Academic Journal of Economic Studies
Vol. 4, No. 1, March 2018, pp. 123–132
ISSN 2393-4913, ISSN On-line 2457-5836

Application of the Sampling Selection Technique in Approaching Financial Audit

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Abstract *In his professional approach, the financial auditor has a wide range of working techniques, including selection techniques. They are applied depending on the nature of the information available to the financial auditor, the manner in which they are presented - paper or electronic format, and, last but not least, the time available. Several techniques are applied, successively or in parallel, to increase the safety of the expressed opinion and to provide the audit report with a solid basis of information. Sampling is used in the phase of control or clarification of the identified error. The main purpose is to corroborate or measure the degree of risk detected following a pertinent analysis. Since the auditor does not have time or means to thoroughly rebuild the information, the sampling technique can provide an effective response to the need for valorization.*

Key words Financial audit, selection techniques, sampling, audit evidence, relevance of financial information, audit report

JEL Codes: M42

1. Introduction

In the current global economic context, financial audit has become an important landmark for any entity - be it an economic entity, a bank, an investor or a manager. Financial statements prepared and published by economic entities are the basis of many important economic and political decisions. Therefore, it has become increasingly necessary for financial auditors to constantly seek to improve their working methods, to improve their document analysis technique, in line with the ever-increasing development of modern technology.

The need for *relevant and true* information has always existed in all economic, social or other activities, but the importance of this process has become evident over the past two decades, with the financial scandals involving a large number of corporations, starting with 2001 (Enron), 2002 (World Com, Adelphia, Quest Communications, Global Crossing), and culminating in 2008, with Lehman Brothers bankruptcy.

All of these events have had a strong impact on the global economic market, suggesting that some investors could lose their confidence in the management of their companies and the investments made by them.

In this context, the role of auditors in general, but especially of financial auditors, becomes a very important one, namely to provide *credibility to accounting information*, to ensure that a decision-making process is based on faithful information, to ensure the functioning of financial flows at the level of capital markets and the economy as a whole.

Many authors indicate that if there were no auditors to certify the financial information presented, the risks on the market would cause a substantial increase in the cost of capital, and this would be reflected in a decline in the standard of living in general. In parallel, it appears that one of the most controversial issues in the audit is related to the auditors' responsibility for detecting frauds and errors.

In recent years, the European Commission has begun complex consultation procedures between the Member States of the European Union regarding the role of financial audit in the current economic climate, the auditors' independence and the relevance of the various information provided by an audit report. There have been and there are ample discussions about the focus of the audit market inside Big audit firms (The Big Four) or issues of corporate governance. In order to ensure a certain level of protection for users in the capital markets, various studies have been carried out that support the need for financial audit and a compliance with regulations published by professional bodies.

In his professional approach, the financial auditor has a wide range of working techniques, including *selection techniques.* They are applied depending on the nature of the information available to the financial auditor, the manner in which they are presented - paper or electronic format, and, last but not least, the time available. Several techniques are applied, successively or in parallel, to increase the safety of the expressed opinion and to provide the audit report with a solid basis of information.

Sampling is used in the phase of control or clarification of the identified error. The main purpose is to corroborate or measure the degree of risk detected following a pertinent analysis. Since the auditor does not have time or means to thoroughly rebuild the information, the sampling technique can provide an effective response to the need for valorization.

Of course, sampling contains a certain margin of error, determined simply by the fact that it is based on extrapolation or estimation. The auditor is confronted with the difficulty in assessing the importance of this estimate in order to achieve an acceptable margin of error for the proposed objective. However, by judicious selection of the units in the sample, a relevant result will be obtained. On the other hand, the modern computerized environment in which each audited entity operates creates new opportunities, but also new risks, additional rules for security, fairness and acceptable margin of error, thus influencing the work of auditors.

Today, in a time so computerized, there appears to be a need for the auditor to express a real-time opinion against the classical, historical approach. The auditor should assess the quality of the information provided by data systems, because there are pressures coming from both internal management and external stakeholders who feel the need to be informed in order to withstand the competitive environment. *Computer-assisted audit* techniques solve this problem as they are able to quickly analyze large data volumes to identify errors. An audit based on these techniques will not examine a sample but all transactions of the audited entity during the audit period.

2. Literature review

The principles and importance of sampling for the financial audit are set out in International Auditing Standard 530 "Auditing Sampling and Other Selective Testing Procedures" (ISA 530) endorsed by the International Federation of Accountants (IFAC) in 1999. The beginnings of sampling in financial audit date back to 1962, when the Special Statistical Sampling Committee of the *American Institute of Certified Public Accountants* (AICPA) issued a special report entitled "Statistical Sampling and Independent Auditor" which established the use of the statistical sampling method with generally accepted auditing standards. Subsequently, AICPA issues in 1981 the Professional Standard "Sampling in Auditing" containing general guidelines for both sampling methods - statistical and non-statistical.

In the financial audit, sampling is a selection method that applies to the balance of an account or class of transactions to obtain pertinent and sufficient audit evidence consistent with audit objectives (Ghiță and Mareș, 2003). In this process, the auditor should examine a representative sample of different types of accounts, as well as review the customer's past events. Both auditors and researchers are faced with a critical situation when deciding how to select the sample and what size it should have.

The sampling selection technique involves applying audit procedures to only a part of the total audited population - called the sample - in order to obtain reliable audit evidence capable of defining the entire population. If the sampling selection technique is applied, the auditor should ensure that the sample chosen is representative - that means a sample of units with characteristics as close as possible to the whole population (Arens and Loebbecke, 2003). Only this way the sampling results are valid for the entire population under testing. Otherwise, the conclusions of the sampling test may only be applied to the sample.

Sampling is used in the phase of control or clarification of the identified error. The main purpose is to corroborate or measure the degree of risk detected following a pertinent analysis. Since the auditor does not have time or means to thoroughly rebuild the information, the sampling technique can provide an effective response to the need for valuation. Sampling, of course, contains a certain margin of error, determined simply by the fact that it is based on extrapolation or estimation (Dobroțeanu and Dobroțeanu, 2002). The auditor is confronted with the difficulty in assessing the importance of this estimate to achieve an acceptable margin of error for the proposed objective. Through a judicious selection of units in the sample a pertinent result will be obtained. In the audit procedures, sampling is the procedure followed by the auditor after deployment of:

a) risk assessment procedures (ISA 315);

b) tests on contracts (ISA 330);

c) the professional judgment of the auditor, which incorporates the accumulated experience.

The science of sampling design involves: analyzing existing resources, externally imposed restrictions, available mathematical and statistical tools, examining the accumulated knowledge of the distinctive features of the population subject to sampling and, last but not least, correlating all of these data to achieve optimal design, appropriate to the objectives of the audit. The essential criterion to be applied when selecting a particular design of the sample is that the sample is designed to provide the desired information with sufficient accuracy at a minimum cost.

The effectiveness of applying the sampling technique depends on several factors. First, it is influenced by the precise definition of audit objectives. The auditor should set out as clearly as possible what is to be demonstrated in order to define the characteristics that will later be considered as an error or anomaly (Lohr, 1999).

Secondly, for an adequate application of the sampling technique, it is essential that the auditor chooses correctly the nature of the population, taking into account the specificity of the audited entity's activity. The Population is a complete set of data, exhaustive and appropriate, from which the auditor wishes to extract a sample in order to reach a pertinent conclusion. A sampling unit can be a simple accounting document, such as an invoice or a receipt, or even a line item. The auditor will define the sampling unit according to its compliance with audit objectives (Tanti and Morariu, 2012). The size of the sample is affected by the level of sampling risk that the auditor is willing to accept: the more the auditor is willing to accept a lower risk level, the higher the sample selected.

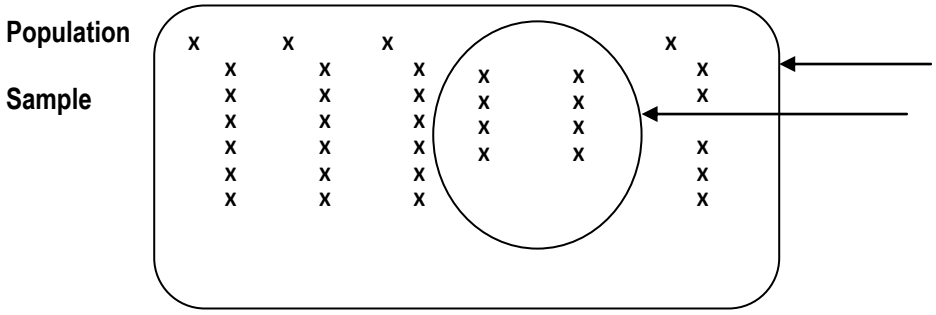


Figure 1. Extracting a sample from a population

When selecting the population to be sampled, the financial auditor may choose between various types of documents and accounting operations on the basis of his/her professional reasoning.

2.1. Statistical or non-statistical sampling?

There are two general approaches to sampling in audit: *both statistical and non-statistical*, and both require the auditor to use professional judgment to correlate audit evidence from sampling with other audit evidence to make an opinion. Choosing a statistical or non-statistical approach does not affect directly the auditor's decision on the audit procedures to be applied, the degree of relevance of the audit evidence obtained from the individual elements in the sample or the measures to be taken if significant errors appear.

Statistical sampling is the selection method based on probability, whereby each unit of the total population has equal chances of being included in the sample (Florea *et al.*, 2008). The results of applying this method are statistically assessable, the auditor can determine whether the evidence obtained is sufficient and the sampling risk can be quantified.

Instead, in *non-statistical sampling*, the auditor uses simple professional reasoning to select sample items. Although sample units with representative characteristics for the population concerned are chosen, the results of the sampling test cannot be extrapolated to the whole population but are only applicable to the units tested.

The difference between the two types of sampling is that the sampling risk of a statistical plan can be measured and controlled (Guy *et al.*, 2002), while a non- statistical plan, even if it is perfectly planned, does not provide a framework to measure the risk of sampling.

The main similarity of the two types of sampling is that both approaches require the auditor's reasoning to be exercised during the planning, implementation and evaluation of the sampling plan. In other words, even if statistical methods are used, it does not eliminate the need for reasoning.

Moreover, the effective audit procedures implemented in the sample will be the same regardless of whether a statistical or non-statistical approach is used. Using a statistical plan does not mean that the auditor can modify the planned procedures for collecting audit evidence to arrive at a final conclusion.

The auditor needs to assess the individual and situational costs and benefits associated with each sampling before reaching a conclusion. Therefore, as statistical and non-statistical sampling can provide sufficient audit evidence, the auditor chooses one of them after assessing their cost and effectiveness in the given circumstances.

In certain situations, it is recommended to use statistical sampling rather than sampling only by reasoning. Before deciding which of the two to use, the auditor should establish the audit objectives, identify the features of the population under review, and assess the acceptable risk. After determining these coordinates, it would be advisable to use a statistical sampling as long as the auditor has a well-defined population and access to the required documents is not restricted or difficult.

3. Methodology of research

The present research is an *opportunity* through the fact that it highlights some aspects that are not fully developed in the specific literature, respectively the selection techniques and the proven utility of the proposed theoretical and practical approaches substantiated and analyzed in the research performed.

The methodological objective of this scientific research is to capture the current level of knowledge in the field of financial audit, particularly with reference to selection techniques, in order to identify the limitations and to propose models and solutions to improve the application of these techniques, by the financial auditor.

The research has started from the time and space analysis of the selection techniques in financial audit by reviewing the literature and studies conducted in this field, followed by a detailed practical discussion of the issues debated.

Therefore, the research activity has been structured starting from the careful study of a significant number of papers elaborated by established authors, national and international institutes in the field of financial audit, works elaborated by various specialists in the field, as well as a series of important publications from the Romanian and foreign literature.

Starting from the fact that we recognize all the principles of the positive and the constructivist currents, we believe that the present study goes from normative doctrinal concepts to a positive and constructive framing, according to which "*the observed facts are sources of knowledge, but with influences of hermeneutics, when interpretative-critical valences were approached, based on a longitudinal analysis". "These interpretative-critical influences, although considered to be boundaries of objective research, sometimes express the researcher's vision, leading to the formation of new visions or directions of research*" (Ryan *et al.*, 2002).

Regarding the *positive-constructive research*, the auditor needs to master the theoretically expressed statements in order to apply and demonstrate them at the practical level. Constructive research in financial audit consists of expressing original views that need to be demonstrated and then interpreted, in order to make the auditor more efficient. Possible hypotheses are to be validated scientifically or experimentally, using the *descriptive*, observational, case study or survey method.

With regard to *constructive empirical research*, the following *methods* were used:

- the use of tabular and graphic representation to highlight both the theoretical notions and the results of the practical case;
- using the case study to show exactly what tools in modern computing technique can be used by financial auditors to refine sampling selection technique.

4. Applying the sampling technique to inspecting tangible assets

4.1. Current procedure for inspecting tangible assets

Inspection of tangible assets consists in the actual verification on the ground of the existence of tangible assets recorded in the company's accounts (Horomnea, 2010). During such an on-site inspection, *physical audit evidence* is collected through direct observation. If the audit evidence obtained through direct observation of a particular situation presents the risk of misinterpretation in relation to the objectives of the audit, then it will be corroborated with other evidence in order to give it credibility. The Financial Auditor is required to participate to the inventory, in accordance *with ISA 501 - Audit Samples*, that comprises the following steps:

- Preparing inventory;
- Establishing factual stocks;
- Establishing inventory results;
- Adjust pluses and minuses.

The auditor must ensure (Mikol, 1999):

- the responsibility for organizing the inventory belongs to the client company and consists in taking a series of measures to ensure its smooth development: sorting, arranging, labeling of materials, products, goods and other material values. Determination of factual stocks is made by the inventory commission, through counting, weighing, measuring or cubing, as the case may be.

- that all quantities found by the commission are listed in the inventory which is drawn up on management, storage vouchers and goods. To determine the inventory results, inventory stocks are first evaluated. These will be signed by the members of the committee and the manager. The value of factual stocks is compared with the value of scrip tic stocks.

- buildings are inventoried by identifying them on the basis of their property titles and technical dossier (Order No. 2861, 2009].

- special constructions and equipment such as: electricity, heat, gas, water, canal, telecommunications, railways and similar to these, are inventoried according to the rules established by their owners.

Among the objectives to control the *portfolio of property titles*, we meet (Pigé, 1997):

- the existence of the accounted securities and their actual holding by the client;
- the correct determination of the book value of securities;
- correct accounting for acquisition costs in case of purchase of securities, income from securities and plus or minus value in case of sale of securities.

According to ISA 501,"*Inspection of property, plant and equipment consists in the physical examination of the assets. The Tangible Assets Inspection provides credible audit evidence of their existence but not necessarily with respect to the entity's rights and obligations or the valuation of those assets. Inspection of individual stock items typically accompanies inventory tracking.*"

The total population of the analyzed company's buildings is 306 items, with a total book value of 46.131.310 lei.

According to the model presented in *Quality Audit Guide –QAG* (*CAFR),* the minimum sample size for construction based on the obtained information is 4 units, according to table 1:

Table 1. Determining the size of the sample for construction (Guide on Quality Audit, 2010)

Statement of the financial situation	**Approximate value of the population**	**Significant threshold**	***Inherent and specific risk factor***	***Control risk factor***	***Relevance to analytical review***	**Is the sample necessary?**	**The minimum sample size**
	Is set by the auditor			1 high risk: 5 low risk	3 total:1 none	Yes/No	
E							
Construction	46.131.310	1.202.087	2,5	4	1	Yes	**3,84**

Minimum sample size = Approximate population / Significant threshold / Inherent and specific risk factor / Control risk factor / Relevance to analytical review

The minimum size of the sample is determined by dividing the approximate value of the population in the amount of 46.131.310 lei, to the final threshold of 1.202.087 lei, to the inherent and specific risk factor previously set for the "Tangible assets" section that is 2.5, to the previously established control risk factor for the "Investments" section that is 4 and to the relevance to the analytical review that is 1.

Based on the calculations made, and using the *systematic sampling method* with a 76 elements step, the financial auditor selects from the building statement received from the client company:

- item no. 1 "Social annexation building" with inventory value 563.405 lei;
- item no. 77 "Door automation" with inventory value 2.045 lei;
- item no.153 "Inventory around the profile hall II" with inventory value 21.041 lei;
- item no. 229 "Special construction for the transport of electricity" with inventory value 61.394,76 lei.

For these elements we have to check whether these constructions exist, if they are in a proper physical state as well as the property documentation.

4.2. Suggestions for refining the sampling technique when inspecting tangible assets

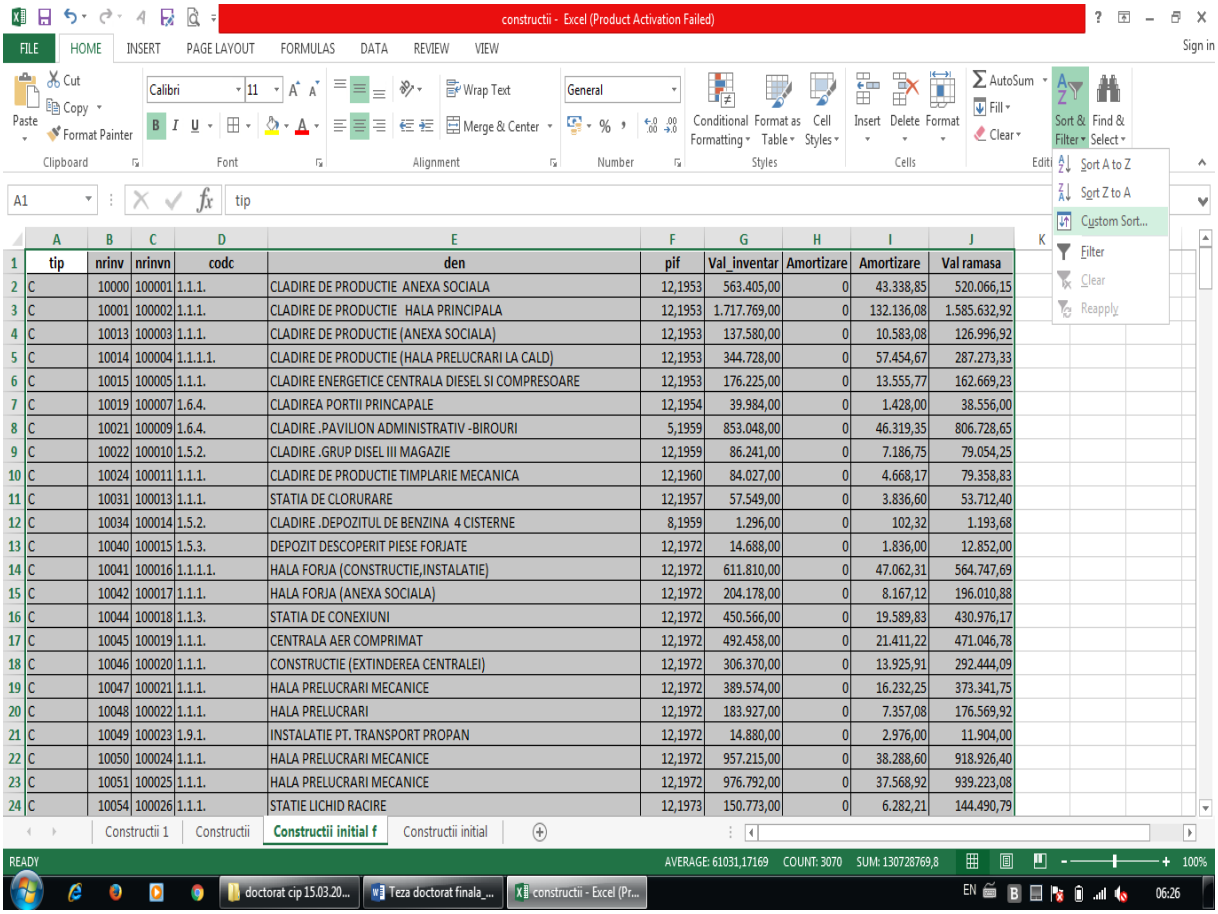
The auditor should consider the IT environment in designing audit procedures to reduce the audit risk to a low, acceptable level. The auditor's specific objectives do not change if the accounting data is processed manually or by computer. However, the methods of applying audit procedures to collect evidence may be influenced by computerized processing methods. The auditor may use either manual audit procedures; computer assisted auditing techniques, or a combination of the two to obtain sufficient audit evidence.

Anyway, in some accounting systems that use a computer to process significant applications, it may be difficult or impossible for the auditor to obtain certain data for inspection, investigation, or confirmation without computerized assistance. In order for the sample chosen to cover the highest value of the total building value, the Excel spreadsheets (Balan and Balan, 1995) and the most suitable commands will be used, depending on the target.

The first suggestion of refinement is to sort down the constructions from the client company card, depending on the inventory value, in order to check how many of them exceed the value threshold.

For this operation, select the cell range that contains the construction data, respectively cells from A1 to J1, to A307 or J307, followed by choosing the *Sort and Filter* command with the *Custom Sort* option, from the *Home* section of the main menu, as shown in figure 2:

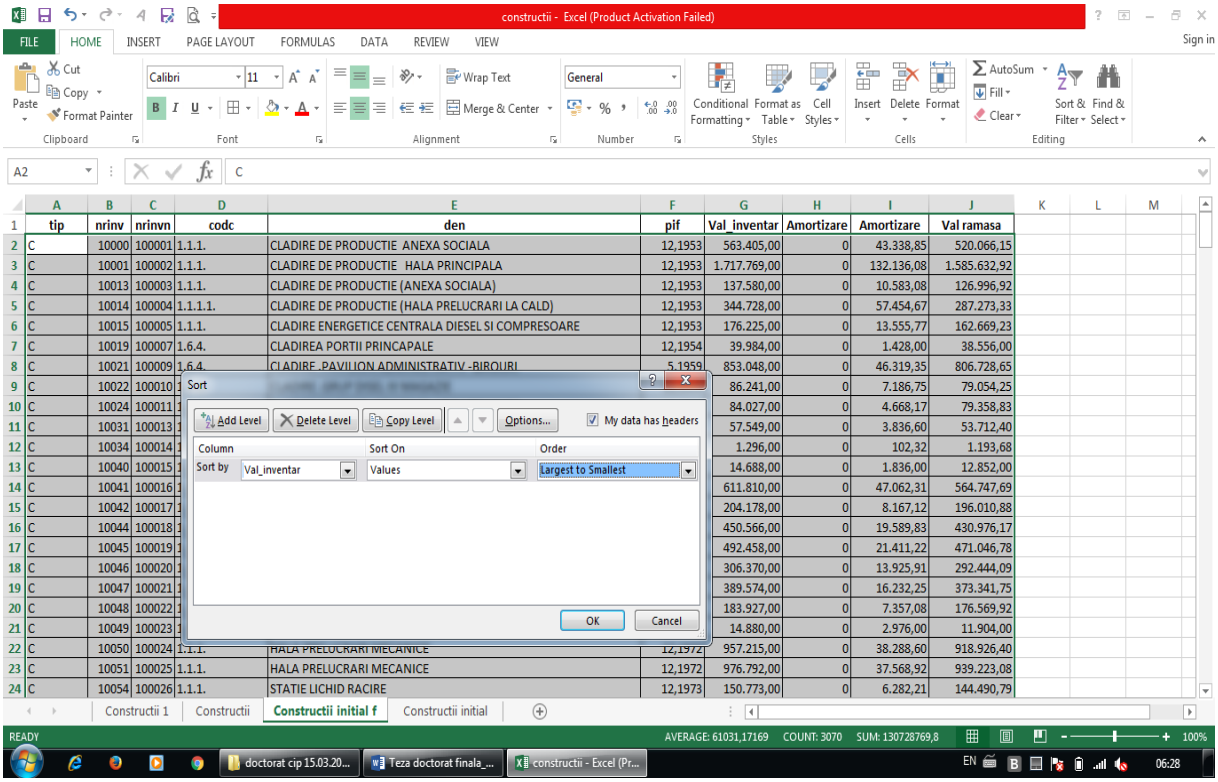
Figure 2. Element selection and sorting



	A	B	C	D	E	F	G	H	I	J
1	tip	nrinv	nrinvn	codc	den	pif	Val_inventar	Amortizare	Amortizare	Val ramasa
2	C	10000	100001	1.1.1.	CLADIRE DE PRODUCTIE ANEXA SOCIALA	12,1953	563.405,00	0	43.338,85	520.066,15
3	C	10001	100002	1.1.1.	CLADIRE DE PRODUCTIE HALA PRINCIPALA	12,1953	1.717.769,00	0	132.136,08	1.585.632,92
4	C	10013	100003	1.1.1.	CLADIRE DE PRODUCTIE (ANEXA SOCIALA)	12,1953	137.580,00	0	10.583,08	126.996,92
5	C	10014	100004	1.1.1.1.	CLADIRE DE PRODUCTIE (HALA PRELUCRARI LA CALD)	12,1953	344.728,00	0	57.454,67	287.273,33
6	C	10015	100005	1.1.1.	CLADIRE ENERGETICE CENTRALA DIESEL SI COMPRESOARE	12,1953	176.225,00	0	13.555,77	162.669,23
7	C	10019	100007	1.6.4.	CLADIREA PORTII PRINCAPALE	12,1954	39.984,00	0	1.428,00	38.556,00
8	C	10021	100009	1.6.4.	CLADIRE .PAVILION ADMINISTRATIV -BIROURI	5,1959	853.048,00	0	46.319,35	806.728,65
9	C	10022	100010	1.5.2.	CLADIRE .GRUP DISEL III MAGAZIE	12,1959	86.241,00	0	7.186,75	79.054,25
10	C	10024	100011	1.1.1.	CLADIRE DE PRODUCTIE TIMPLARIE MECANICA	12,1960	84.027,00	0	4.668,17	79.358,83
11	C	10031	100013	1.1.1.	STATIA DE CLORURARE	12,1957	57.549,00	0	3.836,60	53.712,40
12	C	10034	100014	1.5.2.	CLADIRE .DEPOZITUL DE BENZINA 4 CISTERNE	8,1959	1.296,00	0	102,32	1.193,68
13	C	10040	100015	1.5.3.	DEPOZIT DESCOPERIT PIESE FORJATE	12,1972	14.688,00	0	1.836,00	12.852,00
14	C	10041	100016	1.1.1.1.	HALA FORJA (CONSTRUCTIE,INSTALATIE)	12,1972	611.810,00	0	47.062,31	564.747,69
15	C	10042	100017	1.1.1.	HALA FORJA (ANEXA SOCIALA)	12,1972	204.178,00	0	8.167,12	196.010,88
16	C	10044	100018	1.1.3.	STATIA DE CONEXIUNI	12,1972	450.566,00	0	19.589,83	430.976,17
17	C	10045	100019	1.1.1.	CENTRALA AER COMPRIMAT	12,1972	492.458,00	0	21.411,22	471.046,78
18	C	10046	100020	1.1.1.	CONSTRUCTIE (EXTINDEREA CENTRALEI)	12,1972	306.370,00	0	13.925,91	292.444,09
19	C	10047	100021	1.1.1.	HALA PRELUCRARI MECANICE	12,1972	389.574,00	0	16.232,25	373.341,75
20	C	10048	100022	1.1.1.	HALA PRELUCRARI	12,1972	183.927,00	0	7.357,08	176.569,92
21	C	10049	100023	1.9.1.	INSTALATIE PT. TRANSPORT PROPAN	12,1972	14.880,00	0	2.976,00	11.904,00
22	C	10050	100024	1.1.1.	HALA PRELUCRARI MECANICE	12,1972	957.215,00	0	38.288,60	918.926,40
23	C	10051	100025	1.1.1.	HALA PRELUCRARI MECANICE	12,1972	976.792,00	0	37.568,92	939.223,08
24	C	10054	100026	1.1.1.	STATIE LICHID RACIRE	12,1973	150.773,00	0	6.282,21	144.490,79

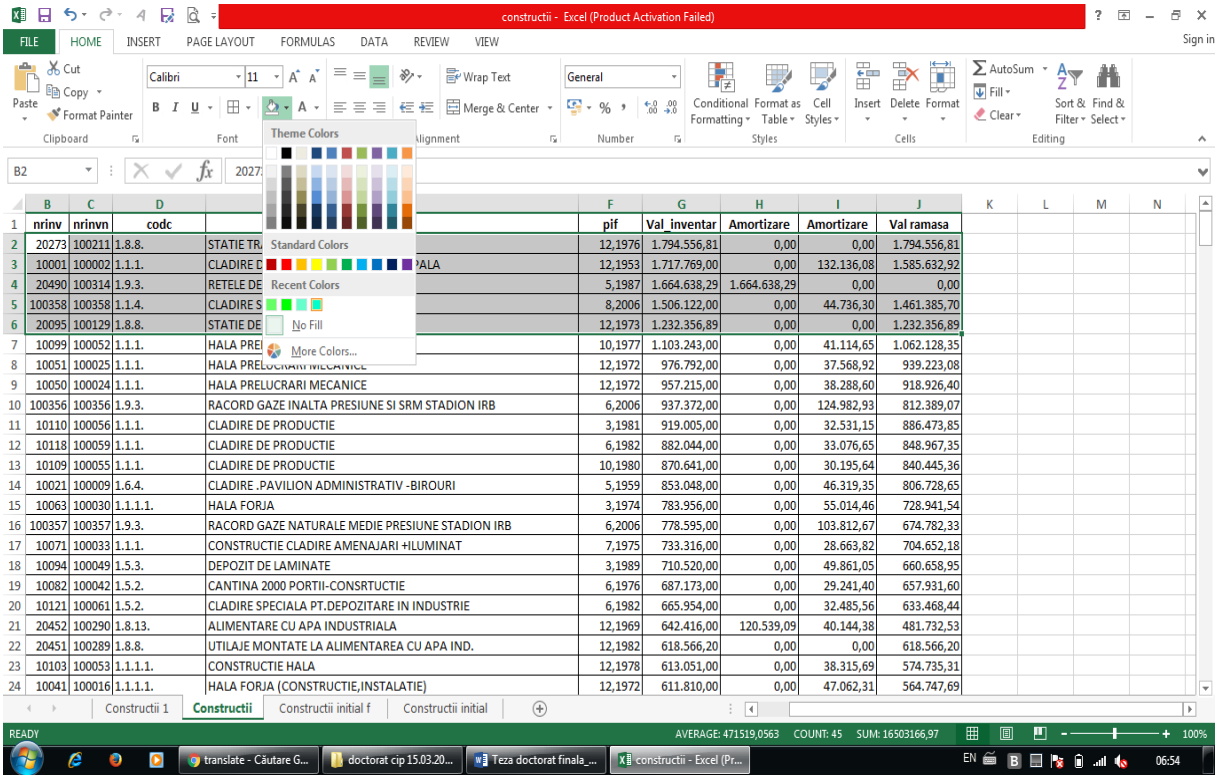
Within this option (which is also organized as a menu) it will be sorted by Column Val_inventory - *Column - Sort By - Val_inventory* (custom sorting after the Val_inventory column). Sorting is performed on the *Sort on Values* field, which is ordered from the large to small *Order - Largest to Smallest* (ordering from highest to lowest), as shown in figure 3:

Figure 3. Personalized sorting of items by inventory value



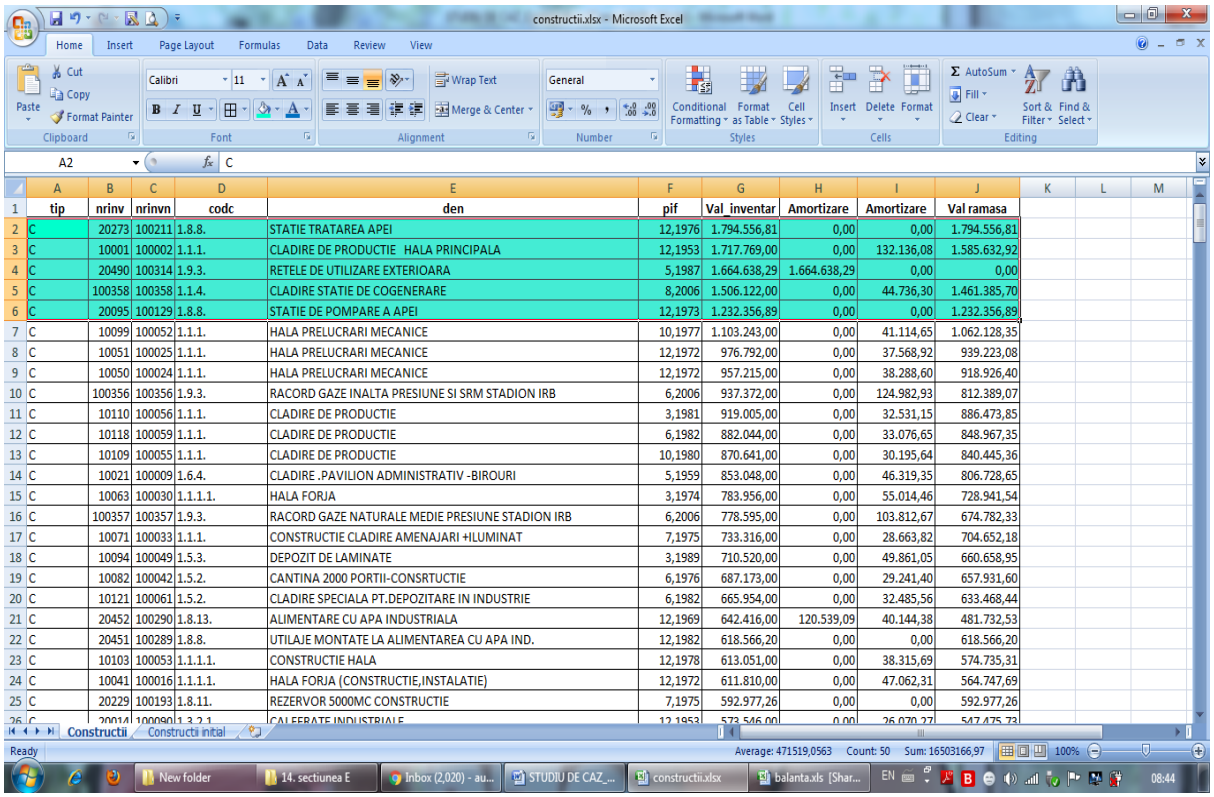
To better highlight the rows selected in the spreadsheet, the financial auditor uses the *Fill Color* command in the *Home* menu section of Figure 4:

Figure 4. Highlighting selected items



The financial auditor chooses the desired color from the color palette according to figure 5, and goes through these steps whenever he wishes to highlight the representative cells.

Figure 5. Highlighting selected items



	A	B	C	D	E	F	G	H	I	J
1	tip	nrinv	nrinvn	codc	den	pif	Val_inventar	Amortizare	Amortizare	Val ramasa
2	C	20273	100211	1.8.8.	STATIE TRATAREA APEI	12,1976	1.794.556,81	0,00	0,00	1.794.556,81
3	C	10001	100002	1.1.1.	CLADIRE DE PRODUCTIE HALA PRINCIPALA	12,1953	1.717.769,00	0,00	132.136,08	1.585.632,92
4	C	20490	100314	1.9.3.	RETELE DE UTILIZARE EXTERIOARA	5,1987	1.664.638,29	1.664.638,29	0,00	0,00
5	C	100358	100358	1.1.4.	CLADIRE STATIE DE COGENERARE	8,2006	1.506.122,00	0,00	44.736,30	1.461.385,70
6	C	20095	100129	1.8.8.	STATIE DE POMPARE A APEI	12,1973	1.232.356,89	0,00	0,00	1.232.356,89
7	C	10099	100052	1.1.1.	HALA PRELUCRARI MECANICE	10,1977	1.103.243,00	0,00	41.114,65	1.062.128,35
8	C	10051	100025	1.1.1.	HALA PRELUCRARI MECANICE	12,1972	976.792,00	0,00	37.568,92	939.223,08
9	C	10050	100024	1.1.1.	HALA PRELUCRARI MECANICE	12,1972	957.215,00	0,00	38.288,60	918.926,40
10	C	100356	100356	1.9.3.	RACORD GAZE INALTA PRESIUNE SI SRM STADION IRB	6,2006	937.372,00	0,00	124.982,93	812.389,07
11	C	10110	100056	1.1.1.	CLADIRE DE PRODUCTIE	3,1981	919.005,00	0,00	32.531,15	886.473,85
12	C	10118	100059	1.1.1.	CLADIRE DE PRODUCTIE	6,1982	882.044,00	0,00	33.076,65	848.967,35
13	C	10109	100055	1.1.1.	CLADIRE DE PRODUCTIE	10,1980	870.641,00	0,00	30.195,64	840.445,36
14	C	10021	100009	1.6.4.	CLADIRE .PAVILION ADMINISTRATIV -BIROURI	5,1959	853.048,00	0,00	46.319,35	806.728,65
15	C	10063	100030	1.1.1.1.	HALA FORJA	3,1974	783.956,00	0,00	55.014,46	728.941,54
16	C	100357	100357	1.9.3.	RACORD GAZE NATURALE MEDIE PRESIUNE STADION IRB	6,2006	778.595,00	0,00	103.812,67	674.782,33
17	C	10071	100033	1.1.1.	CONSTRUCTIE CLADIRE AMENAJARI +ILUMINAT	7,1975	733.316,00	0,00	28.663,82	704.652,18
18	C	10094	100049	1.5.3.	DEPOZIT DE LAMINATE	3,1989	710.520,00	0,00	49.861,05	660.658,95
19	C	10082	100042	1.5.2.	CANTINA 2000 PORTII-CONSRTUCTIE	6,1976	687.173,00	0,00	29.241,40	657.931,60
20	C	10121	100061	1.5.2.	CLADIRE SPECIALA PT.DEPOZITARE IN INDUSTRIE	6,1982	665.954,00	0,00	32.485,56	633.468,44
21	C	20452	100290	1.8.13.	ALIMENTARE CU APA INDUSTRIALA	12,1969	642.416,00	120.539,09	40.144,38	481.732,53
22	C	20451	100289	1.8.8.	UTILAJE MONTATE LA ALIMENTAREA CU APA IND.	12,1982	618.566,20	0,00	0,00	618.566,20
23	C	10103	100053	1.1.1.1.	CONSTRUCTIE HALA	12,1978	613.051,00	0,00	38.315,69	574.735,31
24	C	10041	100016	1.1.1.1.	HALA FORJA (CONSTRUCTIE,INSTALATIE)	12,1972	611.810,00	0,00	47.062,31	564.747,69
25	C	20229	100193	1.8.11.	REZERVOR 5000MC CONSTRUCTIE	7,1975	592.977,26	0,00	0,00	592.977,26

The command results in the reorganization of the entire data table, and it is noted that *the first 5 items highlighted have an inventory value higher than the significance threshold*. Therefore, the financial auditor will first physically inspect the following tangible assets:

- ”Water treatment plant "with inventory value 1.794.556,81 lei;
- ”Main Building Production hall "with inventory value 1.717.769 lei;
- ”External Usage Networks "with inventory value 1.664.638,29 lei;
- ”Cogeneration plant building "with inventory value 1.506.122 lei;
- ”Water pumping station "with inventory value 1.232.356,89 lei.

The second suggestion of improvement is related to refine the way the sample size is determined. It is noticed that the first 5 elements together cover only 17.16% of the total population and the *auditor wants to cover at least 40% of the population*, taking into account the fact that the client company is not audited for the first time.

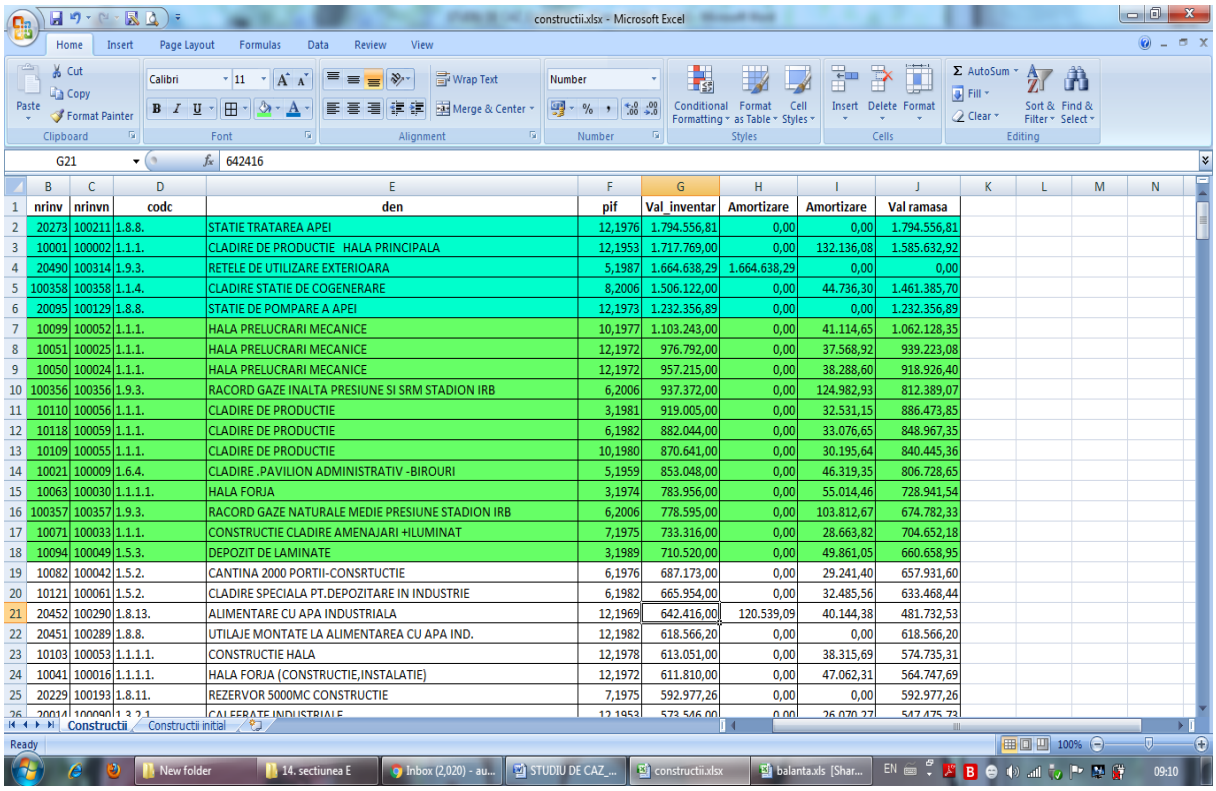
In order to cover the proposed minimum, the auditor first selects lines 7-18, which contain elements from the *Constructions* tab with visibly elevated values, as shown in figure 6.

It follows that the auditor will also inspect the following tangible assets with significantly increased values:

- ”Mechanical hall "with inventory value 1.103.243 lei;
- ”Mechanical hall "with inventory value 976.792 lei;
- ”Mechanical hall "with inventory value 957.215 lei;
- ”High pressure gas connection and IRB stadium SRM "with inventory value 937.372 lei;
- ”Production Building "with inventory value 919.005 lei;
- ”Production Building "with inventory value 882.044 lei;
- ”Production Building "with inventory value 870.641 lei;

- ”Administrative building office building "with inventory value 853.048 lei;
- ”Forge Hall "with inventory value 783.956 lei;
- ”Connection natural gas pressure stadium IRB "with inventory value 778.595 lei;
- ”Construction of buildings + lighting "with inventory value 733.316 lei;
- ”Rolling Stock "with inventory value 710.520 lei.

Figure 6. Selecting items with visibly elevated values



	B	C	D	E	F	G	H	I	J
1	nrinv	nrinvn	codc	den	pif	Val_inventar	Amortizare	Amortizare	Val ramasa
2	20273	100211	1.8.8.	STATIE TRATAREA APEI	12,1976	1.794.556,81	0,00	0,00	1.794.556,81
3	10001	100002	1.1.1.	CLADIRE DE PRODUCTIE HALA PRINCIPALA	12,1953	1.717.769,00	0,00	132.136,08	1.585.632,92
4	20490	100314	1.9.3.	RETELE DE UTILIZARE EXTERIOARA	5,1987	1.664.638,29	1.664.638,29	0,00	0,00
5	100358	100358	1.1.4.	CLADIRE STATIE DE COGENERARE	8,2006	1.506.122,00	0,00	44.736,30	1.461.385,70
6	20095	100129	1.8.8.	STATIE DE POMPARE A APEI	12,1973	1.232.356,89	0,00	0,00	1.232.356,89
7	10099	100052	1.1.1.	HALA PRELUCRARI MECANICE	10,1977	1.103.243,00	0,00	41.114,65	1.062.128,35
8	10051	100025	1.1.1.	HALA PRELUCRARI MECANICE	12,1972	976.792,00	0,00	37.568,92	939.223,08
9	10050	100024	1.1.1.	HALA PRELUCRARI MECANICE	12,1972	957.215,00	0,00	38.288,60	918.926,40
10	100356	100356	1.9.3.	RACORD GAZE INALTA PRESIUNE SI SRM STADION IRB	6,2006	937.372,00	0,00	124.982,93	812.389,07
11	10110	100056	1.1.1.	CLADIRE DE PRODUCTIE	3,1981	919.005,00	0,00	32.531,15	886.473,85
12	10118	100059	1.1.1.	CLADIRE DE PRODUCTIE	6,1982	882.044,00	0,00	33.076,65	848.967,35
13	10109	100055	1.1.1.	CLADIRE DE PRODUCTIE	10,1980	870.641,00	0,00	30.195,64	840.445,36
14	10021	100009	1.6.4.	CLADIRE .PAVILION ADMINISTRATIV -BIROURI	5,1959	853.048,00	0,00	46.319,35	806.728,65
15	10063	100030	1.1.1.1.	HALA FORJA	3,1974	783.956,00	0,00	55.014,46	728.941,54
16	100357	100357	1.9.3.	RACORD GAZE NATURALE MEDIE PRESIUNE STADION IRB	6,2006	778.595,00	0,00	103.812,67	674.782,33
17	10071	100033	1.1.1.	CONSTRUCTIE CLADIRE AMENAJARI +ILUMINAT	7,1975	733.316,00	0,00	28.663,82	704.652,18
18	10094	100049	1.5.3.	DEPOZIT DE LAMINATE	3,1989	710.520,00	0,00	49.861,05	660.658,95
19	10082	100042	1.5.2.	CANTINA 2000 PORTII-CONSRTUCTIE	6,1976	687.173,00	0,00	29.241,40	657.931,60
20	10121	100061	1.5.2.	CLADIRE SPECIALA PT.DEPOZITARE IN INDUSTRIE	6,1982	665.954,00	0,00	32.485,56	633.468,44
21	20452	100290	1.8.13.	ALIMENTARE CU APA INDUSTRIALA	12,1969	642.416,00	120.539,09	40.144,38	481.732,53
22	20451	100289	1.8.8.	UTILAJE MONTATE LA ALIMENTAREA CU APA IND.	12,1982	618.566,20	0,00	0,00	618.566,20
23	10103	100053	1.1.1.1.	CONSTRUCTIE HALA	12,1978	613.051,00	0,00	38.315,69	574.735,31
24	10041	100016	1.1.1.1.	HALA FORJA (CONSTRUCTIE,INSTALATIE)	12,1972	611.810,00	0,00	47.062,31	564.747,69
25	20229	100193	1.8.11.	REZERVOR 5000MC CONSTRUCTIE	7,1975	592.977,26	0,00	0,00	592.977,26
26	20014	100090	1.3.2.1	CALEFRATE INDUSTRIALE	12,1953	573.546,00	0,00	26.070,27	547.475,73

Subsequently, the financial auditor applies the method of systematic sampling with a step of 76 elements, so that the chosen sample is representative of the entire population. So it will select rows 94, 170, 246 in the *Building Sheet*.

In conclusion, the auditor will also inspect the following items according to the established sample:

- ”Inner thermal networks "with inventory value 96.665 lei;
- ”Special construction for the transport of electricity SC9Z "with inventory value 21.804 lei;
- ”Phone Networks "with inventory value 3.403 lei.

5. Conclusions

Based on the notion that selection techniques in financial audit can be and must be improved, improved through the most efficient use of modern computing, estimation and planning tools, the study highlights the importance and the main dimensions of this framework. In the selection techniques, the sampling technique was chosen due to its extent of utilization, due to the efficiency and ability of this technique to obtain quick and pertinent conclusions regarding the audited financial statements. The International Auditing Standard 530 "Auditing Sampling and Other Selective Testing Procedures" shows that, in order to achieve its objectives, the auditor should consider the characteristics of the sampled population in order to select relevant and significant sampling units. Due to the difficulty in applying professional reasoning, determining the sample size is the most difficult stage in the sampling process.

The importance of improving selection techniques, especially by insisting on the sampling technique, also comes from ISA 530, which states that "when designing audit procedures, the auditor must determine the optimal methods for selecting test items in order to gather evidence audit that meets the objectives of audit testing”.

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