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DETERMINATION OF MATERIAL AND PERVASIVE MISSTATEMENT IN AUDITING

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ABSTRACT

The ultimate purpose of this study is to determine the pervasive materiality level. The sample was selected from two groups including certified public accountants employed in Iran Audit Organization (public sector) and other audit institutes (private sector) each sample comprising 60 participants. To collect the data, we used questionnaires composed of two sections, the demography and the questions related to the research. The results indicate that there is a meaningful difference between material and pervasive levels from the viewpoint of active auditors in Audit Organization and certified public accountants in private sectors. This means that there is no consensus between these two groups in determining material and pervasive level. In other words, in determining the pervasive important level, the average viewpoint of auditors in Audit Organization (public sector) in relation to certified public accountants (private sector) is the minimum. The acquired results considered 25% of total average of assets and revenue to determine the pervasive materiality level from the view point of all accountants.

Keywords: *Pervasive Material Misstatement, Iranian Certified Public Accountant, Audit Organization*

INTRODUCTION

Materiality is one of the most comprehensive and common concepts in accounting and auditing, but with a separate application (Zarrin, 2005; Khathiri, 2002). Accounting standards often discuss the concept of materiality in the context of the preparation and presentation of financial statements. According to accounting standards and International Financial Reporting Standards (IFRS's), an issue is considered to be material if it, individually or in the aggregate, could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statement; [9], [13] In auditing standards, misstatement affecting the reports of an independent auditor in the whole group have been categorized as material misstatement but non pervasive as well as material misstatement and pervasive. Naturally, judgment about materiality are made in light of surrounding circumstances and are affected by the size or nature of a misstatement, or a combination of both; [9], [13], [14]

The auditor's determination of materiality is a matter of professional judgment, and is affected by the auditor's perception of the financial information needs of users of the financial statement. The concept of materiality is applied by the auditor both in planning and performing the audit, and in evaluating the effect of identified misstatements on the audit and of uncorrected misstatements, if any, on the financial statements and in forming the opinion in the auditor's report. [9], [13]

Generally, determination of materiality levels for financial statement based on certain criteria is a matter of professional judgment. [9], [12], [13] A percentage is often applied to chosen benchmark as a starting point in determining materiality for the financial statement as a whole. [9], [13] Factors that may affect the identification of an appropriate benchmark include the following:

- The elements of the financial statement (for example, assets, liabilities, equity, capital, revenue, expenses);

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- Whether there are items on which the attention of the users of the particular entity’s financial statement tends to be focused (for example, for the purpose of evaluating financial performance users may tend to focus on profit, revenue or net assets);
- The nature of the entity, where the entity is in its life cycle, and the industry and economic environment in which the entity operates ;
- The entity’s ownership structure and the way it is financed ;and
- The relative volatility of the benchmark. [9], [13]

In recent years in Iran the average of total assets and revenue has been used, (also it still is used) as a criterion to determine the materiality level. Using the following table prepared to this end, is common.

Guideline of determine materiality level based on the instruction of the Audit Organization

Average of total assets and sale (revenue)	Materiality level (percentage)
To 1 billion Rials	3%
To 10 billion Rials	Regarding the surplus of 1 billion 2.5%
To 100 billion Rials	Regarding the surplus of 10 billion 2%
To 1000 billion Rials	Regarding the surplus of 100 billion 1.5%
Over 1000 billion Rials	Regarding the surplus of 1000 billion 1%

However, based on the conducted studies, most of the scholarly researches and professional manuals have dealt with determination of material but non pervasive misstatement and no guideline relevant to determination material and pervasive misstatement has been presented. Therefore the current study tries to take include the point of views and comment of official accountants employed in auditing institutes and auditing organization regarding material and pervasive misstatement.

The following table demonstrate the effect of material misstatement on the auditors opinion regarding the nature of issue resulting modification of the opinion and judgment of the auditor about pervasiveness of the effects or the probable effects on financial statement. [18], [9] , [15] , [17]

The type of modified opinions

Nature of issue resulting modification opinions	judgment of the auditor about pervasiveness of the effects or the probable effects on financial statement	
	Material but non pervasive	Material and pervasive
The existence of misstatement in financial statement	Qualified opinion	Adverse opinion
Limits in acquiring suitable and enough auditing documents	Qualified opinion	Disclaimer of opinion
Essential uncertainty	-----	Disclaimer of opinion

The research hypotheses:

In order to achieve the objectives of this research, a basic hypothesis and five subordinate hypotheses are identified as follows:

The basic hypothesis:

Views between auditors in the private sector and public sector auditors in determining of basic materiality levels, there are significant differences.

Subordinate hypotheses:

- 1) If the average total assets and sales to 1 billion Rials is, so there is a significant difference in the materiality level of private and public sector auditors.

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- 2) If the average total assets and sales to 10 billion Rials is, Than 1 billion Rials surplus, so there is a meaningful in the material level of private and public sectors auditors.
- 3) If the average total assets and sales to 100 billion Rials is, Than 10 billion Rials surplus, so there is a meaningful in the material level of private and public sectors auditors.
- 4) If the average total assets and sales to 1,000 billion Rials is, Than 100 billion Rials surplus, there is a meaningful in the material level of private and public sectors auditors.
- 5) If the average total assets and sales more than 1,000 billion Rials are, there is a meaningful in the material level of private and public sectors auditors.

Population and sample of statistical:

The audit managers (in audit organization- public sector) and certified public accountants (CPA's-private sector) in constitute the target population.

The capabilities and competencies of these individuals are determined and confirmed by Iran's Certified Public Accountants and Tehran's Securities and Exchange Commission, so the acceptance of this group of auditors as professional ones is justifiable.

Identifying and achievement to the aforementioned group as members of Iran's certified Public accountants was in the field of private and public auditing, and they were approximately 600 people in the research that 120 ones were selected according to kukaran formula and some questionnaires was distributed among them.

According to this formula, the number of selected sample was about 82 people, therefore we added 38 people to this sample to achieve an optimal result. This research is a practical one which tries to identify the high materiality level from the viewpoint of private and public sector auditors and also tries to compare the viewpoint of these two groups. For this purpose and with respect to the guidelines of the auditing organization over materiality level, a questionnaire was distributed between these two groups to determine the high materiality level.

METHODS OF GATHERING DATA

Two major methods are used for gathering data.

At first, a library research investigations and gathering data, then after accomplishing primary and continuous theoretical studies by field study, a questionnaire was given as a research means, and also some answers were considered for each of these questions. The purpose of this research was to gather opinions and polls over objectives and order to evaluate and measure the reliability and validity of the questionnaire, a pre-test was used by some reformists and knowledgeable people.

In pre-testing, a questionnaire was given to 20 people of the statistical Population and their answers were surveyed, and some effective and useful suggestions were given for the purpose of enhancing the validity of the questionnaire, and some essential adjustments were made and for evaluating and measuring the reliability of the questionnaire, the accumulated results were tested by SPSS software, statistical software and Cronbach's Alpha method. The Alpha coefficient was 0.77 which was indicative of high reliability.

Testing method of Research hypotheses:

In this research, both descriptive and deductive statistics have been used widely throughout it. At first, for the purposes of the research and identifying the studying Population (statistical society), the samples of the research were being analyzed, then we used the tactics of descriptive statistics like frequency, frequency percentages, the average statistics, figures and tables.

Since the volume of sample was large enough, so the distribution was almost normal, and while we intend to compare the average of these two statistical Population i.e. private and public sector's auditors, so the variance of this Population is unknown.

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T distribution is used instead of zone.

In order to evaluate this matter that there's a meaningful and public sector's active auditors, a T-test was used by SPSS software, and the amount of t and meaningful level were obtained by comparing the meaningful level in 1%, the hypothesis was being accepted or rejected i.e. if the meaningful level be less than 1% or 5%, the hypothesis is accepted and if it be more than 1% or 5% the hypothesis is rejected.

It can be stated in general that there is no consensus between private and public sector's auditors. Therefore it has been suggested that auditors base their viewpoint upon auditing standard, and accomplish this in spite of their professional judgment.

The rejection of hypothesis means that there is a consensus between private and public sectors' auditors, so we use the result of the research in the guidelines of auditing to determine the high materiality level.

The result and analysis of statistical testing of research hypotheses:

As it was already stated, the data required for testing research hypothesis was accumulated from distributing questionnaire. At first 120 questionnaires were directly distributed between these two statistical society, and then they were compiled in four times and at two weeks' time intervals.

The number of them was 17, 28, 25 and 16 respectively. The results of these and received questionnaires are given briefly at table No.1.

The second part identifies the basic materiality level for the average sum of the assets and sales from the viewpoint of active auditors in private and public sectors. This part is briefly given at table No.3.

The results and analysis of basic testing hypotheses the basic hypothesis and its contradictory remark are as follows:

H₀ Hypothesis: there is no meaningful difference in determining the materiality level of active auditors in private and public sectors.

H₁ hypothesis:

There is a meaningful difference in determining the materiality level of active auditors in private and public sectors.

The results of the research are as follows:

The summary of the data about basic hypothesis is:

Test Testing	Sample No.	The average	Standard of deviation	The average difference	Degree of freedom	The amount of "t"	Meaning full level	The analysis result about H ₀ hypothesis
The private sector's auditors	43	24.53	6.07	3.42	81.72	2.57	12%	H ₀ hypothesis is rejected
The audit organization' s auditors	41	21.09	6.13					

As you see the above table, the average viewpoint of auditors in private sector is 24.53 and in public sector is 21.09.

This means that from the viewpoint of private sector's auditors deviations which exceed 24.53% are more significant, but from the viewpoint of public sector's auditors, deviations which exceed 21.09% are more significant. The difference between these two average is about 3.43 which represents that in determining the materiality levels, the average viewpoint of auditing organization is less that the amount of "t" is 2.57 and the amount of meaningful level is about 12% which is less than 5%, so this difference is meaningful from statistical view, therefore H₀ hypothesis is rejected and H₁ hypothesis is supported, i.e.

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it can be stated with 95% reliability that there is a meaningful difference in determining the materiality level of active auditors in private and public sectors, and private sector's auditors are more conservative than public sector's. In other words, supporting this hypothesis means that there is no consensus between private and public sector's materiality levels.

The results and testing analysis of the first subordinate hypothesis:

The research subordinate hypothesis No.1 and its contradictory remarks are defined as follows:

If H_0 be the average sum of the assets and sales up to one billion Rials, so there is no meaningful difference in the materiality level of private and public sector's auditors.

According to the table No.3, since the amount of "t" is 0.217 and the amount of meaningful level is about 0.829, which is more than 5%, so this difference is not meaningful from statistical view.

Considering this that there is a meaningful difference in determining the materiality level of active auditors in private and public sectors, so H_0 hypothesis with 95% reliability is rejected and H_1 hypothesis is supported (i.e. the firsthand subordinate hypothesis of the research is rejected).

In other words, rejecting this hypothesis means that there is consensus between private and public sectors' active auditors, this matter is considered in determining high materiality levels, so according to the results, we should not make a distinction between private and public sectors' materiality levels.

The results and testing analysis of the second subordinate hypothesis:

The research subordinate hypothesis No.2 and its contradictory remarks are defined as follows:

If H_0 be the average sum of the assets and sales up to 10 billion Rials, and in relation to premium be one billion Rials, so there is no meaningful difference in the materiality level of private and public sectors active auditors.

Of private and public sectors active auditors.

If H_1 be the average sum of assets and sales up to ten billion Rials and in relation to premium be one billion Rials , so there is a meaningful difference in the materiality level of private and public sectors' active auditors.

According to the table No.3, since the amount of "t" is 1.135 and the amount of meaningful level is 0.26 which is more than 5%, so this difference is not meaningful from statistical view.

Considering this that in determining the materiality level, there is a meaningful difference.

at the average viewpoint of active auditors in private and public sectors, so H_0 hypothesis with 95% reliability is rejected and H_1 hypothesis is also rejected, I .e the second subordinate hypothesis is also rejected. In other words, rejecting this hypothesis means that there is consensus between private and public sectors' active auditors; this matter is also considered in determining high materiality levels. Therefore, according to these results we should not make a distinction between private and public sectors materiality levels.

The results and testing results of the third subordinate hypothesis:

The research subordinate hypothesis No.3 and its contradictory remarks are defined as follows:

If H_0 be the average sum of the assets and sales up to 100 billion Rials and in relation to premium be 10 billion Rials, so there's no meaningful difference in the materiality level of private and public sectors' auditors.

If H_1 be the average sum of the assets and sales up to 100 billion Rials and in relation to premium be 10 billion Rials, so there's meaningful difference in the basic materiality level of private and public sector's auditors.

According to the table No.3, since the amount of "t" is 3.2 and the amount of meaningful level is 0.002 which is less than 0.01, therefore this difference is meaningful from statistical view.

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Considering this that in determining the materiality level, the average viewpoint of active auditors at private sector is more than the auditing organization, so H_1 hypothesis with the reliability of 99% is supported. (That's the third subordinate hypothesis is supported).

In other words, supporting this means that there is no consensus among active auditors in private and public sectors. Therefore, with respect to these result, we should make a distinction between private and public sectors' materiality levels.

The results and testing analysis of the fourth hypothesis:

The research subordinate hypothesis and its contradictory remarks are defined as follows:

If H_0 be the average sum of the assets and sales up to 1000 billion Rials and in relation to premium be 100 billion Rials, so there's a meaningful difference in the materiality level of private and public sector's auditors.

According to the table No.3, since the amount of is 3.6 and the amount of the meaningful level is 0.001 which is less than 0.01 so this difference is meaningful from statistical view.

Considering this that in determining the materiality level the average viewpoint of active auditors in private and public sectors is more than the auditing organizations so H_1 hypothesis with the reliability of 99% is supported (that is the fourth subordinate hypothesis is supported).in other words there is no consensus among active auditors in private and public sectors.

Therefore according to these results, we should make a distinction in the private and public sectors materiality level.

The results and testing analysis of the fifth subordinate hypothesis:

The research subordinate hypothesis NO.5 and its contradictory remarks are defined as follows:

If H_0 be the average sum of the assets and sales more than 1000 billion Rials so there is no meaningful difference in the materiality level of private and public sectors auditors.

If H_0 be the average sum of the assets and sales more than 1000 billion Rials so there is a meaningful difference in the materiality level of private and public sectors auditors.

According to table No.3 since the mount of "t" is 2.93 and the amount of meaningful level is 0.004which is less than 0.01, so this difference is meaningful from statistical view.

Considering this that in determining the maturing level, the average viewpoint of active auditors in private and public sectors is more than the auditing organization, so H_0 hypothesis with the reliability of 99% is supported (that is the fifth subordinate hypothesis is supported).

In other words, there's no consensus among active auditors in private and public sectors.

Therefore, according to these results, we should make a distinction between private and public sectors materiality level.

CONCLUSION:

In general, the testing results of subordinate hypotheses and main hypothesis are shown at following table:

hypotheses	The number of sample		average		The difference between two average	Support or reject H_1
	private	public	private	public		
main	43	41	24.53	21.09	3.43	Supported
The first subordinate	43	41	24.88	24.51	0.371	rejected
The second subordinate	43	41	24.06	22.43	1.63	rejected
The third subordinate	43	41	25.46	20.73	4.73	supported
The fourth subordinate	43	41	24.65	19.26	5.38	supported
The fifth subordinate	43	41	23.48	18.53	4.95	supported

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Incidental findings in research

Peripheral findings of the research since the guidelines of the auditing organization in determining the quantitative level of materiality is on the basis of given percentages of average sum of the assets and sales, therefore in this research. We used the average sum of the assets and sales in determining the high materiality level, and achieved the following results: (these results are on the basis of the viewpoints of active auditors in private and public sectors)

The average sum of the assets and sales (income)	The basic materiality level (high important)
Up to one billion Rials	25%
Up to ten billion Rials	In relation to premium one billion Rials 25%
Up to one hundred billion Rials	In relation to premium 10 billion Rials 25%
Up to one thousand billion Rials	In relation to premium 100 billion Rials 25%
More than one thousand billion Rials	In relation to premium 1000 billion Rials 25%

Comparison of quantitative thresholds about materiality levels of auditing organization and high materiality level agreed by managers and partners in private and public sectors.

base	Threshold	
	Materiality level according to the guide lines of the Audit Organization	High materiality level according to the polls of managers of auditing organization and partners in private sector
Up to one billion Rials	3%	25%
Up to ten billion Rials and in relation to premium one billion Rials	2.5%	25%
Up to 100 billion Rials and in relation to premium to premium ten billion Rials	2%	25%
Up to 1000 billion Rials and in relation to premium 100 billion Rials	1.5%	25%
More than 1000 billion Rials	1%	25%

Suggestions:

In general, since the auditors play the role of granting credit to financial statements in the society, so the auditors must attempt to share their ideas and viewpoints, so that there will be no problem in case of changing or replacing auditors from year to year.

Therefore, according to the results at the research, it's suggested to the active auditors in private and public sectors to provide a basis for determining the basic materiality level in financial statements and consider it in their guidelines in order to avoid the conflicts of interests and different judgments and remarks of auditors in completely similar conditions.

We hope that the results of this research be a practical guideline for compilers in accounting standards and auditors in private and public sectors, and a guide for further researches.

Suggestions for further research According to the results obtained, the following suggestions are offered for further researches:

-Comparison of quantitative level of materiality from the viewpoint of private and public sectors in planning about auditing and stating over financial statements.

-Surveying whether the opinion of active auditors in auditing organization corresponds with the guidelines of the auditing organization.

Limitations of the research:

This research has been followed by some limitations:

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1) Auditing is one branch of social sciences. Therefore all of the limitations which are essentially in descriptive test and evaluating human behavior are also true about materiality level.

2) In this research, auditing managers were selected as a homogeneous group for surveying the materiality level, whereas these auditing managers may not be homogeneous with respect to the analysis done and different viewpoints.

3) Inherent limitations of a written questionnaire:

One of the most important and inherent limitations of the questionnaires is the weakness in their delivery on time however, by repetitive inquires about returning completed questionnaires and distributing more 36 other cases, This problem is successfully obviated. Another disadvantage of the questionnaire is that the potential answers of unanswered people can contaminate the results and reduce their validity.

It is mentioned that none of the existing methods for data collection cannot disappear the problem completely.

APPENDIXES:

Table 1: Information about distributed questionnaires

Description	Number	Percentage
Received questionnaires and applicable	84	70%
Received questionnaires and inapplicable	2	1.6%
Not received questionnaires	36	28.3%
sum	120	100%

Table No. 2: General information / The study of population.

row	description	Number	Percentage
1	Major:		
	Accounting	70	83.3
	Management	9	10.7
	Economic	5	6
	sum	84	100%
2	The last academic degree		
	B.A	47	56
	M.S	32	38
	Ph.D	5	6
	sum	84	100%
3	Occupational major:		
	The partner of auditing institution manager	43	51
		41	49
	sum	84	100%
4	Age group:		
	Less than 30 years	10	11.9
	More than 30 – 40 years	28	33.3
	More than 40 – 50 years	32	38.1
	More than 50 years	14	16.7
	sum	84	100%
5	experience in auditing profession:		
	Less than 6 years	9	10.7
	More than 6 – 10 years	6	7.1
	Between 10 – 15 years	26	31
	More than 15 years	43	51.2
	sum	84	100%
6	University teaching experience		
	Yes	34	40.5
	No	50	49.5
	sum	84	100%

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Table no.3: The summary of the results of statistical computations:

hypotheses	The number of sample		average		Standard of deviation		The difference between two averages	Degree of freedom	The amount of "t"	Meaningful level	Support or reject(H ₀)
	private	public	private	public	private	public					
Main	43	41	24.53	21.09	6.07	6.13	3.43	81.72	2.57	0.012	rejected
The first subordinate	43	41	24.88	24.51	7.02	8.67	0.371	77.41	0.217	0.829	supported
The second subordinate	43	41	24.06	22.43	6.9	7.16	1.63	77.55	1.135	0.26	supported
The third subordinate	43	41	25.46	20.73	7.13	6.37	4.73	81.66	3.2	0.002	rejected
The fourth subordinate	43	41	24.65	19.26	7.1	6.57	5.38	81.92	3.6	0.001	rejected
The fifth subordinate	43	41	23.48	18.53	8.2	7.26	4.95	81.56	2.93	0.004	rejected

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