-1.285	0.199	H <sub>1</sub> rejected
H <sub>1e</sub>	Age	Less than 30 More than 30	134 147	18636 20985	139.07 142.76	-.385	0.700	H <sub>1</sub> rejected
H <sub>1f</sub>	Field of study	Accounting Management	195 86	26374.5 13246.5	135.25 154.03	-1.814	0.070	H <sub>1</sub> rejected

**Table 3.** Results of testing sub hypotheses of second main hypothesis.

Hypotheses	Variables	Compared groups	Respondents	Sum of rank	Mean rank	Z	P-value	Result of test
H <sub>2a</sub>	Experience	Less Experiences High experiences	204 77	29565 10056	144.93 130.60	-1.338	0.181	H <sub>1</sub> rejected
H <sub>2b</sub>	Education	Bachelor Master and PhD	233 48	32477.5 7143.5	139.39 148.82	-.743	0.457	H <sub>1</sub> rejected
H <sub>2c</sub>	Work area	Practitioner Academic	194 16	20922.5 1232.5	107.85 77.03	-1.980	0.048	H <sub>1</sub> accepted
H <sub>2d</sub>	Gender	Male Female	176 105	23405 16216	132.98 154.44	-2.172	0.030	H <sub>0</sub> rejected
H <sub>2e</sub>	Age	Less than 30 More than 30	134 147	20450.5 19170.5	152.62 130.41	-2.321	0.020	H <sub>0</sub> rejected
H <sub>2f</sub>	Field of study	Accounting Management	195 86	27194 12427	139.46 144.50	-.486	0.627	H <sub>1</sub> rejected

and 0.020) thus, at last, for these sub-hypotheses, there is a meaningful difference between investigated groups in those sub-hypotheses. Based on the result of sub-hypothesis 3 tests, practitioners' viewpoints about perceiving importance of increasing governmental supervision to protect investors' right and reduce information asymmetry is different from academics' and practitioners are more willing to increase governmental

supervision. In similar findings about this case, for sub-hypothesis 4, males' viewpoints are also different from females' and females are more willing to wide spreading governmental supervision. However, as the result of the sub-hypothesis 5 show the adult respondents' views are not in the same direction as young respondents and comparing to adult respondents, young respondents demand much governmental supervision.

**Table 4.** Spearman's correlation tests for third main hypothesis.

Hypotheses	Investigated variables	Number of participants	Correlation coefficient	Sig. P-value	Result of test
H <sub>3</sub>	X <sub>1</sub> : Experience of participants X <sub>2</sub> : participants' perception of importance of wide spreading general accounting education	281	0.083	0.165	H <sub>1</sub> rejected
H <sub>4</sub>	X <sub>1</sub> : Age of participants X <sub>2</sub> : participants' perception of importance of wide spreading general accounting education	281	0.044	0.467	H <sub>1</sub> rejected
H <sub>5</sub>	X <sub>1</sub> : Experience of participants X <sub>2</sub> : perception of increasing governmental Supervising	281	-.039	.519	H <sub>1</sub> rejected
H <sub>6</sub>	X <sub>1</sub> : Age of participants X <sub>2</sub> : perception of increasing governmental Supervising	281	-.134	0.025	H <sub>0</sub> rejected

### Testing of H<sub>3</sub>

H<sub>3</sub> to H<sub>6</sub> are designed to investigate the probability of existing meaningful relationship between two variables of experiences and age of the respondents with their perceiving importance of increasing governmental supervision and wide spreading accounting general education. H<sub>3</sub> specially tends to determine whether there is a meaningful relationship between the experience level of respondents and their perceiving importance of wide spreading accounting general education. Hereunder the testing of hypothesis is elaborated:

$$\begin{cases} H_0: \rho = 0 \\ H_1: \rho \neq 0 \end{cases}$$

Because of the ordinal scale of the variables' data and in order to analyze the research hypotheses, we employed Spearman's correlation nonparametric statistical method for which the results are shown in Table 4.

As Spearman's correlation tests for H<sub>3</sub> show ( $\alpha = 0.05 < P\text{-Value} = 0.165$ ), H<sub>1</sub> was rejected in 0.95 meaningful levels. On the other hand, there is no meaningful relationship between the experience level of respondents and their perceiving importance of wide spreading accounting general education to reduce information asymmetry.

### Testing of H<sub>4</sub>

In similar direction to H<sub>3</sub>, H<sub>4</sub> tends to determine the probability of existing meaningful relationship between respondents' age and their perceiving importance of wide spreading accounting general education to reduce information asymmetry.

As Spearman's correlation tests for hypothesis 4 show in Table 4, H<sub>1</sub> was rejected in 0.95 meaningful levels ( $\alpha = 0.05 < P\text{-Value} = 0.467$ ). Thus, there is no meaningful relation between age of the participants and their perceiving importance of wide spreading accounting general education to reduce information asymmetry.

### Testing of H<sub>5</sub>

H<sub>5</sub> tends to determine the probability of existing meaningful relationship between experience level of respondents and their perceiving importance of increasing governmental supervision to reduce information asymmetry. As shown in Table 4, for this hypothesis, H<sub>1</sub> was rejected in 0.5 meaningful levels ( $\alpha = 0.05 < P\text{-Value} = 0.519$ ). Therefore, there is no meaningful relation between the experience level of the participants and their perceiving importance of increasing governmental supervision to reduce information asymmetry.

### Testing of H<sub>6</sub>

H<sub>6</sub> attempts to determine the meaningful relation between respondents' age and their perceiving importance of increasing governmental supervising in order to reduce the information asymmetry. As results show in Table 4, for this hypothesis, H<sub>1</sub> was accepted in 0.5 meaningful levels ( $\alpha = 0.05 < P\text{-Value} = 0.025$ ). Thus, their perceiving importance of increasing governmental supervising is reversely correlated with their age. Furthermore, with their age going up, they believe that there is no need for high level of governmental supervision to reduce information asymmetry.

## DISCUSSION

Based on the results of the study, handling information asymmetry is very important for financial society since there is a probability that managers know more about the real value of the firm than investors, thus there must be an adequate regulation to assure that financial information of entities is presented in a reliable and correct and on time manner delivered to investors and other users and also to assure that users have sufficient ability to understand informative content of released financial statements. To sort out these problems, as the research results show, participants want accounting profession to provide a convenient environment and strengthen its presence and regulation in capital market. Moreover, they seek to enhance financial wisdom in Iran's financial society where the ultimate suitable releasing of accounting information would lead to optimal allocation of economic resources and maximization of wealth and social welfare.

## Conclusion

The present structure of financial reporting system and its usefulness is universal in the sense that it meets the requirements of users independent of any culture. The results of this survey show that amount of the experience, level of the education, gender, as well as the field of study or education have no effect on perceiving importance of wide spreading general accounting education and increasing governmental supervision in order to information asymmetry reduction goal. While one can interpret that there is no sufficient knowledge in our financial society to perceive the importance of forgoing factors, on the other hand, it can be interpreted that the importance of those factors is evident for all investigated groups. The study also revealed that compared with the academics, accounting practitioners and profession believe and are more willing to wide spreading general accounting education and increasing governmental supervision as the two main tools to reduce the level of information asymmetry. Moreover it was documented that there is a reverse relation between the age of participants and their perception of the increasing governmental supervision and upon that younger participants demand high level of governmental supervision in market capital for handling unwanted information asymmetry.

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