

Sampling in Tax Audit

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Abstract: Today we face the necessity to find a special approach to validating tax report indexes. That is why it becomes urgent to use sampling for validation. In auditing practice, they apply a statistical (probabilistic) and non-statistical (estimating) approaches to sampling. It is reasonable to use sampling aimed at monetary misstatement check (monetary unit sampling) as a sampling method. In other countries, monetary unit sampling is often called PPS (probability proportional to the size). PPS method consists in selecting according to the cost parameter of a document. That is, the larger the sum, the higher the probability for the document to get into sampling.

Key words: Audit sampling • Tax audit • Stratification • Tax report • Monetary method • Audit evidences
• Auditing procedure

INTRODUCTION

In both external and internal audit-including tax audit-they mainly apply sampling as the most perfect and scientifically grounded tool for partial observation. Audit sampling questions were studied in papers of such specialists as A. Ahrens, J. Lobbek and P. Levy, etc. In Russia, the usage of audit sampling is now regulated by the Federal Auditing Regulation (Standard) # 16 “Audit sampling” (hereinafter called “FAR(S) # 16”). This regulation was approved by the Government Decree # 532 dated October 7, 2004 [1]. In contemporary international practice, the questions about audit sampling are regulated by International Standard on Auditing # 530 “Audit sampling and other procedures of selective inspection” (hereinafter called ISA 530) [2].

Main Part: According to the FAR(S) # 16, audit sampling is the application of auditing procedures to less than all elements of one report item or a group of stereotyped operations. If all formatting rules of a sampling are kept, it gives us the opportunity to obtain and assess audit evidences for selected elements which allow us to make proper conclusions about the whole universe (to extrapolate the results) [1].

According to ISA 530, audit sampling is the application of auditing procedures to less than 100% of universe’s elements significant for auditing in a way that every element has a possibility to get into sampling. This will allow auditor to obtain enough information for conclusions about the whole [2].

Although there are differences in the definitions of audit sampling, the essence of this notion remains the same.

It is reasonable to start a sampling with the analysis of all data to be audited. Tax reports and tax ledger or accounting records supplemented with additional details if needed (p.1, art. 313 Tax Code of the Russian Federation) [3] and primary documents of respective part of accounting become the database for the audit of both profit tax and VAT.

The FAR(S) # 16 (pp: 11-16) and the Federal Auditing Standard dated July 2011 “Audit Evidences” approved by the Order of the Russian Ministry of Finance # 99n dated August 16, 2011 (hereinafter called “FAS 7/2011”) superseded the Federal Auditing Regulation (Standard) # 5 “Audit evidences” (hereinafter called “FAR(S) # 5”). According to the FAR(S) # 16, auditor can use the following methods of selecting elements to be inspected:

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- Selecting all elements (total inspection);
- Selecting specific (concrete) elements;
- Building an audit sampling [4].

The FAS 7/2011 was worked out in compliance with the effective version of the International Standard on Auditing 500 “Audit evidences” (hereinafter called “ISA 500”). It was considerably enlarged as compared with FAR(S) # 5. The innovations of the FAS 7/2011 include the above mentioned methods of selecting elements for inspection aimed at obtaining audit evidences. Previously, these questions were studied only within the framework of FAR(S) # 16 “Audit sampling” (pp: 11-16). The repetition of selecting methods in ISA 500 and FAS 7/2011 is not accidental. It is the consequence of the intention to draw the auditors’ attention to the importance of sampling. It is notable that Russian auditing standards were maximally approximated to the international ones.

At the planning stage of tax auditing, the auditor should decide what method would be the most rational—total inspection or sampling.

When using the total method, all taxpayer’s documents of all audited tax periods are inspected: primary documents, ledgers, the general ledger, the cash book, the purchase ledger, the sales ledger, the invoice report, the ledger of income and expenditure, payment drafts, tax declarations, commercial agreements, etc. In the course of analysis, documents are compared with documents received from the external companies of the audited person; the reports and ledgers of accounting and tax accounting are confirmed by primary documents. In view of the findings, auditors form a conclusion about the existence or absence of tax offences. If tax offence is detected, they ascertain its character and corpus delict. Besides, they form the evidential base and the grounds for auditor’s recommendations on additional tax charge and penalties.

No doubt, total inspection method requires much time and labour, while auditor does not have a goal to confirm all transactions of audited company. Moreover, total inspection presupposes the prevention of all possible mistakes which is excessively labour-consuming in tax auditing and is not practiced in normal conditions because of the inefficiency [5]. For example, if tax authority imposes even small financial sanctions after tax auditing, it is not always caused by auditor’s low-quality work. It may be a consequence of diverse interpretation of some regulations.

In accordance with the above mentioned ISA 500 and FAS 7/2011 (p. 31), the usage of total inspection is rational when:

- The audited universe consists of a small number of elements which have high costs. If there are voluminous documents, total inspection will require much time, labour and economic resources. This is not always reasonable in practice;
- There are high-risk spheres (the high level of risk concerning internal control means and inherent risk), while other selecting methods do not provide proper audit evidences. Total inspection is rational in situations when it is necessary to find out spheres with disorganized or missing system of internal control and spheres in which transactions are performed for the first time, etc.;
- There are repeating calculations or other automated processes that make total inspection effective from the viewpoint of costs.

Besides the conditions for selecting the total inspection method enumerated in FAS 7/2011, we consider one more criterion to be noteworthy. This is the presence of field checks conducted by tax authorities or tax auditing.

If a field check was performed by tax authority before tax auditing, or the management of audited company had initiated tax auditing in previous periods, then the risk not to find mistakes comes down, because it is supposed that mistakes founded by authorities or auditors were corrected and not made in future.

In all other cases it is optimal to use sampling.

It should be taken into account that there are such important and risky spheres of company’s activity that audit sampling is too perilous. In this situation every element of universe should be inspected.

In auditing practice, they apply a statistical (probabilistic) and non-statistical (estimating) approaches to sampling [6].

In non-statistical sampling, the conclusion about the largest universe is made on the basis of inspecting only part of its objects. Sampling requires the professional judgment throughout the whole process. Auditor uses the professional judgment to check whether there are enough audit evidences based on selected objects. The larger the sampling, the more audit evidences, it can provide. The same is with sampling formation: the better it is organized, the more audit evidences, the auditor can obtain.

Statistical sampling presupposes the objective approach to sampling when the auditor determines the sample size and chooses objects from the universe for quantitative inspection. Statistical sampling is characterized by the ability to assess the risk by means of ascertaining confidence interval which provides the designed range of data errors in the universe [7], [8].

Tax audit substantially prevent the risk of penalties for tax offences. This is the goal for the monetary misstatement check (monetary unit sampling). In other countries, monetary unit sampling is often called PPS (probability proportional to size). PPS method consists in selection which is proportional to the cost characteristics of a document. That is, the larger sum of money, the higher the probability for the document to get into sampling [9], [10].

The following features of the PPS method became a reason for choosing this method in tax audit sampling:

- It is more effective for finding overstatements than understatements, because the more the value of element, the less chances for him to get into sampling. At the same time, the expenditure for income taxing are more often exposed to tax reporting audit, especially the legality of recognizing them as such. The more the number of expenditures illegally recognized as costs of taxation, the stiffer are the penalties, because Article 122 of Russian Tax Code says that the nonpayment of partial payment of a tax (charge) as a result of understating the tax base, or other incorrect tax charge, or other illegal actions (inactions), if such an action does not show the signs of tax offence, entail penalty of 20% of the sum of a tax (charge) not paid [3]. So, it is effective to emphasize the selection of elements with high probability of overstatement in tax expenditure auditing;
- The audited universe is divided into strata in a way that the largest element will have the highest opportunity to be selected, while the smallest one will have the lowest probability. Due to the stratification, the PPS method makes it possible to limit oneself to small samples and to reduce the number of inspections if there is a low level of mistakes because one transaction can be selected for more than one time (the more the sum, the higher is the probability of repeated selection). At the same time, if the level of mistakes is high, the PPS method can cause large samples because one element can be selected for more than one time [11].

A. Ahrens and J. Lobbek consider such advantages of sampling method as the increase in the probability of selecting large monetary units from the whole audited universe; reducing the cost of inspections because several units are audited at a time; and providing statistical inference in value terms [12].

In order to conduct a tax report auditing, it is reasonable to divide the audited universe into three following groups:

- The largest elements (tax accounting elements). These are such elements which have the largest sum by tax reporting items. So, the strata will be based on the main tax reporting items. For example, tax declaration of profit tax consists of the following strata: bought-in goods revenue, non-operating income, direct costs, indirect costs and non-operating costs.

In their turn, the items of tax report are based on account items. For instance, indirect costs of profit taxation include commercial expenditures, administrative expenses and the property tax.

- Elements in which, according to the auditor's professional judgement, the probability of errors is the highest. For instance, commercial expenditures contain publicity expenditures not included in sample by values, though the accounting policy of the company and other normalization data helped the auditor to find the absence of normalization procedure of publicity expenditure for profit taxation (p. 4, art. 264 Tax Code of the Russian Federation).
- Other elements.

While dividing the audited universe, one should bear in mind that unlike account reporting forms approved by the Order of the Russian Ministry of Finance # 66n dated June 2, 2010, tax reporting forms are obligatory for taxpayers to complete and one must not introduce any changes in them (p.3, art.80 the Tax Code of the Russian Federation). This means that the stratification of sampling universe should meet the order of article forming according to the Order of Federal Tax Service of the Russian Federation (hereinafter called "FTS") # MMB-7-3/174@ dated March 22, 2012 "On the approval of the form and format for profit tax declaration and the completion order") [13].

While applying the PPS method, they use the following notions:

Table 1: PPS Reliability Factors

| Required reliability | Reliability factors |
|----------------------|---------------------|
| 99% | 4.605 |
| 95% | 2.996 |
| 90% | 2.300 |

- Reliability factor (Table 1);
- Expected error level. This parameter is important when errors are expected. It is computed the following way (Formula 1):

$$O = SI/GS \tag{1}$$

where M is the expected error level,
 SI is the expected sum of misstatements,
 GS is the universe.

- The acceptable error level. This parameter is necessary for computing the size of sample. Two formulae are used for it (Formulae 2 and 3):

$$UI = I/F \tag{2}$$

where UI is the misstatement level,
 I is the sample interval,
 F is the reliability factor used for overstatement error.

$$n = GS/I \tag{3}$$

Now we will consider the example of overstating purchase accounts for materials (prime cost) with book value 5,000,000 roubles using the PPS method as a method of selecting observation. The auditor decided that a 5% mistake in book value is significant. Besides, he decided to use the reliability level. 5% of 5,000,000 roubles are equal to 250,000 roubles.

Book value = 5,000,000 roubles.

The number of accounts in universe = 3,000 pieces.
 Acceptable mistake = 250,000 roubles.
 Reliability level = 95%.

The sampling interval (I) is computed the following way (Formula 4):

$$I = 250,000 / 2.996 = 83,400 \text{ рублей} \tag{4}$$

The sample size (n) is computed the following way (Formula 5):

$$n = 5,000,000 / 83,400 = 60 \tag{5}$$

Table 2: The work sheet for PPS sampling

| # of transaction account | Cost | Total | Selected elements |
|--------------------------|-----------|--------------|-------------------|
| 1 | 2,000.00 | 2,000.00 | 2,000.00 |
| 2 | 536.00 | 2,536.00 | |
| 3 | 897.00 | 3,433.00 | 83,400.00 |
| 4 | 4,565.00 | 7,998.00 | |
| 5 | 75,600.00 | 83,598.00 | 85,400.00 |
| 6 | 2,500.00 | 86,098.00 | |
| 7 | 8,901.00 | 94,999.00 | 83,400.00 |
| 8 | 1,000.00 | 95,999.00 | |
| 9 | 9,987.00 | 105,986.00 | |
| 10 | 62,000.00 | 167,986.00 | 168,800.00 |
| ... 3000 | | | |
| | 5,000,000 | 5,000,000.00 | 2,587,987.00 |
| | 100% | 100% | 58% |

Then these results can be used for selecting purchase accounts for sampling. This process is shown in Table 2 given below. All accounts with the largest balances got into the sample.

Although the sample contains 60 accounts and some accounts have very insignificant balances, nevertheless the PPS method gives us the high probability that all the accounts with the largest balances will be selected. It should be noted that though the auditor inspected only 3% of the universe, it made up 58% of total book value.

In conclusion, it should be noted that audit sampling is a necessary and important element of auditing. It requires of auditor to have special knowledge and skills that can allow him to increase the effectiveness of inspections. The results of audit and the auditor’s opinion about the trustworthiness of tax reports depend on the quality of sampling and the correctness of results assessment.

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