CHARTERED PUBLIC ACCOUNT´S PERCEPTION ON MATERIALITY

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Abstract

In this paper we want to bring out how the Albanian CPA[65], according to his/her professional judgment on financial statements, his/her experience and also the procedures of risk determination, can calculate the materiality and perform substantive tests. In determining what "materiality" refers to, i.e. in a financial audit, the auditor, based on his/her professional judgment, must decide which items are materials. The auditors must go beyond a numerical calculation of materiality and risk, their experience over the years as auditors, the experience of audited companies or the experience in the same field. Personal judgment does not mean that the auditor can reach or form conclusions on his/her own. The auditor always makes conclusions based on the facts which are known to him/her.

Keywords: Materiality; Risks; Professional judgment

Introduction

This study analyzes the perception of Albania´s Chartered Public Account, also known as CPA, on materiality and the methods used by them in materiality´s identification and calculation. Therefore it is raised in order to come into valid conclusions about the procedures and methods used in the determination of any materiality level.

Theorizing materiality by standard

Financial reporting frameworks often discuss the concept of materiality in the context of the preparation and presentation of financial statements. Although financial reporting frameworks may discuss materiality in different terms, they generally explain that:

∞ Misstatements, including omissions, are considered to be material if they, individually or in the aggregate, could reasonably be expected to

[65] Chartered public accountant

influence the economic decisions of users taken on the basis of the financial statements;

∞ Judgments 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; and

∞ Judgments about matters that are material to users of the financial statements are based on a consideration of the common financial information needs of users as a group. The possible effect of misstatements on specific individual users, whose needs may vary widely, is not considered.

Performance materiality means the amount or amounts set by the auditor at less than materiality for the financial statements as a whole to reduce to an appropriately low level the probability that the aggregate of uncorrected and undetected misstatements exceeds materiality for the financial statements as a whole. If applicable, performance materiality also refers to the amount or amounts set by the auditor at less than the materiality level or levels for particular classes of transactions, account balances or disclosures.

Conceptual analysis

The auditor is required to decide about many things while conducting certain engagement. To decide appropriately, the auditor has to rely on his/her professional and personal judgment. Personal judgment refers to the skill that the auditor acquires over time and only after acquiring it, he/she can make use of the personal judgment.

The auditor acquires this capacity by obtaining relevant:

- Experience;
- Skill;
- Training

Professional judgment is essential in interpreting relevant laws and standards, especially under certain circumstances. This judgment is necessary particularly for decisions on:

- Materiality and audit risk.
- Nature, timing and extent of the audit procedures in accordance with the auditing standards.
- Evaluating whether sufficient and appropriate audit proofs have been obtained, or if further procedures are necessary to meet the audit objectives and standard criterion.
- Evaluating the management's judgment in employing the entity's applicable financial reporting framework.
- Drawing conclusions based on the evidence obtained from the audit.

However, personal judgment does not mean that the auditor can reach or prepare conclusions on his/her own. The auditor always makes conclusions based on facts which are known to him/her.

In the IFAC Handbook, materiality refers to the *"magnitude of a misstatement (including an omission) of financial information either individually or in the aggregate that, in the light of surrounding circumstances, makes it probable that the judgment of a reasonable person relying on the information to would been influenced or his decision affected, as a result of the misstatement."*

The concept of materiality is therefore one that requires the auditor to exercise his/her judgment about the importance of errors made by the user of the accounts, either individual or in group. There is no prescriptive rule to fit all cases. However, there are guidelines that assist the auditor in judging.

Although the definition of materiality does not tell the auditor how to determine it, it does infer some points to be taken into consideration.
Risk is concerned with the likelihood of error and materiality with the extent with which we can tolerate error. Since for our purposes we are concerned only with material errors, the risk assessment we do will be focused on the likelihood of material error.

From these definitions, we say that these are inversely related. That is, the higher the materiality levels, the lower the audit risk and vice versa. For example, if, after planning for specific audit procedure, the auditor determines that the acceptable materiality level is lower, then we see an increase of the audit risk.

In specifying what "materiality" refers to, i.e. in a financial audit, the auditor, based on his/her professional judgment, must decide which items are materials. The auditors must go beyond a numerical calculation of materiality and report all items they believe would affect decision-making.

Hypothesis and methodology

Hypothesis: *"The probability of materiality judgment by the Albanian CPA is affected by experience as an accounting expert."*

We have constructed the above mentioned hypothesis based on the identification of the dependent factor being a judgment on materiality and of one of the independent variables being experience on the field.

Population and Instruments for Data collection: Our study was structured upon Focus-Groups Questionnaires as a Method of Collecting Qualitative Data[66] , in our case 215 Chartered Public Accountants (CPA) from IEKA[67], Albania. We have designed questionnaires regarding audit

[66] Yin, Robert . Qualitative Research, 2011,page 141
[67] Authorized Accountant Experts Institute, Albania (IEKA)

judgment based on the materiality; risk assessment (professional judgment) or experience (personal judgment) that they have as auditors; the years passed as auditors in a society are described as experience in auditing.

Actually the method of gathering Data consists of two stages. Firstly we have collected data based on assumptions about the general answers provided by the open Register of Statutory Auditors in the IEKA official website containing general information about each CPA. This was the first database on which we conducted hypothetical results.

Secondly we were provided with the real data based on the Questionnaires applied and collected from 132 CPAs and built with it a new database, used to come to rigid conclusions. We even did a comparison of the two databases which are not given in this paper. So the real population of this study numbers 132 CPAs.

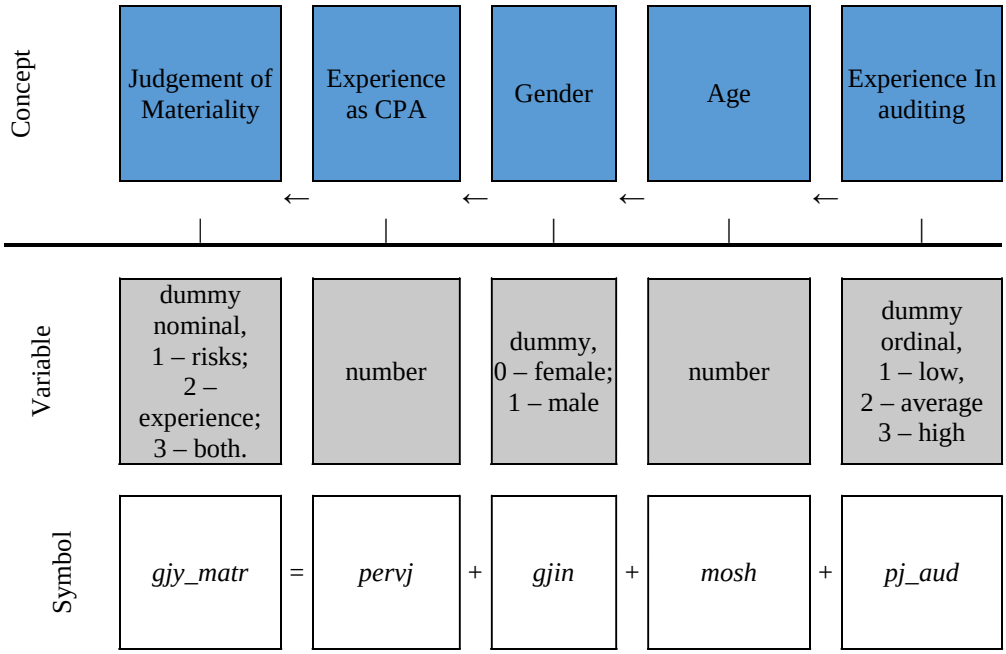
Methodology: As a methodology has been choose the operationalization scheme structured in two distinct areas: the theory world (concepts area) and study world (variables area)[68]. In the theory world takes place an abstract analysis of the concept and its relation to other concepts. In order to do this, it is often helpful reviewing the literature of the field of study and an analysis of the researcher based on his/her experience. When we talk about relation between concepts we make reference to the logical relation between them, which leads to the orientation between concepts and also to the direction of the relation itself. The causality direction divides factors into: causal one and the ones that are affected, while the direction of the relation has to do with the positive or negative report between them.

The experience as a professional accountant expert is a variable that is believed to exercise pressure on materiality judgment. For this reason, experience is taken into consideration as an independent factor thus which causes materiality judgment. This concept is measured by the number of years in the profession as an accounting expert and its symbol is *pervj* (experience). Gender and age are two other factors that can determine the materiality assessment. Gender is measured by a dummy variable, where 0 means the female accounting expert and 1 male accounting expert, and its symbol is *gjin*. Participation in consecutive audits is a factor that can be taken into consideration when it comes to determining the method of judgment of materiality. This variable is measured by an ordinal dummy variable.

The following graphic illustrates the operationalization scheme of concepts in variables and the direction of the relation on the first hypothesis. The upper area is represented by concepts deduced from theory or logic. The

[68] Yin, Robert. Qualitative Research, 2011, page 77-96

materiality judgment is measured by a categorical variable with three features: 1 - risk, 2 - experience and 3 - both ways of judgment. The symbol of this variable is gjy_matr.



Graphic 1: The operationalization scheme in variables; their symbols and measuring for the materiality assessment

From the operationalizing scheme of the concepts in variables was brought up the idea of the functional form which relates the variables of this hypothesis, in:

gjy_matr = f (*pervj, gjin, mosh, pj_aud*)

$$P(gjy\_matr_{0;1}) = \frac{1}{1+e^{-(\beta_0+\beta_1 pervj+\beta_2 mosh+\beta_3 gjin)}}$$

In fact, in this model there were integrated the independent variables of the experience of accounting expert (*pervj*) and their gender (*gjin*). The *pj_aud* variable is immediately excluded from the regression, in respect to the results of the correlation analysis, to avoid any possible occurrence of the multicolinearity.

We must remember that the hypothesis aims at evaluating only the relationship between the experiences as an expert accountant to the way of judging materiality. As often occurs in the world of studies and questionnaires, a hypothesis cannot be controlled only with one independent and one dependent variable. This type of relation is considered as an extreme simplification of reality. To better control the possible effects of other factors, it seems reasonable to integrate into the analysis other factors, which

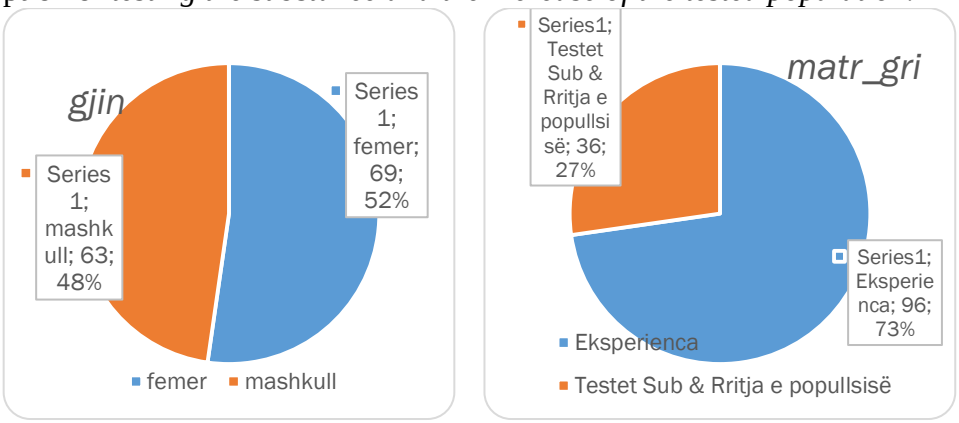
address adequately the potential effects that may arise in different directions. This is precisely the reason why we integrated other variables in the above mentioned functional form.

Situation analysis

In this study has been used the **SPSS software** (statistical software) in order to apply econometric techniques with real data sets. The analysis consists on the estimation of a regression model with real data using SPSS software.

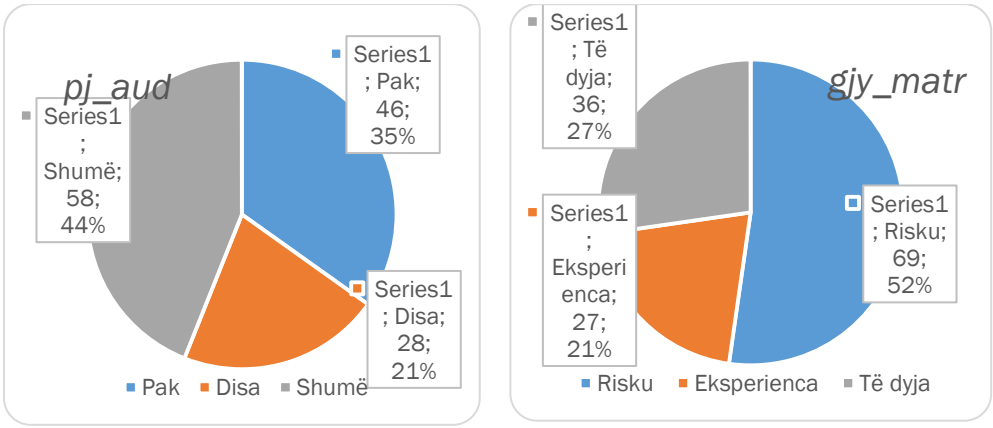
Shown below are graphics and data crafted by SPSS software 20

The below graphics present more clearly the nature and composition of the variables. Gender is composed by: 48% men and 52% women. We are dealing here with a nearly equal distribution: 50 to 50. More specifically, 27% of respondents selected the option *experience* when they were asked about the technique of defining materiality, while 73% of them chose the option of *testing the substance and the increase of the tested population.*



Graphic no.2: Graphic presentation of the variables gjin and matr_gri

Below you can see an illustration of the graphics for the variables *pj_aud* and *gjy_matr*. Let us take a minute to analyse the graphic of participation in successive audits (*pj_aud*): 35% of the respondents have participated in audits very few times, 21% of them have participated several times, while 44% have participated many times. The graph to the right illustrates the density of the variables' features *gjy_matr* (materiality assessment). Experience, as a way of materiality assessment, was chosen by 21% of the respondents. Risk, as another technique, was chosen by 52%, and less than 25% said that a good basis for materiality assessment are both techniques combined (27 %).



Graphic no 3: Graphic presentation of the variables gjy_matr and pj_aud

The distribution of the responses on variables in categories is a good way to recognize the problem being studied. Tables with two entrances represent the density distribution according to the attributes of variables. Thus, the following table presents this kind of variables *pervj* (experience) and *gjy_matr*, and the columns show the attributes of the categorical variable *gjy_matr* -rows show the values of quantitative variables *pervj*. Let us interpret some of its figures. Let's take in consideration number 15 which located as a junction point of the first column *gjy_matr = risku* with first row *pervj* = 2. This means that the number of accounting experts with 2 years of experience, that have chosen *risk* as a technique for materiality assessment, is 15 people. The same logic applies also to the interpretation of other figures. Noted in these charts are the big values in the categories of materiality assessment. At the *risk* category, major densities are encountered for the 2-3 years and 15 years of experience. The same applies to the categories *both* and *total*. It is obvious that the chosen ones are a mixture between young and old professionals in this profession. 45 people interviewed have almost 3 years of experience and 48 people with at least 15 years of experience working as auditors. Meanwhile 39 people have more than 3 years, but less than 15 years working in the profession.

Chart 1: Chart with two features for the variables pervj and gjy_matr assessed with SPSS 20, associated by the symmetrical meter

*pervj * gjy_matr* **Crosstabulation**

Count

		gjy_matr			Total
		Risks	*Experience*	*Both*	
Exper	2	15	0	5	20
	3	17	0	8	25
	4	4	1	1	6
	5	2	2	4	8
	6	2	0	0	2
	7	5	1	2	8
	8	0	1	3	4
	9	2	1	3	6
	10	2	1	0	3
	14	0	1	1	2
	15	20	19	9	48
Total		69	27	36	132

Part of the descriptive statistics is the correlation between the two series. When variables are categorical, then the ordinary correlation cannot be used, but we can use an adjusted correlation for the categorical variables, which is known as *rho 'Spearman'* coefficient.

In the SPSS software program, this probability can be estimated for each correlation coefficient. We are interested in the lowest probability in order to say for sure that the respective coefficient of the correlation does not have a zero value.

Below you can see a report on the coefficient correlation rho 'Spearman' between each pair of variables, associated with probability.

Chart 2: The correlation coefficient rho Spearman assessed through the SPSS 20

Correlations

			gjin	*mosh*	*pervj*	*pj_aud*	*gjy_matr*
Spearman's rho	*gjin*	Correlation Coeff	1.000				
		Sig. (2-tailed)	.				
		N	132				
	mosh	Correlation Coeff	.151	1.000			
		Sig. (2-tailed)	.084	.			
		N	132	132			
	pervj	Correlation Coeff	.059	.490**	1.000		
		Sig. (2-tailed)	.498	.000	.		

	N	132	132	132		
pj_aud	Correlation Coeff	.079	.485**	**.942****	1.000	
	Sig. (2-tailed)	.369	.000	.000	.	
	N	132	132	132	132	
gjy_matr	Correlation Coeff	-.004	.140	.147	.146	1.000
	Sig. (2-tailed)	.964	.110	.092	.094	.
	N	132	132	132	132	132

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

An important aspect of the correlation analysis is the multicolinearity assessment. Multicolinearity is a phenomenon that appears in econometric modelling and it makes reference to the case when an independent variable is expressed as a combination of other independent variables. So between independent variables there is a relationship of dependency. The high correlation coefficient between *pervj* and *pj_aud* (0942) suggests that these two variables are not used simultaneously in a regression, because the chances for the multicolinearity phenomenon are high. It is a high coefficient, but it is also statistically important. For this reason econometric modelling are not used as independent variables simultaneously for *pervj* - and *pj_aud.*

Results

Use of the common software previously mentioned can help at this stage.[69] Multinomial execution of logistic regression through SPSS software follows a slightly different procedure from the execution of ordinary logistic regression, resulting in the reported statistics to be slightly different.

The table in the annex illustrates the ratings for individual parameters for the model of materiality assessment. We can see that the table is divided into two halves. This is due to the comparison of the parameters according to the categories of the dependent variable, which is *gjy_matr*. Here the category *experience* is specified as a reference category. Let's see the effects one by one; as we compare two categories, interpretation resembles to the binary logistic regression:

- *Intercept*: generally it does not bare any economic interpretation, but we can say that the model considered results statistically significant with a certainty of 99%, as the figure in the *Sig column* figure is 0.000.

[69] Yin,Robert . Qualitative Research, 2011, page 184.

- *pervj*: we can see that the parameter is -0227 and that is statistically significant in making the difference between the category *Risks* to the category *Experience* of the dependent variable, as long as Sig column shows a small probability value (p <0:05). The negative value of the sequence parameter shows that with an increase of the years working in the profession, there are higher chances to use *Experience* as a way of materiality assessment against *Risks*. More than the value of the coefficient, here it is more important the number in the column Exp(B), because it shows the relation between opportunities or probabilities that *gjy_matr* has to take risk attribute value *Experience.* Referring to the multinomial logistic regression assessments, the ratio of probabilities for this variable is 0.717 (= $e^{-0.227}$) and shows that when *pervj* increases by one unit, then the risk that an accounting expert has to choose the *Risks´* attribute versus the *Experience* one, changes by 0.797, when the other factors remain constant. With 95% of statistical security this report revolves between 0.717 and 0.887 values.
- *Gjin*: positive signs near the gender parameter indicate that the male accounting expert has more chances to use *Risk* as materiality assessment rather than *Experience*. This variable does not appear to be statistically significant (p> 0:05). 1.32 is the real chance and it is calculated as: the $e^{0.277}$ = 1.32. The probability report for the accounting expert to choose the *Risk* attribute versus *Experience* is 1.32 when we pass from a female to a male expert.

By the same logic we interpreted variables of the coefficients for the categories *Risks* and *Experience* we might interpret the variables of the second half of the table. Thus:

- *Intercept*: represents the free coefficient and seems to be statistically significant, since its probability is 0.001 (p <0.05). The absolute value of this parameter is less than the risk category.
- *pervj;* seems that the parameter is -0.211 and that is statistically significant in making the difference between the categories *Both* and *Experience* of the dependent variable, as long as Sig column refers to a small probability value (p <0.05). The negative value of the parameter´s sequence shows that by increasing the number of years in the profession, there is an increase in the probabilities to use *Experience* as a way of materiality assessment against *Both.* The number 0.81 shows the ratio between the chances that *gjy_matr* gets attribute value *Both* in relation to the chances that *gjy_matr* gets attribute value *Experience*. Referring to the multinomial logistic regression estimates, the ratio of chances for this variable is 0.81 (= $e^{-0.81}$) and shows that when *pervj* increases by one unit, then the risk

for an individual to choose attribute *Both* over attribute *Experience* changes by 0.81, while the rest of factors remain constant. With 95% statistical level of security, this report of probabilities varies between the values 0.723 and 0.908.

- *Gjin*: positive signs near gender parameter indicate that the male CPA has less chance to use *Experience* as materiality assessment rather than *Both*. Even here, this variable does not seem to be statistically significant (p> 0.05). The number 1.267 is a relative chance and is calculated as: the $e^{0.237} = 1.267$. Report probabilities that a CPA chooses *Both* versus *Experience* attribute is 1.267 when gender moves from 0 to 1, then passes from female to male.

Conclusion

Our application has identified the existence of a strong correlation between the professional judgment and the first years of work in the profession of an auditor. Risks and experience are the methods that Albanian CPAs choose to determine the materiality. The result of the study can have significant implication for IEKA and the Quality Audit Control which takes place once every five years for the experts on the field. For the young experts, it takes place only once every two years. The young experts use professional judgment more than personal judgment.

As an overall conclusion of this study, we can state that Albanian auditors consider the professional judgment as the method they will use when determining materiality.

Annex

Warnings

There are 21 (35.0%) cells (i.e., dependent variable levels by subpopulations) with zero frequencies.

Case Processing Summary

		N	Marginal Percentage
gjy_matr	*Risks*	69	52.3%
	Experience	27	20.5%
	Të dyja	36	27.3%
Valid		132	100.0%
Missing		0	
Total		132	
Subpopulation		20[a]	

a. The dependent variable has only one value observed in 6 (30.0%) subpopulations.

Model Fitting Information

Model	Model Fitting Criteria			Likelihood Ratio Tests		
	AIC	BIC	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	119.774	125.540	115.774			
Final	103.588	120.885	91.588	24.187	4	.000

Goodness-of-Fit

	Chi-Square	df	Sig.
Pearson	46.231	34	.079
Deviance	49.856	34	.039

Pseudo R-Square

Cox and Snell	.167
Nagelkerke	.193
McFadden	.090

Likelihood Ratio Tests

Effect	Model Fitting Criteria			Likelihood Ratio Tests		
	AIC of Reduced Model	BIC of Reduced Model	-2 Log Likelihood of Reduced Model	Chi-Square	df	Sig.
Intercept	132.288	143.819	124.288	32.700	2	.000
pervj	123.769	135.300	115.769	24.181	2	.000
gjin	99.897	111.428	91.897	.309	2	.857

The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0.

Parameter Estimates

gjy_matr[a]		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
								Lower Bound	Upper Bound
Risku	*Intercept*	3.119	.694	20.180	1	.000			
	pervj	-.227	.054	17.329	1	.000	.797	.717	.887
	gjin	.277	.504	.303	1	.582	1.320	.491	3.546
Të dyja	*Intercept*	2.370	.729	10.571	1	.001			
	pervj	-.211	.058	13.024	1	.000	.810	.723	.908
	gjin	.237	.550	.186	1	.667	1.267	.431	3.721

a. The reference category is: *Exsperience*.

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