



Emerging Markets Queries in Finance and Business

Professional judgment and reticence to apply sampling techniques

Tatiana Danescu^a, Anca Chira^{b*}

^aUniversity Petru Maior, Nicolae Iorga Street, , Târgu Mureş, 540088, Romania

^bUniversity 1 December 1918 Gabriel Bethlen Street, no 5, Alba Iulia, 51009, Romania

Abstract

Audit sampling means, according to International Standard on Auditing 530 "Audit Sample", applying audit procedures to less than 100% of the items or class of transactions within an account balance. Sampling is used not only in auditing financial statements, but widely in market research, scientific analysis, market analysis, surveys. An ideal situation would involve studying the entire population under investigation. This is impossible in situations where we find large populations of data. The auditor must use professional judgment to assess audit risk and establish appropriate procedures for the transactions and accounts tested. When the auditor uses sampling, his goal is to ensure that the sample provides a reasonable basis to draw conclusions about the population from which the sample is selected. Using statistical sampling assumes a computer program, more expensive, it requires statistical knowledge and assumes in a lesser extent the use of professional judgment. Non-statistical sampling does not allow quantification of risk, leaving large margin of interpretation, exposing the auditor to a high risk of malpractice.

© 2014 The Authors. Published by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/3.0/>).

Selection and peer-review under responsibility of the Emerging Markets Queries in Finance and Business local organization

Keywords:

1. Introduction

Researchers all over the world have begun to question the sampling techniques applied, underlying its disadvantages and risks.

*Corresponding Author: Tel: 04041244133,
E-mail address: ancaoanachis@yahoo.com

Issues in audit sampling has been studied by Gabriela Ungureanu (Ungureanu,2010, pp.42) outlining the main methods of sampling, attracting attention to the choice of these sampling methods based on professional judgment and cost-benefit.

John Wendell and Josef Schmee (Wndell and Schmee,1996, pp.825) noted that statistical sampling auditing methods can create problems that do not apply to a large sample of items. Populations are usually small and the number of errors accepted, even in the case of a large sample of elements, is almost zero, setting aside the central limit theorem. Central Limit Theorem (CLT) is a statistical theory, which argues that, given a sufficiently large sample from a population diverse enough, the average of all results will be approximately equal to the average population. In addition, evidence will follow approximately a normal distribution model (eg, bell-shaped curve), with variations that reflect the source population variance divided by sample size. As a rule, a sample of 50 elements is necessary for the CLT to be applied.

In their article, "Using Computerized Statistical audit sampling software to learn: an instructional resource", Richardson and Louwers (Richardson and Louwers, 2010, pp.553) state that the use of non- statistical sampling method requires judgment to an extent greater than the use of statistical sampling method. The authors say that many U.S. public accounting firms were reluctant to use statistical sampling methods, reticent which is due because of: the cost of the elements selection, cost of valuing elements and the cost of training.

We do not yet have a good understanding of what happens when experienced people, such as public accountants, use their judgment to make decisions that matter, amid the pressures, constraints, dangers, and opportunities of their everyday environment (Felix and Kinney, 1982).

2. Audit sampling: professional judgement and reticences

Audit sampling means, according to International Standard on Auditing 530" Audit Sample", applying audit procedures to less than 100% of the items or class of transactions within an account balance. Sampling is used not only in auditing financial statements, but widely in market research, scientific analysis, market analysis, surveys.

An ideal situation would involve studying the entire population under investigation. This is impossible in situations where we find large populations of data.

The auditor must use professional judgment to assess audit risk and establish appropriate procedures for the transactions and accounts tested. When the auditor uses sampling, his goal is to ensure that the sample provides a reasonable basis to draw conclusions about the population from which the sample is selected.

2.1. Professional judgment

A Canadian study (CICA, 1995) refers to professional judgment as 'the application of relevant knowledge and experience, within the context provided by auditing and accounting standards and Rules of Professional Conduct, in reaching decisions where a choice must be made between alternative courses of action'.

Carpenter et al. (1994) states that auditor judgment is not only a cognitive and a technical phenomenon but also a cultural phenomenon (see Fig. 1).

The auditor's profession is undergoing different, complex developments. As increased regulatory norms and pressure within companies, both influence the way audit engagements are performed, it is mandatory to analyse auditor's professional judgment. There are situations where companies received a clean audit opinion, before suffering of fraud problems or collapse. Such are the case of S&L episode in the US, and in UK BCCI, Polly Peck, and the Mirror Group. Giving an inaccurate opinion of financial statements could result in losing reputation and also in litigations and loss of money for the audit firms.

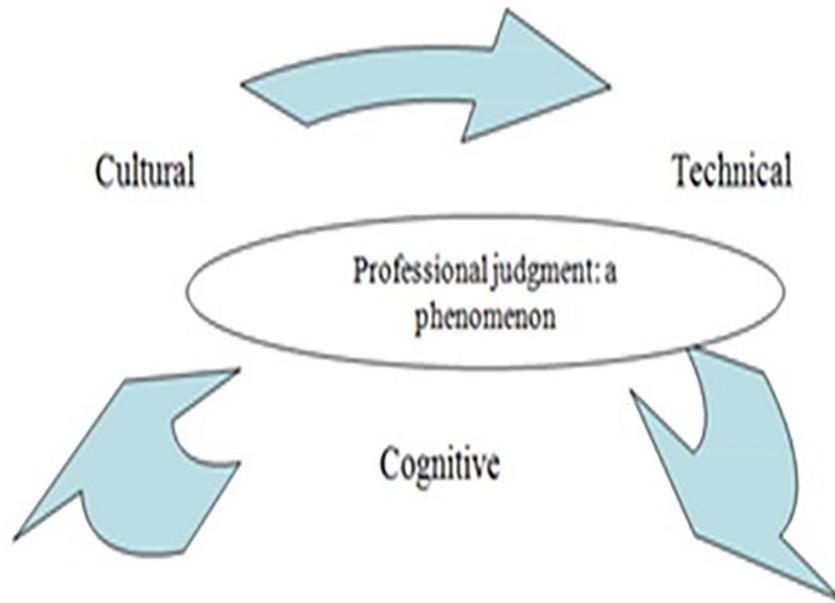


Fig. 1. Professional judgement

We have studied the factors that influence auditor's professional judgment, in a case study performed, sending questionnaires to different auditors in Romania. The participants that responded were 100 auditors, which have a management position. At the time of testing, all participants had completed their first university degree, the majority of them being members ACCA. The participants were employed by chartered accounting firms in auditing. Their work experience ranged from 5 to 10 years in audit. The average age of the participants was 33 years. Participation was on a voluntary basis, we sent questionnaires to managers and assistant managers from Big Four companies and smaller audit firms. The answers received were approximately 50% from Big Four managers and 50% from managers working in smaller companies.

In our questionnaire, we have requested the participants, to qualify the factors that influence their professional judgment, on a scale from 1 to 5, 5 being the highest score. We have also requested them to give us arguments for the 3 main factors that influence professional judgment and for the least important.

The factors listed on the quiz are: accuracy and confidence of the auditor, experience, auditor's soft skills, auditor's ethical behavior, auditor's professional knowledge, independence, objectivity and technical skills

According Norman's studies in 1975, the strength of a decision-maker's attitude towards his/her judgment affects the consistency of the subsequent actions. If a decision-maker has low confidence, it is probable that he will not act on his judgment, while a highly confident decision maker will act on his judgment.

Table 1. Questionnaire results

Managers from different companies/Factors	Score 1	Score 2	Score 3	Score 4	Score 5	Total score	Importance%
	Number of managers						
Accuracy and Confidence	100					1*100=100	100/2563=4%
Experience				10	90	10*4+90*5=490	490/2563=19%
Soft skills		25	75			25*2+75*3=275	275/2563=11%
Ethical behavior		11	80	9		11*2+80*3+9*4=298	298/2563=12%
Independence	8	21	70			8*1+21*2+70*3=260	260/2563=10%
Objectivity	8	21	70			8*1+21*2+70*3=260	260/2563=10%
Technical skills			33	54	13	380	380/2563=15%
Total						2563	

Experience develops an auditor's abilities to process information, make mental comparisons of alternative solutions and initiate subsequent action(s) (Gibbins, 1984). Inexperienced auditors have not developed these abilities.

Being a professional implies also particular abilities as soft skills, communications and people orientation.

We could not speak about a professional without speaking about ethics, a good professional respects and adheres to all regulations.

Knowledge is what makes an auditor, in our opinion, this being the main quality an auditor should have.

An auditor must always be independent and objective, respecting client's confidence while being always challenging the client information.

In our days, for a professional, technical skills are essential, without IT knowledge an auditor could not perform at the highest parameters.

Based on the respondents' answers, we have computed the level of importance of the analyzed factors. As per our computation the main 3 factors that influence professional judgement are professional knowledge, experience and technical skills, while the least important is auditor's accuracy and confidence (see fig.2).

2.2. *Reticence in applying audit sampling in the case of the two sampling techniques applied*

The main risk in audit sampling is over-estimation or under-estimations of errors within a population. Audit evidence may reveal a sample containing errors, which extrapolated to the entire population, could overestimate the errors in the population.

Although ISA 530 recognizes both statistical and non-statistical sampling, the preferred approach used by large audit firms is non-statistical sampling method.

The main advantages of the non-statistical method are a statistically derived sample and a statistical evaluation of sampling risk. One of the disadvantages of non-statistical method includes the use of formal techniques to determine the size of the sample, select the sample and to evaluate the results. Non-statistical sampling does not allow quantification of risk, leaving large margin of interpretation, exposing the auditor to a high risk of malpractice.

The non-statistical sampling method is mainly a tool, to obtain sufficient appropriate audit evidence, in order to support the claim that the population is selected according to regulations. The method is not suitable for testing populations with high error rates, or to estimate distortion, in order to correct a significant misstated account or class of transactions. In the cases when the non-statistical sampling method is not considered practical, because the sample size selected is too large, audit evidence is

obtained through other methods, such as tests of controls, substantive analytical procedures, statistical methods. In some cases, adding or increasing the use of other procedures, the non-statistical sampling method could become practical, since the desired level of audit evidence can be reduced by other procedures, thereby decreasing test sample population. In cases where a high percentage of distortions are observed in the entire population to be tested, it may be necessary for entities to correct errors, reducing error rates, or to perform their own control tests that can be tested in turn by the audit team, to provide necessary evidence.

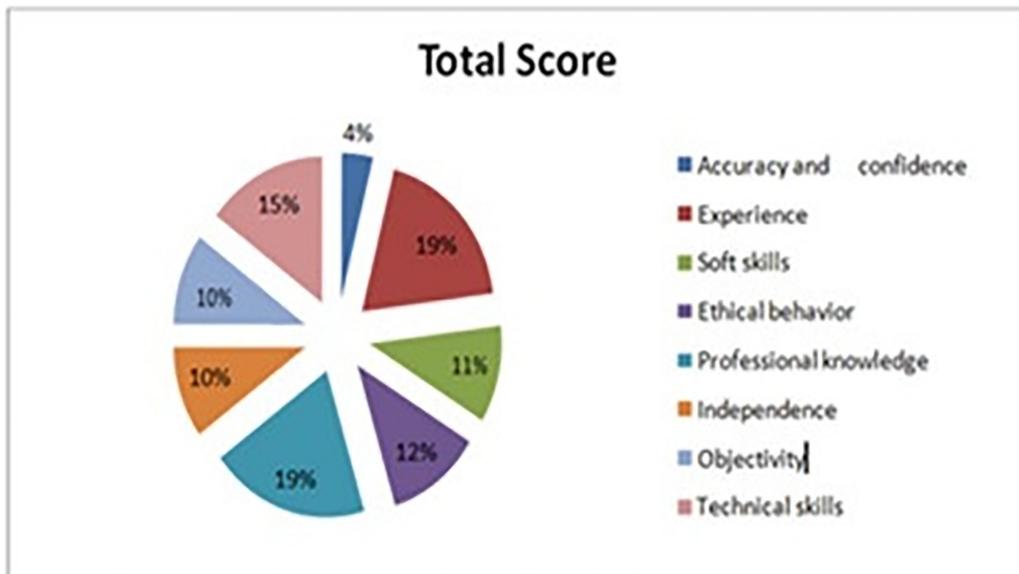


Fig. 2. Main factors that influence professional judgment

According to ISA 330, the use of computer-assisted audit techniques may enable more extensive testing of electronic transactions and account files, which may be useful when the auditor decides to modify the extent of testing, for example, in responding to the risks of material misstatement due to fraud. Such techniques can be used to select transactions from key electronic files, to sort transactions with specific characteristics, or to test an entire population instead of a sample.

Using statistical sampling assumes a specialized computer program, more, it requires statistical knowledge and assumes a lesser extent the use of professional judgment. Applying statistical sampling would imply extensive training for the employees' of audit firms and access to licensed software. Using this method would mean extra costs for the audit firms.

The underlying principles, procedures and matters relevant to the planning and performance of audit sampling are similar for both non-statistical and statistical methods. Thus, while the procedures and methods used in non-statistical sampling are less formal, they are nonetheless rigorous.

3. Conclusions

Audit sampling involves the application of audit procedures to less than 100% of items within an account balance or class of transactions. Nowadays the technique is indispensable, the economic entities operating with sophisticated computer systems and large amounts of data.

The non-statistical sampling method is a rigorous procedure, being preferred by the large audit firms, assuming the auditor's professional judgment

Being a professional that uses professional judgment implies the following qualities: accuracy and confidence, experience, soft skills, ethical behavior, professional knowledge, independence, objectivity and technical skills.

Auditors should always use professional judgment while giving reasonable assurance on the financial statements.

References

- Ungureanu, F. G., 2010, Metode de eșantionare statistice utilizate în audit, *Romanian Statistical Review*, nr. 5/2010, pp. 42.
- Wendell, J., Schmees, J., 1996, Exact Inference for Proportions from a Stratified Finite Population, *Journal of the American Statistical Association*, pp. 825-830.
- Richardson, S., Louwers, T., 2010, Using Computerized Audit Software to Learn Statistical Sampling: an Instructional Resource, *Issues in American Education Journal*, American Accounting Association, Vol. 25, no.3, pp.553.
- Felix, W. L., JR., KINNEY, JR, 1982, Research in the Auditor's Opinion Formulation Process: State of the Art, *The Accounting Review*, April, pp. 245-71.
- ISA 530.
- CICA, 1995, *Professional Judgment and the Auditor*, Toronto: Canadian Institute of Chartered Accountants.
- Carpenter, B. W., Dirsmith, M. W., Gupta, P., 1994, Materiality judgment and audit, culture: social, behavioral and political perspectives, *Accounting, Organizations and Society*, 19(4/5), pp. 355–80.
- Norman, D., 1975, On Data-limited and Resource-limited Process, *Cognitive Psychology*, 7, pp. 44-46.
- Gibbins, M., 1984, Propositions about the psychology of professional judgment in public accounting. *Journal of Accounting Research* 22, pp. 103-125.
- ISA 330.

1.