The Effects of Materiality Threshold and Managers’ Voluntary Incentives on Disclosure of Information in the Financial Statement of Companies Listed in Tehran Stock Exchange

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ABSTRACT

In this research, mandatory and voluntary incentives of disclosure, in the financial statement as a whole, have been tested. A sample of 98 companies active in Tehran stock exchange (TSE) and audited by Iran Auditing Organization (IAO) selected to test the research hypotheses. Study period selected, 1379 and 1380, as the fiscal year of before and after of the obligation to comply audit manual partially revised to include audit risk management as a base for materiality threshold. Research results is showed statistically significant impact of disclosure variables, include materiality threshold, earning response coefficient (ERC), proprietary cost (pc), on the disclosure in the financial statements. But the impact for the amount of capital provided by the company was no statistically significant.

KEYWORD

Materiality Threshold, Voluntary disclosure, Mandatory disclosure, Tehran Stock

INTRODUCTION

The main role of financial reporting is effective transfer of information to people outside of the organization, reliable and timely manner. Administrators can use the information to improve the effectiveness of their Business Financial Statements, as a means to convey information to actual and potential investors and creditors. One of the ways to transmit information is the disclosure through Financial Statements.

Under the statement of financial reporting theoretical concepts of IRAN, the goal of financial statements is to provide summarization and classification information about financial position, financial operation and financial flexibility, which is useful for a wide range of users of financial statements, in making good economic decision (committee of audit organization, 2008). In this context, this disclosure decision is a strategic one for management because the information is important. That is affected of manager's behavior and motives and therefore the main objective of this paper is the director's incentives in disclosing the information [34].

Prepare of financial reporting based of managers' reporting decision [22], or in other word based on managers' mandatory and voluntary incentives, is one of the best important case in the literature of information disclosure. Between, the empirical researches of disclosure of information have been important, because have the most role in the literature of disclosure [7].

In models (Verrecchia, 2001), theatricals and empirical researches, which as in advanced countries (Cooke, 1989; Meek et al, 1995; Depoers, 2000; Collett & Hrasky, 2005) or emerging countries (Hossain et al, 1995; Chau & Gray, 2002; Ferguson, 2002; Al-Razeen & Karbahi, 2004; Leventis & Weetman 2004; Ghazali, & Weetman, 2006; Hossain & Taylor, 2007;Al-Shammari, 2008; Wang, 2008), didn't use mandatory disclosure based on materiality threshold and versus. The research of Heitzman and et al (2010) is a case of exception in this context, tested the manager's mandatory and voluntary incentives, together.

Under the international auditing standard No. 320, as "materiality in planning and performing an audit, the financial reporting frameworks, often discuss the concepts of materiality in the context of preparation and presentation of financial statements. Although, financial reporting frameworks, may discuss materiality in different terms, they generally explain that, misstatement including omissions, are considered to be material if they, individually or in the aggregate, could reasonably be expected to influence the economics decision of users taken on the basis of the financial statement and this will be a frame of reference to the auditor in determining materiality for the audit. Hence,
the auditor shall include in the audit documentation the following amounts and the factors considered materiality for the financial statement as a whole and if applicable, the materiality level or levels for particular classes of transactions, account balances or disclosures [25]. But the main question is that how much is effective the exits (or dis exits) materiality in financial statement.

Just when could discuss the both of the managers' mandatory and voluntary incentives, that there was a career, legal obligation and a career no legal obligation in reporting of item or items of financial statements [21].

In Iran, until 1999, was not any accounting standard about disclosure and until 2000 was not any materiality threshold based on legal. Coues of This statues, is possible to test two context of research, one test of voluntary disclosure and mandatory disclosure based on making principle for two career before and after of 1999 and other, test of voluntary disclosure and mandatory disclosure based on materiality threshold before and after of 2000, that it is our goal test of voluntary and mandatory disclosure based on materiality threshold and in the financial statement as a whole.

To determine the managers’ incentives in disclosure of information in financial reporting, should be consider not only the voluntary incentives but also the mandatory incentives such as materiality threshold. So, We have classified the process of disclosing information to the three specification including: (1) voluntary disclosure without requirement of materiality threshold, (2) mandatory disclosure based on materiality threshold and (3) disclosure with both of voluntary and mandatory disclosure [21].

One of theories about managers incentives to disclose of information is voluntary disclosure or theory based on cost – benefit. According to this theory, managers disclose information when the benefits exceed the costs of preparing and reporting information [42],[43].

In the Verrecchia model (1983), cost is proprietary in nature. In this setting disclosing more information is akin to letting your competitors know more about you. This attracts a loss of competitive advantage for your firm. Proprietary cost, however, is only one dimension of the costs of disclosing. Skinner (1994) suggests that firms will voluntarily disclose bad news. The incentive for such disclosure is motivated from the fear of incurring legal liability for withholding information from the market. More generally, disclosure costs are not limited to proprietary costs or the litigation cost suggested by skinner.

The cost of disclosing proprietary information will be the cost that Organization will incur for disclosing its proprietary information and its potential use by competitors. In other words, the release of accounting statistics about a firm may be useful to others specially competitors, Because they can understand the companies' strategies with using this information and are faced with risk the prospect of the company and can lead to Possible reduction in future cash flows. Thus, the manager will be reluctant to disclose information even if the information favorable [18],[42],[43]. This is important especially for small companies listed in stock exchange [30].

On the other hand, manager would tend to disclose information, if increase competition in the market. Because it is intended withheld information (proprietary cost) in company’s pricing by dealers and lead to lower prices. Therefore, it could not justify keeping information by manager. As a result, if the market is more competitive, will be less to maintain information and subsequent information maintenance cost (proprietary cost).

The cost of litigation risk appears when the manager withholds the firm’s news, especially bad news [13],[16],[27],[29],[37],[38],[39],[46]. So, the stockholders claim a lawsuit against managers, because investors allege that their prior expectations regarding firm value were too high and those overly optimistic expectations were based on the firm’s disclosures. Hence, withholding of information Caused a risk called legal risk and arises when there is a possibility of non – compliance legal provision related to trade and the litigation risk from parties to the transaction. Legal risk can lead to being discrediting risk of the transaction from a party to the transaction (credit risk). Because both sides are searching a legal way for questioning the validity of transaction [32].

On the other hand, voluntary disclosure of information has benefits that motivate managers release information voluntarily [21]. The benefits of this disclosure will be provided for supplier and demanded capital. On the one hand, Manager expects to obtain a greater share of market through certain amount of information disclosed in the capital market and the other hand, Provider of capital investment would be concerned about his expected return. However, investors uncertainty about the expected return of the firm will reduce with voluntary disclosure of information by the director and will drop companies financial cost. Consequently, investment increase in the company and the manager provides the company required financial resources.

If the rules and regulation is specified the standard other than cost – benefit under the materiality threshold for information disclosure, decision of disclosure just will be based on important of information. In this case, one side there is no incentive of benefit of voluntary disclosure as increase capital and expected return for suppliers of capital, and also other side, there is no incentive to reduce costs arising voluntary disclosure such as proprietary and litigation cost. In other words, the materiality threshold will be the main role in this scope of disclosure and its relationship with voluntary disclosure variables will be representing the effect of materiality threshold on the measure of voluntary disclosure.

Because of the relation between materiality and qualitative characteristics of relevance, type of information (good or bad news), amount of information, sensitivity of stock return (ERC) and effects of disclosed information on dishonor risk (Information relevant creditors), because of effects on materiality threshold, impacted on making decision. Hence, the amount of disclosed information, based on cost – benefit constraint in voluntary disclosure and materiality threshold in mandatory disclosure, will be equally in the both, voluntary disclosure and mandatory disclosure. Also the
sensitivity of investor’s decision to disclosures made by firm will be equally in the both models, voluntary and mandatory disclosure [21].

A. Disclosure History

With regard to the taxonomy, suggested three broad categories of disclosure research in accounting. The first category of research is work whose primary concern is how exogenous is associated or related to, the change or disruption in the activities of investors who compete in capital market settings as individual, welfare- maximizing agents. This research dubbed "associated – based disclosure". The distinguishing feature of work in this category is that it studies the effects of exogenous disclosure on the aggregate or cumulative change in investors’ actions, primarily through the behavior of asset equilibrium prices and trading volume. The second category is work that examines how managers and/or firms exercise discretion with regard to the disclosure of information about which they may have knowledge. This research dubbed "discretionary- based disclosure". The distinguishing feature of work in this category is that is treats disclosure as endogenous by considering managers’ and/or firms’ incentives to disclose information known to them; typically this is done in the context of a capital market setting in which the market is characterized as (simply) a single, representative consumer of disclosed information. The third category is work that discussed which disclosure arrangements are preferred in the absence of prior knowledge of the information, that is, ex ante. This research dubbed "efficiency- based disclosure". The distinguishing feature of work in this category is that it examines unconditional disclosure choices; typically this is done in the context of a capital market setting in which the actions of individual, welfare- maximizing agents are endogenous [43].

B. Materiality History

Materiality defines the threshold between the important and the trivial [21]. A concrete definition of materiality that is useful in actual application has eluded the accounting literature. FASB in concepts statement No.2 defines materiality as:

"The magnitude of an omission or misstatement of accounting information that, in the light of surrounding circumstances makes it probable that the judgment of a reasonable person relying on the information would have been changed or influenced by the omission or misstatement".

The Auditing Standards Board incorporates the FASB’s definition into statement of Auditing Standards (SAS), No. 47 Sec. AU31210:

"… Consideration of materiality is a matter of professional judgment and is influenced by [the auditor’s] perception of the needs of a reasonable person who will rely on the financial statements”.

Similarly, the SEC in regulation S-X, rule 1-02 defines material by stating that:

"When used to quality a requirement for the furnishing of information as to any subject, limits the information required to those matters about which an average prudent investor ought reasonably to be informed".

These definitions put the primarily burden of determining materiality on the auditor. Therefore, the auditor must be able to identify the various users of financial statements. Surmise how they make decisions, and then judge materiality so as to satisfy the needs of all users. The supreme curt in TSC industries (1976) noted that determinations of materiality require "delicate assessments of the inferences a "reasonable shareholder” would draw from a given set of facts and the signification of those inferences to him…”.

In August 1999, the SEC issued Staff Accounting Bulletin (SAB), to provide guidance to registrants and auditors on assessing the materiality of misstatements that occur during the financial reporting process. The SEC did not attempt to change current definitions or law, but instead emphasized to practitioners the importance of considering qualitative factors, misstatements (both individually and in the aggregate), and management intention in assessing materiality.

Registrants and auditors are reminded in SAB 99 that while a numerical threshold may serve as an initial step in assessing materiality, all the relevant circumstance (including qualitative factors) must be considered. Relatively small misstatements can be determined to have a material effect on financial statements. For example, even a relatively small amount can be considered material when it makes a change earning, hides a failure to meet analysis expectations, changes a loss into income (or vise versa), affects compliance with loan covenants or regulatory requirement, or involves concealment of an unlawful transactions. However, cost benefit considerations are a factor in the decision of whether a small misstatement should be corrected. Registrant and auditors must also contemplate whether a known misstatement might result in a significant positive negative reaction in the market when assessing materiality. SAB 99 further required that misstatement be considered both individually and in the aggregate in the materiality assessment. Auditors must be especially cognizant of misstatements that offset the effect of other misstatement and prior period misstatements that may potentially cause future financial statements to be materiality misstate. Any international misstatement that might normally be considered to be an international amount is considered material by nature of the intention. In certain circumstances international misstatements of any amount may be considered unlawful, but are always considered inappropriate.

While the courts, SEC, FASB, Generally Accepted Auditing Standards (GAAS), researchers and others have attempted to define the threshold for materiality, they have only been able to provide guidance. Auditors must make the materiality judgment.
C. Tehran Stock Exchange
The idea of setting up in Iran a well – established stock exchange goes back to the 1930s. In 1967, the first security law came to force and, soon after in 1968, Tehran Stock Exchange (TSE) established and started trading shares of a limited number of banks, industrial companies and state-backed securities.

Due to the rapid and sharp rises of Oil prices in the mid-1970s, the TSE showed a rapid growth in terms of the number of shares and the level of prices. In 1977-1978, the annual value of shares traded in TSE reached 628 Million USD and the number of companies listed in the Exchange exceeded 105 with the net capital of 3.5 Billion USD.

During the imposed Iran-Iraq war (1980-1988), the level of transactions had gone done severely. Accepting the United Nations Resolution – 598 by Iran and consequently the ceasefire with Iraq, the start of the first "five year economic development plan" and the privatization programme work the TSE up from a long sleep. As a result, the TSE expanded dramatically; the number of shares traded in 1992 increased to 62.6 Million USD and TEPIX* reached 472 (1990=100).

As the index was growing very fast (The TEPEX rose to 1549 in year 1995 and to more than 1950 in year 1997), practitioners argued that there was bubble in the market which would burst shortly. In 1997, as every one expected, the bubble burst; the index fell by 21%.

In 1998 two factors helped TSE recover; first a regular increase in money supply by the central bank of Iran and secondly due to a strong recession in other real economies sectors (i.e., investment opportunities such as property, foreign exchange, etc); more and more investors decided to invest their money in the shares through TSE.

From the Nov. 1998 to Nov. 2002 the TIPEX rose from 1564 to 4918 and on the first eight months of 2003 the index reached 9512. As in 2003, the TSE Secretary General believed that there were bubbles in the market, he made an unusual and strange decision to stop any rise in the TEPIX for two weeks and banned any price increase in any shares of more than 5% a day; but the market continued to grow and reached the highest record of 13,882 in Aug-2004, the moment at which 422 companies were listed in TSE. Shortly after this harsh rise in TEPIX, the TSE experienced two political changes, appointing by the government the new Secretary General for TSE, and the presidential elections of Iran afterward the index declined dramatically below 10,000.

In the closing month of 2005, the Securities Market Act of Islamic Republic of Iran, as the most affective event, was passed and the Iranian Capital Market became more regulated. Accordingly, operational functions of the market were transferred to the newly formed Tehran Stock Exchange (TSE) Corporation while the over –sighting activities where assigned to the Security and Exchange Organization (SEO) – new supervision body. The Security Act Market allows TSE for establishing OTC markets and making operational new financial institutions such as investment bankers, etc. this event also let the core players of the market i.e. financial institutions, brokers and other individual and institutional investors to be actively involved in electing the board members of TSE Corporation.

As the changing history of the TSE shows, the market has its own features. Firstly, the TSE was totally dependent to the government and its directors were almost totally selected and managed by government officials. This sort of behavior may even continue in the future and affects the performance of the newly established TSE Corporation. Secondly, the TSE is a very small exchange compared to all well established exchanges in term of the size, turnover and the other indicators; mainly common shares and participation securities only are being traded and there are not any derivatives; nearly, impossible to hedge and the risks are very high. Thirdly, there is a great lack of knowledge and expertise among the TSEs staff as well as the brokers and investors and finally the TSE is a local Exchange with insufficient liquidity.

D. The role of voluntary and mandatory disclosure incentives on Iran financial reporting
Voluntary disclosure theory will be exist when a manager either has no affirmative duty to disclose material information or when there is a duty to disclose but the underlying information is immaterial to investors [21]. Corporation required to issuing balance sheet and performance and income statements in IRAN (12).

Nevertheless, before of year 2000, was not presentation any manual regarding materiality threshold for disclose of information in the financial statements, until the audit organization issued the audit manual (partially revised to include audit risk management) in the year 2000 that used as the base to determine materiality threshold. Therefore, the career of disclosure before 2000, director determines the minimum of information and the presentation of information in the financial statement. In this career, if materiality threshold had determined, it wouldn’t based law or principles but also it was determined with consulting of auditors. In this research, this scope of voluntary disclosure is considered voluntary disclosure before affirmative determination of materiality threshold in the career of 2000 and before this year.

Therefore, it is possible to classified Iran’ financial reporting to two career before issuing the audit manual (2000 and before it) and after issuing the audit manual (2001 and after it).

D. A) Voluntary disclosure incentives on Iran financial reporting before issuing the audit manual (2000 and before it)
Based on empirical research of yeganeh and kasiri (2003), the most important variables that affect in determining level of audit materiality were the item size, the amount of total asset, the amount of total revenue, the average of total assets and revenue, income, equity, the main quantity and the main classis of item in financial statement. In this regard, the quantity guidance based on total assets, total revenue, average those, equity (measure of 1% - 3% descending) and

* In 1990 TSE introduced a new index, TEPIX; the all –shares price index which is the main indicator of share price movement.
net income before tax (higher than 5%) has agreed to Iran\'s audit managers. Also, the application of guidance based on average of total assets and revenue with net income are improving to guide of materiality and research result indicate the need to develop quantity guidance of materiality by professional bodes (yeganeh & kasiri, 2003).

D.B) Mandatory disclosure incentives on IRAN financial reporting after issuing the audit manual (2001 and after it)

In this career, the manual of level of materiality, as average of total asset and total revenue were approved and was implemented form the year 2001 (yeganeh & kasiri, 2003). In this manual, the amount of materiality for normal condition is presented in the table (1).

<table>
<thead>
<tr>
<th>Average of total asset and total revenue (level)</th>
<th>Materiality of materiality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Until 1 Rial</td>
<td>3%</td>
</tr>
<tr>
<td>Until 10 Rial</td>
<td>2.5%</td>
</tr>
<tr>
<td>Until 100 Rial</td>
<td>2%</td>
</tr>
<tr>
<td>Until 1000 Rial</td>
<td>1.5%</td>
</tr>
<tr>
<td>Higher than 1000 Rial</td>
<td>1%</td>
</tr>
</tbody>
</table>

The average of total assets and total revenue (1% - 3% descending) with other audit manuals has been one of used and agreed manuals in career of before of issuing and enforcing the audit manual (partially revised to include audit risk management) (Yehaneh & Kasiri, 2003). So, the 5 levels presentation in picture (1) was sited as base of effects voluntary disclosure incentive in the career before of issuing manual and base of effects mandatory disclosure incentive (Materiality Threshold) after issuing manual.

E. Hypothesis Development

Based on research of Heitzman et al (2010), has used a fiscal year before implementing audit manual (2000) as career of voluntary disclosure and first year of implementing audit manual as career of mandatory disclosure for financial period of this research. To determine the effect of materiality threshold, the mandatory incentives, and manager\'s voluntary incentives on firms\' disclosure measure, are presented four hypotheses. According to literature, the variables of the amount of information and sensitivity of investors and creditors is joint in both models, voluntary and mandatory, that is because of different incentives for manager in both types of disclosure, can have a different coefficient in the research model.

E. A) Materiality Threshold

Materiality threshold is the quantitative benchmark used to determine, based on the auditor\'s professional judgment, what dollar amount of misstatement or omission in a reported financial statement element, account or item would be consider a "material misstatement" individually or in aggregation. The auditor materiality threshold generally consists to two components: a materiality base and a percentage. The materiality base is an account in the client financial statements such as revenue, gross profit, net income, total assets or total equity. The materiality base identified is multiplied by a percentage to establish the overall materiality threshold. Therefore, the auditors consider the misstatements\' percentage effect on the financial statement as well as trends in the financial statement [10].Consequently, the first hypothesis is:

H1: the coefficient of the magnitude of the disclosed information in financial statement in the year 2001 is differential from the coefficient of the materiality threshold in the year 2000.

E. B) The sensitivity of investors\' decision to disclosure

Heitzman et al (2010) hypothesized that the materiality of a piece of information depends the sensitivity of the firm\'s stock price to disclosures for an equity investor or the sensitivity of the firm\'s default risk to disclosures by the firm for debt holder. In either case, sensitivity varies across firms. Because of the stock prices of firm with a lower cost of capital are more sensitive to accounting information (see, Collins and Kothari, 1989), we use the ERC for measure the sensitivity.

H2: the coefficient of the earning response in financial statement in the year 2001 is differential from the coefficient of the ERC in the year 2000.

E. C) Propriety cost

Much research of voluntary disclosure is based on propriety cost. A potential propriety cost is any possible reduction the profit or competitive advantage attributable to disclosure of confident information. Verrecchia(1983) posits that The release of accounting statistics about may be useful to competitors, shareholders or employees in a way which is harmful to a firm\'s prospects even if (or perhaps because) the information is favorable. In other word, disclosing more information is akin to letting your competitors know more about you.

H3: the propriety cost is related with disclosure measure of companies listed in Tehran stock exchange in the financial period (2000).

E. D) Financial markets or Stock issue

The idea of having a well – organized stock market and accelerating the process of industrialization dates back to the 1930s in Iran when the Melli bank undertook a study on the subject. A report completed in 1936 worked out the details for the formation of a stock market and laid the foundations for the plan. The outbreak of World War II and subsequent economic and political events delayed of the stock exchange for the plan. The Tehran Stock Exchange (TSE) opened in April 1968. Initially only government bonds and certain state – backed certificates were traded on the market. During the 1970s, the demand for capital boosted the demand for stocks at the same time, institutional changes, like the transfer of shares of public companies and large monopolies to employees and
the private sector led to the expansion of stock market activity.

Post-revolution, Iran faced two different processes of structural change—nationalization immediately following the 1979 revolution and privatization later in 1980s. Financial reporting has gained importance in Iranian companies following international pressures from the World Bank and the International Monetary Fund (IMF) in connection with privatization. In recent years, privatization of economics entities in Iran has enhanced the need for publicly available financial information. If firms want capital from the public, they need to provide adequate levels of disclosure in their financial reports to inspire investor confidence (Mashayekhi and Mashayekh, 2008). Therefore, the fourth hypothesis is:

\[
H_4: \text{the supply of capital is related with disclosure of companies listed in Tehran stock exchange in the financial period (2000).}
\]

F. Research Method

For the purpose of estimating the research models for hypothesis testing, a sample of companies listed in Tehran Stock Exchange for the time period of 2000-2001 is used. We estimate the research models with cross-sectional data for each year. Then similarly the models are estimated for sample companies in different industrial groups.

F, A) Source of data and Methodology

For the sake of gathering the needed data related to financial statements of sample companies, we use the electronic archival data provided by TSE. In some cases that, the needed data is incomplete we use the manual archive existed in the TSE’s library. We also, acquire part of needed data from tadbirpardaz (Iranian software).

F, B) Sample and Study period

In this research, Statistical sociality has been all companies in stock exchange that were audit with the auditing committee. Because, in financial period of mandatory disclosure (2001), only companies were required to follow the instructions, that its auditor is audit committee. So, sample is selected from among these companies. Table (2) shows the selected sample of companies (98 companies).

F, C) Selection of variable

In this section, the result (how) of calculation of the independent variables and the dependent variable are presented:

The depend variable as the level of disclosure: in this research, to calculate the disclosure, we use thresholds in the table (1).

The independent variable of the magnitude of the disclosed information:

According to research of yeganeh and kasiri (2003) and the audit manual, to calculate the magnitude of the disclosed information, has used the average of total assets and revenue.

Earning Response Coefficient (ERC):

ERC is different market reaction to earning information. In other words, the earnings response coefficient, or ERC, is the estimated relationship between equity returns and the unexpected portion of (i.e., new information in) companies’ earnings announcements. The ERC is expressed as follows mathematically:

\[
R = a + b (ern - u) + e
\]

Where:

\[
R = \text{the expected return}^*;
\]
\[
a = \text{benchmark rate}
\]
\[
b = \text{earning response coefficient}
\]
\[
(ern - u) = \text{(actual earnings less expected earnings)} = \text{unexpected earnings}
\]
\[
e = \text{random movement}
\]

Table 3: Process of ERC

<table>
<thead>
<tr>
<th>Process</th>
<th>Calculate</th>
</tr>
</thead>
</table>
| 1. Average regression between normal return and normal return average (3-years) in the pre-audit manual (2000) | \[
R_{t} = a + b T_{M} R_{t-3} = 2519.83 - 99.30239TR_{M,79} + 70.4649 T_{M,79} \]
| 2. Average regression between EPS and EPS average (3-years) in the pre-audit manual (2000) | \[
\text{eps}_{t} = \beta_0 + \beta_1 \text{EPS}_{t-3} = 121122.7 - 70.4649 TEPS_{M} + 99.30239 TR_{M,79} \]
| 3. Calculate of abnormal return in post-audit manual year (2001) with the help of EXCEL | \[
\text{e}_{t} = R_{t} - 2519.83 + 99.30239 TR_{M,79} \]
| 4. Calculate of unexpected earning in post-audit manual year (2001) with the help of EXCEL | \[
\text{e}_{t} = 121122.7 - 70.4649 TEPS_{M} + 99.30239 TR_{M,79} \]
| 5. Cross-section regression between abnormal return And unexpected earning | \[
e_{t} = a + E R C e_{t} + \epsilon \]
Proprietary cost (competition index):
Herfindahl index is proxy for the proprietary costs of disclosure using industry concentration, calculated annually based on SIC codes. In this research, it is calculated based on firms’ revenue divided industry revenue in the pre-audit manual year (2000).

The firm's magnitude of capital:
This variable represents the firm's ability to attract the foreign capital. We measure the Stock issue using an indicator variable set equal to 1 if the firm issued public equity during the 3-years period ending in the pre-audit manual year.

Also we use the following control variable: ROA. Because levels of disclosure may be significantly impacted by the firm's return on assets.

F, D) Statistical tests and Model
To examine the influence of materiality threshold and voluntary disclosure, we use two logic regression models (non-linear) to test the above hypothesis. The used logistic model is multinomial logistic regression without constant (Gujarat, 2004). In the logic model, the response variable has more than two ordered, ranked or categories.

The mandatory disclosure model followed for the period after implementing audit manual (PRIARM):

\[ DisM_t = \alpha_0 + \alpha_1 Mt_t + \alpha_2 ERC_t + \varepsilon_0 \]

Where:
- Dis.M is disclosure based on materiality threshold;
- Mt is materiality threshold for measuring the magnitude of the disclosed information;
- ERC is earning response coefficient for measure the sensitivity of investors and creditors;
- \( \alpha_0, \alpha_1, \alpha_2 \) constant;
- \( \varepsilon_0 \) is residual.

For test the joint effect of materiality threshold and voluntary incentives, we added the variables of voluntary disclosure to mandatory disclosure model, therefore:

\[ DisV_t = \beta_0 + \beta_1 Mt_t + \beta_2 ERC_t + \beta_3 HH_t + \beta_4 StI_t + \beta_5 ROA_t + \epsilon_0 \]

Where:
- DisV is disclosure based on voluntary incentives (cost – benefit analyses);
- HH is proxy for the proprietary costs of disclosure using industry concentration measured as Herfindahl index.
- StI is proxy for stock issue;
- ROA the growth index;
- \( \beta_0, \beta_1, \beta_2, \beta_3, \beta_4 \) and \( \beta_5 \): coefficient and \( \epsilon \) is residual.

G. Results
G, A) Descriptive statistic
Table 4 presents descriptive statistics. The disclosing sample contains firms disclosing information in the pre-audit manual year. MT is materiality threshold in the post-audit manual year. ERC is coefficient of average regression of abnormal return on unexpected earning on the post-audit manual year; HH is Herfindahl index measured based on firms revenue divided by industry revenue in the pre-audit manual year using sic codes. Stock issue is an indicator variable set to one if the firm issued public equity during the 3-year's period ending in the pre-audit manual year. Size is Ln (total assets) in the pre-audit manual and is indicator variable for litigation risk. B-to-M is book value of equity divided by MVE measured at the end of the pre-audit manual; ROA is operating profit divided by total asset at the end of pre-audit manual year.

Based on table 4 (panel A), the average of the materiality threshold of companies of statistic community is 8.036998 that it is between the Rang 6.112974 (lowest of materiality threshold) and 12.00131 (the highest level of materiality threshold).

The earning response coefficient with the average of 0.4989694 is between the range of -0.0867 and 0.6208. It is expected the company with greater sensitivity has the greater level of disclosure and vice versa.

The mean of the concentration index with the highest value and lowest value, 4.60517 and -8.06553 is -2.057843. Vies via the concentration (i.e. competition) is a measure of proprietary cost. If the concentration is lower in market, the competition is more and whatever is more the competition in capital markets, managers will be more willing to disclose information.

The variable of stock issue is the company’s ability to attract foreign investment. Observations have shown that over 50% (about 54%) of the sample companies have capital increase during the years 1998-2000.

Profitability variable (ROA) is measure of firms’ growth. Whatever, the growth rate of companies is most, it is expected that company directors disclose greater amount of information, especially confidential information.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Observations</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dis</td>
<td>8</td>
<td>3.704082</td>
<td>0.559992</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>MT</td>
<td>8</td>
<td>8.036998</td>
<td>1.092645</td>
<td>6.112974</td>
<td>12.00131</td>
</tr>
<tr>
<td>ERC</td>
<td>8</td>
<td>0.4989694</td>
<td>0.061889</td>
<td>-0.0867</td>
<td>0.6208</td>
</tr>
<tr>
<td>HH</td>
<td>8</td>
<td>2.057843</td>
<td>-2.7259</td>
<td>-8.06553</td>
<td>4.60517</td>
</tr>
<tr>
<td>StI</td>
<td>9</td>
<td>0.795918</td>
<td>0.872951</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>ROA</td>
<td>8</td>
<td>0.175171</td>
<td>0.180907</td>
<td>-</td>
<td>0.539648</td>
</tr>
</tbody>
</table>

Table 4: Summary statistic
G. B) Z – test result

We compare the joint variables in two models, mandatory and voluntary disclosure. The $z$ – statistic results indicate that the materiality threshold is significantly related to level of mandatory disclosure ($z = 4.09, p = 0.0$) and voluntary disclosure ($z = 3.31, p = 0.001$). Also for the ERC, $z$ – statistic in mandatory disclosure model ($z = -4.08, p = 0.0$) and in the voluntary disclosure model ($z = -3.32, p = 0.001$) is associated with level of information significantly. The amount of effects MT and ERC on the amount of disclosure in the disclosure model is more than the mandatory disclosure model.

Table 5 shows test the research hypotheses using multinomial logistic regression software of Stata 9.1.

G. C) Regression result and test of hypotheses

Table 5 illustrate the result of test of research hypotheses to way multinomial logistic regression and with help of Stata 9.1.

Regarding of hypotheses 1, the result of regression tests (model1 and model 2) show significantly positive coefficient for MT. In the level 4 of disclosure, the coefficient of materiality threshold in the model 1 ($6.430668$) rather than model 2 ($7.556301$) is less about $17.5\%$. This result is in the level 5 of disclosure too. The reason is that, the magnitude of disclosed information just is determined by law (materiality threshold) during fiscal year 1380 (mandatory disclosure period) and the manager decision is no effect on disclosure. Whereas in the voluntary disclosure period, addition to the mandatory incentives, voluntary incentives involved on process of disclose of information. Hens, it disclosed important information based on materiality threshold test and unimportant information based on managers cost – benefit analysis. Thereby, increasing the amount of information disclosed. On the other hand, by comparing the levels of information can be seen, that the effect of materiality threshold increased by the per unit change in the level of disclosure.

The second hypotheses have announced the ERC is different in both of models. The comparison of this variable coefficient shows the sensitivity of investors to the disclosed income in the financial period 2001.

Regarding to third hypotheses, the type of relation of competition index with firms’ level of disclosure is positive in the voluntary disclosure period. i.e. in the market, whatever the competition among firms is more, the amount of voluntary disclosure of information is more too. Therefore, willing to withhold the information will be less and the firms incurred the less of proprietary costs.

In forth hypotheses, the relationship between stock issue and the level of information is insignificant in our considered sample.

**SUMMARY AND CONCLUSION**

In this paper, we argue that tests of voluntary disclosure incentives must be consider the role that materiality threshold plays in shaping firms disclosure. It was expected, that with determining the amount of disclosed information, based on materiality threshold, increases firms’ level of disclosure of information, especially proprietary information and reduces the information asymmetry. Research results indicate that determining the materiality threshold has been effective on the amount of disclosure of financial information. The comparison of results of estimation models, pre and post approved the audit manual, shows the requirement of audit manual and determine of materiality threshold, significantly is related to level of disclosure of information. Addition of materiality threshold on model 2000 (voluntary period) show that the effect of materiality threshold on level of disclosure in this period in more than mandatory disclosure period. Also, the sensitivity of investors’ decision on the magnitude of disclosed information has been less. This results suggest that the use of mandatory and voluntary incentives, probably to improve the process of disclosure of information. In fact, this study has been motion in order to emphasis the importance of information disclosure and financial reporting process. The results of this study are consistent with research of Heitzman et al (2010) and emphasis on empirical research of yeganeh and kasiri (2003).
Table 5: Significant at the .05 level

<table>
<thead>
<tr>
<th>model 1 mandatory disclosure</th>
<th>model 2 disclosure</th>
</tr>
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<tbody>
<tr>
<td>Dis Coef.  z  P&gt;</td>
<td>z</td>
</tr>
<tr>
<td>Level4</td>
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<tr>
<td>MT 6.43068  4.09  0</td>
<td>7.55630  3.31  0.001</td>
</tr>
<tr>
<td>ERC -96.25016  -4.08  0</td>
<td>-108.7091  -3.32  0.001</td>
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<tr>
<td>HH 0.617235  2.33  0.02</td>
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<tr>
<td>SLI -0.838037  -1.19  0.236</td>
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</tr>
<tr>
<td>ROA 6.846387  4.23  0</td>
<td>2.813116  0.77  0.443</td>
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<tr>
<td>-108.3264  -4.42  0</td>
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<tr>
<td>Level5</td>
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<tr>
<td>MT 8.144065  3.53  0</td>
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<tr>
<td>ERC -123.0599  -3.69  0</td>
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<tr>
<td>HH 0.7335412  2.06  0.039</td>
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<tr>
<td>SLI 0.1016364  0.1  0.919</td>
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<tr>
<td>ROA -9.313231  -1.95  0.051</td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES


