

audit FINANCIAR

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- Telemunca în sfera auditului financiar în contextul pandemiei
- Teleworking in the Field of Financial Audit in the Pandemic Context



- Incertitudinile asupra continuității activității evidențiate în raportul auditorilor
- Evaluarea riscului de audit și influența asupra opiniei auditorului
- Auditul intern în contextul sistemelor ERP
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- Going Concern Uncertainties Disclosed in the Auditor's Report
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- the article must mention the title, the research methodology used, authors' contributions, the impact on the accounting profession and the references;
- an Abstract is compulsory, which must be written at the 3rd person plural, presenting the subject of the research, the main problems and authors' contributions;
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Teleworking in the Field of Financial Audit in the Context Generated by the COVID-19 Pandemic

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Abstract

In the sensitive socio-economic context generated by the COVID-19 pandemic, teleworking was, in many fields, a way to continue the activity while complying to the measures imposed by law in order to fight the spread of the new Coronavirus. On the one hand, teleworking offers flexibility in setting the work schedule, eliminates travelling time to and from the worksite and allows to attract competent employees from all over the world, by means of digitalisation. On the other hand, working from home is a challenge. The time required to transfer the activity in the virtual space, and the additional training necessary for the use of innovative information technologies can reduce efficiency and affect the work-life balance. This paper focuses on the audit profession, which had to rethink remote auditing so as to comply with the restrictive measures, but at the same time to avoid affecting the quality of audit missions. The questionnaire distributed among professional practitioners, members of the CFAR, helped us identify the perception of Romanian financial auditors on the variables influencing the efficiency of the audit work carried out in the "new normal" and the extent to which teleworking could become a practice in future financial audit missions.

Key words: telework; financial auditor; remote audit; pandemic; COVID-19; digitalisation;

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1. Introduction

Due to globalisation, people and economies are more connected than ever. However, in the current pandemic context, it is precisely this interaction that can make the impact of the new coronavirus much stronger (IIA, 2020).

The pandemic was officially declared by the World Health Organization on March 11, 2020 and, since then, world governments have instituted restrictive measures meant to contain and fight the spread of the new Coronavirus (World Health Organization, 2020).

The new Coronavirus has shown us that the future is unpredictable. In the face of such a challenge, humanity must adapt and find new solutions, on different defining bases than the ones known and practiced before the pandemic. In other words, the current pandemic context “forces” us to distance ourselves physically, but it equally offers us the opportunity to stay connected in the “new normal” through digitalisation and innovation.

In this context, we focused our research on the audit profession, which had to adapt and show flexibility in order to carry out its activity under the new circumstances. For the financial auditor, the restrictive measures required changes in terms of face-to-face meetings, teamwork and the performance of audit missions. Thus, *teleworking* (or the concept of *work-from-home*, *home-office*, *remote work* or *e-work*) acquires new values in the financial audit, being the link between containing the spread of COVID-19 and reducing the economic and social impact.

In Romania, teleworking is a relatively new concept, regulated in 2018 by Law no. 81. On the one hand, according to a study performed by the European Foundation for the Improvement of Living and Working Conditions, in the period 2010-2019, only 0.6% of the employees worked from home (Eurofound, 2021), a percentage that placed Romania on the last position in the EU ranking. The pandemic, however, changed this statistic. On the other hand, the “Living, Working and COVID-19” report also highlights that restrictive measures have increased the use of teleworking during the pandemic among the EU Member States (Eurofound, 2020). Thus, by the Decrees and Ordinances issued in Romania during the health crisis, “during the state of emergency it was recommended to implement home-work or teleworking, where possible” (art. 48 in Annex 1 to Decree no. 240/2020). These

measures led to a significant increase in the number of people working remotely, which propelled Romania to 14th place in the EU27 ranking, with a percentage of 24%, compared to the European average of 34%.

Certainly, this increase would not have occurred so rapidly in the absence of the pandemic context. The emergence of the new coronavirus forced us to identify and adopt new solutions for carrying out the economic activity, while complying with the restrictive measures imposed by law. *In this context, shall we return to the old practices or is the “new normal” going to become a reality, even after the pandemic?*

For the financial auditor, the subject of this paper, the fulfilment of agreed commitments required the implementation of working procedures adapted to the new context. Thus, according to the perception of the financial auditors who are members of the Romanian Chamber of Financial Auditors (CFAR), the purpose of the research undertaken has two objectives:

- OB1: *identify the variables that impact the work efficiency of the financial auditor, and*
- OB2: *establish the extent to which teleworking can become a practice used in future audit missions.*

The study we proposed is structured in five sections. Thus, if this first section highlights the preliminary aspects of the scientific approach undertaken, the second section finds its correspondent in the analysis of specialist literature. The next two sections present the research methodology and a discussion of the results. Finally, the fifth section draws the final conclusions of the case study.

2. Literature review

According to the United Nations, the COVID-19 pandemic has unbalanced state economies, having an unprecedented negative impact since the Great Recession (UN, 2020; Bunget *et al.*, 2020), an event considered the “black swan” of our times, which changed everything through a domino effect. Thus, the economy has changed; technology has changed; even the concept of “location” has changed (Harvey Nash / KPMG CIO Survey, 2020).

The restrictions imposed to prevent the spread of the new Coronavirus have generated changes in the way of carrying out economic activities, the companies being forced to identify and adopt new solutions in the new

context generated by the pandemic, so as to ensure compliance with the principle of continuing the activity (Deliu, 2020; Burcă *et al.*, 2021). *But are these a temporary measure or, once implemented and used, they are likely to become a practice even after the pandemic?*

Due to physical distancing measures and the restriction of face-to-face meetings, many companies have moved their activities online. Although teleworking is not a new concept, being used since 1973 (Wojcak *et al.*, 2016), the pandemic has emphasized its widespread development.

In Romania, teleworking was regulated by Law no. 81 in 2018 and represents, according to art. 2, “the form of work organisation that allows an employee, called teleworker, to regularly and voluntarily fulfil the attributions specific to the position, occupation or profession the employee holds, in a different place than the workplace organised by the employer, at least one day per month, by using information and communication technologies”.

In the current pandemic context, the Decree of the President of Romania no. 195/2020 on the establishment of a state of emergency, introduced an important derogation from the provisions of Law no. 81/2018. Thus, if Law no. 81 provides within art. 3, paragraph 1, that teleworking is based on the agreement of the parties, art. 33 of the above-mentioned decree stipulates that, throughout the state of emergency, the teleworking regime may be imposed unilaterally by the employer, as a measure intended to limit the spread of the new Coronavirus. Thus, teleworking allows employees to perform their duties from any location, which can also represent a solution to reduce the level of stress experienced by young employees (The Deloitte Global Millennial Survey, 2020).

For many companies, teleworking is a challenge because it involves the use of information technology, remote coordination of employees and the transposition of the organisational culture into the online environment so that the organisation’s values, mission and vision are adopted in the new virtual workspace (Newman, 2020).

In the field of financial audit, information technology and digitalisation elements have been implemented to keep pace with the trend of business globalisation, in order to streamline the business, detect fraud more easily and increase the quality of the audit mission (Oncioiu *et al.*, 2019; Farcane & Deliu, 2020; Tiron-Tudor *et al.*, 2021).

Moreover, the pandemic has accelerated digitalisation (Gartner, 2020; KPMG, 2020) and, implicitly, the need to secure the activity moved in the virtual environment.

Thus, in the current sensitive socio-economic context, generated by the COVID-19 pandemic, the trust of stakeholders is paramount, financial auditors being forced to withdraw, reconsider their work practices, and look at this crisis as an opportunity to explore innovative solutions (Deliu, 2020; Farcane & Deliu, 2020).

In our study we focused on the profession of financial auditor, for which face-to-face meetings and travelling to the client’s headquarters represent important activities for meeting the agreed audit commitments, actions that had to be rethought in the face of the pandemic.

3. Research methodology

The practice of financial audits was affected by the measures imposed to contain the spread of the new Coronavirus, the members of the Chamber of Financial Auditors in Romania (CFAR) being forced to adapt to the new context generated by the COVID-19 pandemic in order to conduct the agreed audit missions.

Thus, the purpose of this scientific study is to identify the perception of Romanian financial auditors regarding:

1. the practice of audit missions in the teleworking regime,
2. the importance of digitalisation in the “new normal”,
3. the challenges and opportunities specific to the audit work carried out in the current pandemic context, and
4. the continuation of remote work after the pandemic period.

According to the research methodology addressed in this paper, it inherently belongs to the *behavioural research* trend that involves studying the behaviour and perceptions of professional financial auditors, and the way teleworking influences their behaviour when conducting the audit missions. The behavioural research method helped us correlate the fundamental research (of literature) with the applied research (using the questionnaire method), which will be presented in what follows.

The study is, therefore, *descriptive*, focusing on a questionnaire-based research, which aims to build on the theoretical and methodological elements presented

in the previous sections. Thus, when performing the present study, we aimed to use the scientific methodology of the *questionnaire*-based research, by using the *survey* as a research form.

The information needed to conduct the study was included in a questionnaire consisting of 45 questions, mostly closed, evaluated on a Likert scale from 1 to 5, but also of open-ended questions, which gave the respondents the opportunity to provide examples of best practices, as well as measures to respond to the risks deriving from the COVID-19 pandemic, from the teleworking perspective.

In March 2021, the questionnaire was distributed online, with the support of the CFAR, to the voting members of the Chamber, in an e-mail including a study description and the questionnaire.

Out of the 2,215 professional practitioners with voting rights in the CFAR, 182 financial auditors answered, namely 8.22%, which represents a valid percentage according to the specialist literature displaying similar samples (Cohen *et al.*, 2018; Almășan *et al.*, 2019; Ciocan *et al.*, 2020; Faragalla *et al.*, 2020).

The data collected was processed and analysed using SPSS 25.

4. Results and discussions

4.1. The respondents' profile

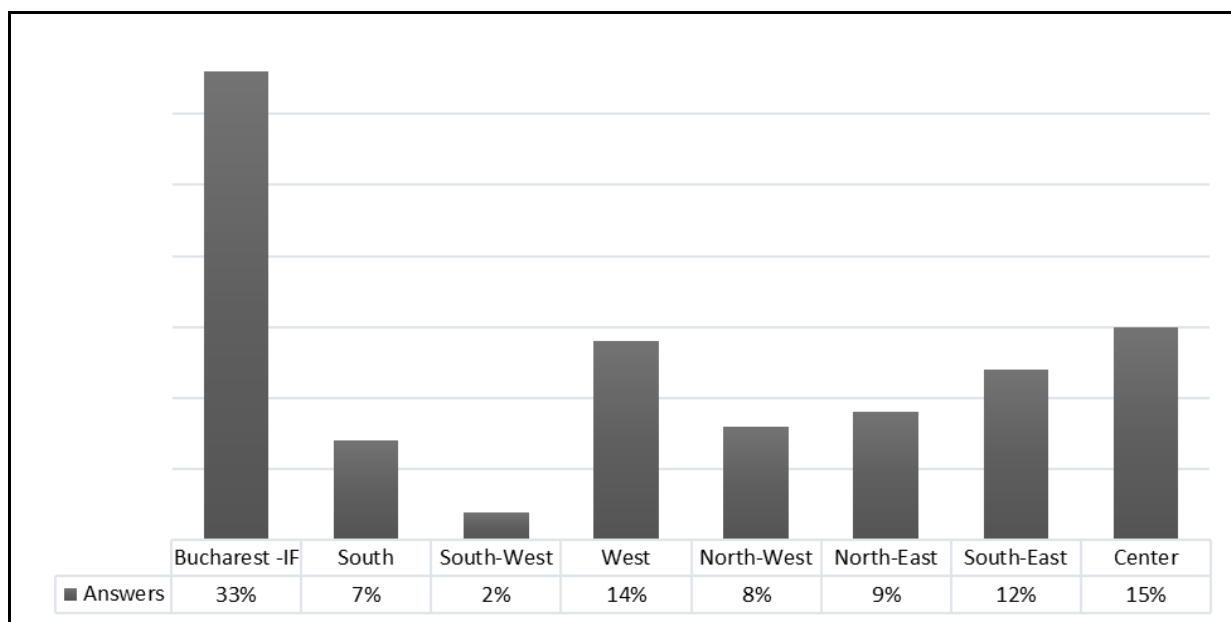
Descriptively, out of the 182 respondents included in our sample, the vast majority (66%), namely 120 people, are women and 62 (34%) are men.

A similar situation occurs when analysing the distribution of the sample according to the social status of the respondents. We thus noticed that 66% claim to have dependents, while only 34% of the respondents claim to have no dependents.

From a legal point of view, 51% of the respondents work in Romanian companies, 44% individually, as independent, and 5% in multinational companies.

The answers were collected from all over the country, the respondents originating from the 8 regional divisions of Romania, as it can be noticed in *Figure no. 1*.

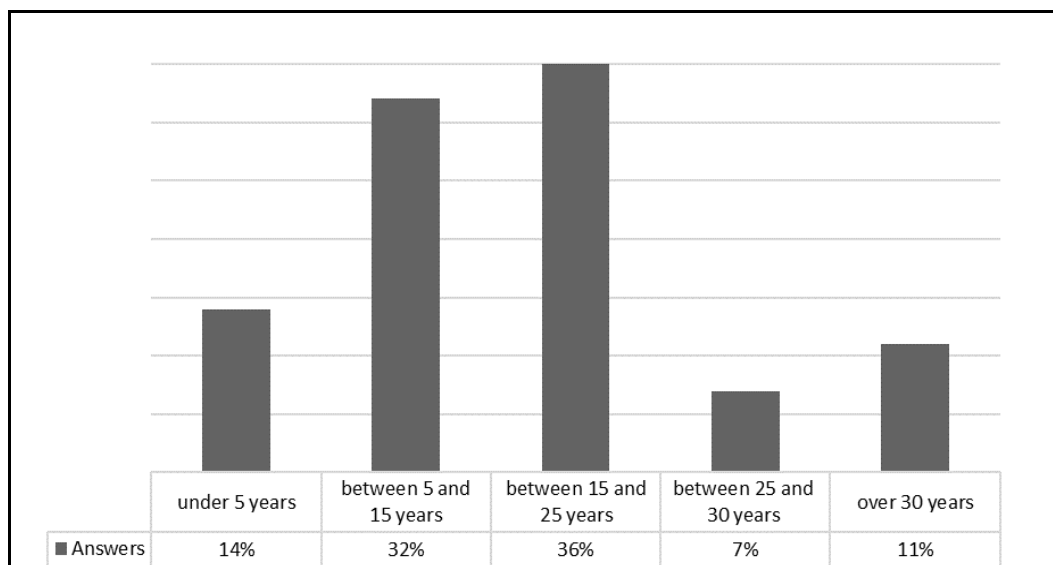
Figure no. 1. Geographical dispersion of respondents



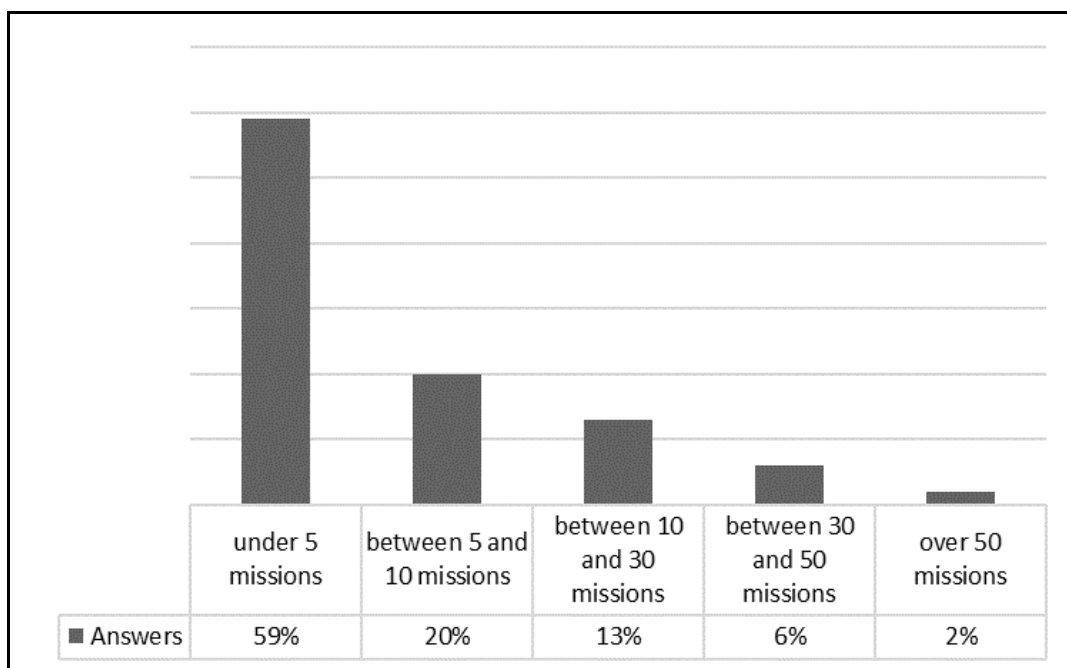
Source: Own projection

Most of the respondents who completed the questionnaire are people with vast experience in financial auditing, with

an average of at least 5 missions performed each year, aspects highlighted in *Figure no. 2* and *Figure no. 3*.

Figure no. 2. Years of experience in the field of financial audit

Source: Own projection

Figure no. 3. Average annual number of financial audit missions

Source: Own projection

In correlation to the pandemic context where the activity is carried out mainly in a teleworking system, the vast

majority of the respondents (78%) stated that they have a dedicated space to work remotely.

4.2. The statistical analysis on the financial audit mission carried out in the teleworking system

In order to explore the respondents' perceptions on the aspects related to the development of the financial audit mission in

the current pandemic context, our questionnaire presented a series of factors influencing remote activity and required the respondents to rate each element from 1 to 5 (where 1 – total disagreement, 5 – total agreement). Opinions were ranked according to the score assigned by the 182 respondents (**Table no. 1**).

Table no. 1. Aspects related to the development of the financial audit mission in remote audit / teleworking system

Item	Score					\bar{x}^*
	1	2	3	4	5	
the risks related to the authenticity of the audit evidence for the activities carried out in the teleworking regime	6	32	74	54	16	3.23
the quality of the communication with the representatives of the audited entity during the mission carried out by way of teleworking compared to a mission carried out at the client's headquarters	3	41	70	54	14	3.19
the role of analytical procedures during the audit mission carried out by way of teleworking	3	20	83	63	13	3.35
the level of negative impact on the audit team's communication and cohesion in the context of teleworking	8	31	83	50	10	3.13
the extent to which compliance with ISA standards has been affected in the context of teleworking	13	45	83	34	7	2.87
the extent to which the audit procedures have been adapted to the error or fraud risks generated by the COVID-19 pandemic, and by way of teleworking, at the level of the audit clients	2	22	90	56	12	3.30
the way in which the new context may have an impact on extending the auditor's liability	7	26	62	69	18	3.36
the extent to which the ability to detect significant misstatements in audit missions may be affected	8	27	70	60	17	3.28
the extent to which telework efficiency is a long-term goal	9	31	70	56	16	3.21
the level of integration of new employees from the professional training perspective, in teleworking conditions	15	40	70	40	17	3.02

* \bar{x} = weighted arithmetic mean

Source: Own projection

The pandemic, in general, and the remote working system, in particular, generated changes in conducting financial audit missions. As it can be noticed from the responses obtained, the respondents consider that the new context may primarily affect the extension of the auditor's liability, due to the fact that the procedures used to collect the evidence necessary to formulate the audit opinion are conditional on the compliance with the measures imposed to contain the spread of the new Coronavirus. Therefore, the remote audit implies adapting the procedures so that the financial auditor

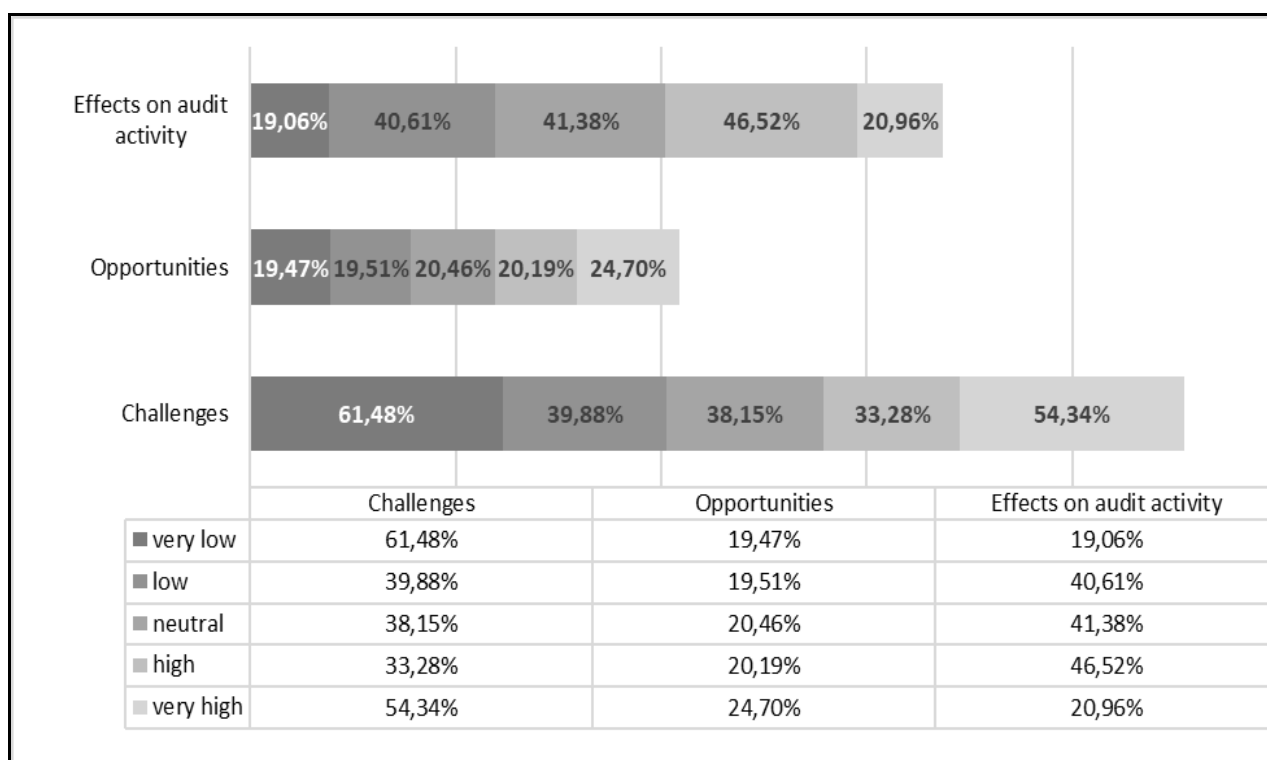
reduces the audit risk generated by the COVID-19 pandemic through an additional assurance, which involves developing and applying new tests and analytical procedures, as well as increasing the sample size and identifying any additional audit evidence.

Overall, for each item included in the survey, we notice that the auditors have a neutral perception on the effects of the COVID-19 pandemic and on how the remote audit is carried out and how the control over the key elements in financial reporting is ensured, with small differences generated by the

auditors' profile. By analysing **Figure no. 4**, we notice that the auditors gave higher scores for the efficiency of remote auditing, which means that this alternative scenario can continue even after the

removal of the restrictions imposed by the current pandemic context. The results are in line with the results highlighted in the global study performed by PricewaterhouseCoopers (PwC, 2020).

Figure no. 4. Assessment distribution on clusters



Source: Own projection

Table no. 2 presents the results obtained from the tests performed in order to identify the statistically significant differences between the factors considered relevant in the analysis for shaping the auditor's perception on the effects of COVID-19 on the current activity and on the prospects of returning to the classic audit model. Statistically significant differences could only be identified at the level of the auditor's experience factors ($Sig. < 0.10$) and the size of the audit firm ($Sig. < 0.10$).

These results outline significant differences, according to the auditors' experience, in terms of the need for a better planning of audit activities and the use of innovative technologies in adopting the remote audit model.

At the same time, significant differences between audit firms of different sizes are identified in terms of the importance of ensuring a balance between personal life and the time allocated to professional activities.

The size of audit firms also proves to be a determining factor in the analysis of the auditors' perception regarding the implications of conducting remote audit activities on the quality of the audit report, given that the results obtained reveal significant differences in the auditors' perceptions of the negative effect of teleworking in the audit field on the audit risk and the need to adapt audit procedures to the context of the restrictions imposed by the COVID-19 pandemic.

Table no. 2. Assessment of differences caused by the auditors' profile

Auditors' profile characteristics	Item	Kruskal-Wallis H	df	Asymp. Sig.
Experience	The use of innovative information technologies such as Machine Learning (ML) or the Internet of Things (IoT)	9.41	4	0.052
	The need for a fixed work schedule	12.05	4	0.017
	The need for fixed breaks during working hours	8.01	4	0.091
Legal form of organisation	Perceptions related to the efficiency of the remote audit activity	12.08	2	0.002
	The use of innovative information technologies, such as robotic process automation (RPA)	9.49	2	0.009
	The prioritisation of the audit activity, in relation to personal/family life	7.80	2	0.020
	The negative effects caused by the lack of work-life balance	10.20	2	0.006
	Experience of negative emotions, including depression caused by the requirements of social distancing	6.00	2	0.050
	The role of analytical procedures on remote audit performed in accordance with COVID-19 pandemic restrictions	6.11	2	0.047
	The risk of less reliably documented audit evidence during remote audit due to pandemic restrictions	5.42	2	0.066
	The flexibility of audit procedures related to the higher perceived risk of material misstatement or fraud in financial statements	8.81	2	0.012
	Implementing procedures meant to reduce the audit risk in the context of the coronavirus pandemic	6.23	2	0.044

Source: Own processing in SPSS

Based on these results, we find that there are no significant differences in perception regarding the auditor's gender or social status, although we were expecting that the challenge of ensuring a work-life balance would be more difficult for female auditors than for men, especially in the current pandemic context in which school takes place predominantly online (Table no. 2).

Table no. 3 highlights the results of the tests carried out to identify the statistical differences between the responses regarding exclusively the characteristics of the auditors' profile that generated significant differences in perception, as presented in Table no. 2. Additionally, we tested the influence of the social status and the existence of a space dedicated to teleworking on the efficiency of remote auditing.

Based on the results obtained, we notice that the auditors' experience is essential only when it is correlated with the need to establish and follow a fixed work schedule when the activity takes place in a remote system (Stat = 575.0, $p = 0.021$).

The size of the audit firm is another factor that generates significant differences in perception as to how auditors

assess the effectiveness of remote audit in accordance with pandemic restrictions. The perceptions of the restrictions imposed by limiting the spread of the new Coronavirus affect them in terms of ensuring a work-life balance or the way in which they overcome the negative effects of the COVID-19 pandemic in the professional area, by adopting innovative information technologies customised for audit purposes. The different perceptions of auditors working individually and those employed in local Romanian companies show that auditors working at local audit firms are less able to ensure a balance between their personal and professional life. One explanation could be the workload, higher in the case of audit firms, compared to that of auditors working individually.

In contrast, there are differences between auditors working individually and those working in multinational audit firms in terms of their perception of the usefulness of information technology, which allows for an increased degree of automation of audit procedures and facilitates the exchange of information in real time. Similar differences in perception occur between the auditors employed in local firms and those working in multinationals. It seems that auditors within local

companies did not have the same possibilities to finance the digitalisation projects and the implementation of the various innovative technological solutions, customised in the audit field, as those working in large audit firms. Consequently, they seem to have difficulties in meeting the deadlines for their commitments, which affects the balance between professional and personal life, namely the time spent with their families.

Although we haven't identified any significant influence determined by the auditors' gender in the responses collected through the survey, we notice that the auditors' social status is important. Having dependents causes a

general decrease in the perceived effects of the pandemic on the remote audit activity (Mean rank = 85.78, reported for the auditors with dependents, is lower than Mean rank = 102.58, reported for the auditors who have claimed to have no responsibilities).

The differences in perception as to whether the auditors have a strict workspace for remote working seem to relate more to the information technology capabilities and the risk of the auditor's responsibility expanding, by auditing remotely, in accordance with the restrictions imposed by the COVID-19 pandemic.

Table no. 3. Assessment of differences determined by the auditors' profile

Auditors' profile	Item	Mann-Whitney U	Wilcoxon W	Z	Mean rank reference item for comparison	Mean rank compared item	Asymp. Sig. (2-tailed)
Experience							
<i>high vs. very high</i>	The need for a fixed schedule of working hours	575	2591	-2.299	21.85	13.85	0.021
Legal form of organisation							
<i>individual vs. local company</i>	Efficiency of remote audit activity	2640.5	5800.5	-3.372	73.42	97.61	0.001
	The need to balance work and personal life	3015.5	7386.5	-2.088	94.83	79.42	0.037
	Experiencing negative emotions, including depression	2936.5	7307.5	-2.33	95.83	78.58	0.020
<i>local company vs. multinational</i>	The use of innovative information technologies, such as robotic process automation (RPA)	322.5	4693.5	-2.2	50.47	66.25	0.028
	Prioritizing the audit activity, in relation to personal life	243.5	4614.5	-2.601	49.62	74.15	0.009
	The negative effects of the improper balance between work and personal life	216	4587	-2.885	49.32	76.90	0.004
	Positive effects of work-life balance	276	331	-2.209	54.03	33.10	0.027
	Intensify the exchange of information and knowledge	237	4608	-2.755	49.55	74.80	0.006
<i>individual vs. multinational</i>	The use of innovative information technologies, such as robotic process automation (RPA)	242.5	3402.5	-3.141	43.07	60.25	0.002
	Intensify the exchange of information and knowledge	192	3352	-2.874	42.43	65.30	0.004
Social status	Positive effects of work-life balance	3033	10293	-2.115	102.58	85.78	0.034
Workspace	Work remotely using VPN connection or external servers	2340	3120	-2.305	80.00	94.64	0.021
	The use of innovative information technologies, such as robotic process automation (RPA)	2255.5	3035.5	-2.772	77.83	95.23	0.006
	The use of innovative information technologies such as Machine Learning (ML) or the Internet of Things (IoT)	2294.5	3074.5	-2.284	78.83	94.95	0.022
	Increasing the auditor's liability in the case of remote audits due to pandemic restrictions	2222.5	3002.5	-2.045	76.99	95.46	0.041
	Implementing procedures meant to reduce the audit risk in the context of the coronavirus pandemic	2254.5	3034.5	-1.992	77.81	95.23	0.046

Source: Own processing in SPSS

4.3. The digitalisation in the financial audit field in the new pandemic context

As specified in the text of the law regulating teleworking (Law no. 81/2018, art. 2), the information technology is indispensable for carrying out the activity in a different place than the workplace organised by the employer.

Therefore, our questionnaire also captured dynamically the aspects regarding the digitalisation in the field of financial audit, before the pandemic and now. The responses collected confirm that the pandemic has caused an increase in the use of digital technologies and tools that allow team working and/or remote work (**Table no. 4**), being similar to the results obtained in the study performed by Gartner (2020).

Table no. 4. Digitalisation in the field of financial audit before the pandemic and in present

Aspects of digitalisation regarding the use of technologies / tools that allow teamwork and / or remote work:	before	% of total	in present	% of total
Ability to work remotely on the server (VPN connection)	150	82.42	154	84.62
Storing data in Cloud at workplace	105	57.69	112	61.54
Storing data on servers situated in other locations than workplace	87	47.80	94	51.65
Blockchain	22	12.09	25	13.74
Cloud Accounting	53	29.12	60	32.97
RPA (Robotic process automation)	22	12.09	32	17.58
Machine Learning, Internet of Things	45	24.73	46	25.27
ERP	70	38.46	72	39.56
Video conferencing (communication platforms: Google Meet, Zoom, Teams, Webex etc.)	140	76.92	162	89.01
Big Data	37	20.33	42	23.08
Use of digital signature	144	79.12	151	82.97

Source: Own processing

Thus, the dynamic analysis revealed that each element currently registered an increase, compared to the situation before the pandemic. The highest increase (12.09%) was registered for the increasing use of video conferencing, which allows organising meetings between members of the audit team and their clients, in the virtual environment. We also noticed that there is a trend to implement systems that allow the automation of repetitive tasks, data storage in the Cloud through Cloud Accounting, and the use of digital signature. Moreover, a slight increase of 0.55% was also registered in relation to the use of technologies based on Machine Learning and Internet of Things, which highlights that the systems incorporating Artificial Intelligence are more and more present in the current audit activity, and the current

pandemic context has stimulated the implementation and use of innovative information technologies.

4.4. Challenges and opportunities in conducting remote audit

In the field of financial audit, teleworking actually means adapting to the new context. It is a complex process, not at all easy, but necessary, amplified by the globalisation and digitalisation trend.

Through the questionnaire we distributed, we aimed to identify, as in the case of the issues related to conducting the financial audit mission by remote audit/teleworking, the main challenges and opportunities perceived by the financial auditor when carrying out remote audit missions (**Table no. 5**, **Table no. 6**).

Table no. 5. Challenges generated by remote audit

Item	Score					\bar{x}^*
	1	2	3	4	5	
Focus on activities	19	39	68	36	20	2.99
Prioritisation of work, social, family tasks	18	23	72	46	23	3.18
Impairing the balance between work and extra-professional life	20	24	60	44	34	3.26
Limiting professional development	32	30	58	33	29	2.98
Extra-professional disruptive factors (lack of energy, lack of internet, family interactions)	30	42	59	33	18	2.82
Existence of technical equipment (printer, scanner, etc.)	32	22	56	35	37	3.13
Fixed work schedule	27	24	59	41	31	3.14
Lack of a fixed schedule for work breaks	30	22	64	40	26	3.05
Fear and concerns about health	20	27	73	33	29	3.13
The obligation to follow tutorials, webinars and the extra time allocated to them	19	24	64	44	31	3.24
Lack of peer interaction at work	18	26	46	35	57	3.48
The appearance of emotional states of anxiety, anxiety, depression, etc.	35	28	61	30	28	2.93

* \bar{x} = weighted arithmetic mean

Source: Own processing

The results obtained reflect that one of the biggest challenges for the respondents is the lack of peer interaction at work, as social distancing is limiting the team's physical meetings, and communication takes place only through regular statuses on online communication platforms.

Thus, the results of our study are consistent with those highlighted by Ernst & Young, which highlight that the interaction and collaboration at the workplace reflects the very human nature of the individual, who needs direct connections, and face-to-face interaction (EY, 2020). Another challenge of teleworking is the work-life

balance. Many respondents to our study considered that, during the pandemic period, the work schedule was not respected, and overtime was necessary for accomplishing work tasks, at the expense of the time spent with the family.

Due to the measures meant to contain the spread of the virus, some auditors avoided engaging in financial audit missions with new clients, believing that, by teleworking, the auditor only has access to the information that the entity's management agrees to disclose, which increases the audit risk, compared to the audit risk corresponding to remote audit missions.

Table no. 6. Remote audit opportunities

Item	Score					\bar{x}^*
	1	2	3	4	5	
Increasing labor productivity	11	26	72	49	24	2.48
Reducing the time, fatigue and costs associated with actually going to work	16	26	43	58	39	2.49
Ensuring a balance between work and extra-professional life	19	34	68	36	25	2.51
Work inclusion for people with disabilities	35	15	85	27	20	2.48
Flexibility regarding the simultaneous fulfilment of work tasks, respectively of family / social activities	10	25	56	59	32	2.48
The extent to which telework was a vector for sharing information and professional knowledge and more	16	27	66	51	22	2.38

* \bar{x} = weighted arithmetic mean

Source: own processing

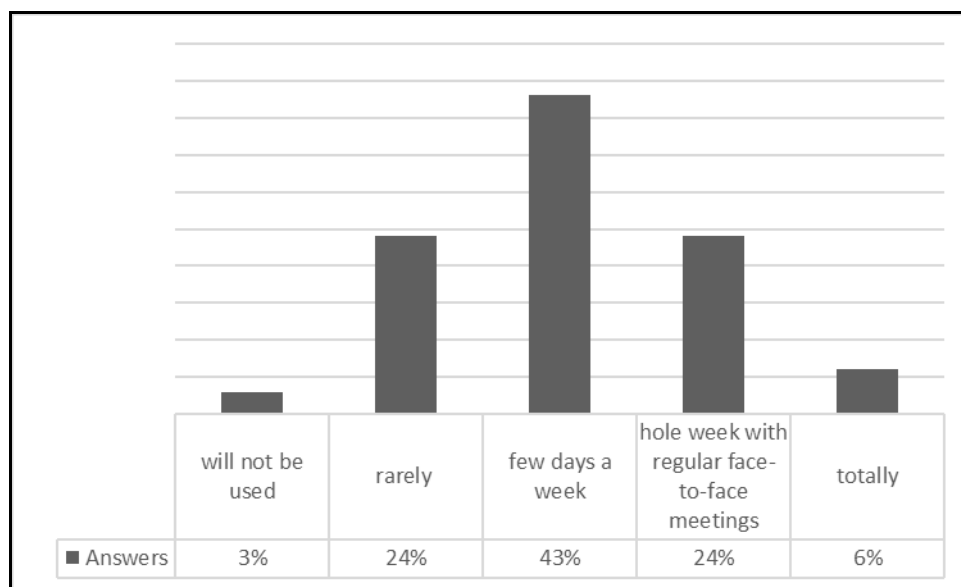
As for the *opportunities* generated by remote auditing, the responses provided by respondents reveal that ensuring a work-life balance in the context of teleworking is both an advantage and a major challenge. On the one hand, remote auditing reduces travelling time to the workplace in favour of allocating time for other non-professional activities. Thus, in the new context, teleworking increases the efficiency of processes that used to require redundant times at the physical workplace and offers greater flexibility in organising the activity. On the other hand, carrying out the activity in remote system implies a rigorous organisation, which also requires time and can affect the work-life balance.

4.5. The use of teleworking in the field of financial audit after the removal of the restrictions imposed by the pandemic

Carrying out financial audit missions by remote represented a way to adapt the auditors' work to the current pandemic context generated by COVID-19. However, is teleworking going to be used in this field after the removal of restrictions? Have auditors become so familiar with the "new normal" imposed by the pandemic that they will use it frequently?

As it can be noticed in the following figure, the general perception is that teleworking will be used in the field of financial audit a few days a week even after the COVID-19 pandemic (*Figure no. 5*).

Figure no. 5. Use of telework after the COVID-19 pandemic



Source: own processing

The results of our study are consistent with the ones presented by PricewaterhouseCoopers (PwC, 2020). In this respect, the research "The Future of Remote Work", which included more than 300 companies globally, reveals that 80% of the companies consider remote work as the "new normal", while 53% of them claim to have already created and implemented a policy in this regard. Moreover, 21% of the companies intend to implement a mixed model in the near future, thus

allowing employees to work a few days per week in a teleworking system.

Prior to the outbreak of the COVID-19 pandemic, study results showed that teleworking was not preferred in the professional environment in Romania. However, the restrictions imposed by the authorities have forced the business environment to focus increasingly on carrying out remote operational activities, where possible. This trend also appeared among auditors, who realized that

teleworking is a solution for carrying out their activity in safe conditions, meant to stop the spread of the coronavirus. At the same time, the professionals' favourable perception on the teleworking scenario in the audit field proves to be a viable practice in the future. However, this decision must be closely correlated with the audit firm's ability to adapt its information systems and procedural framework to the new requirements for collecting, processing, analysing and evaluating audit evidence, so that the auditor's opinion reflects a reasonable level of quality assurance of summary financial statements.

Conclusions

The crisis caused by the pandemic generated by the new Coronavirus has forced us to adapt to the "new normal" in which we have to live and work. This context urged us to look for solutions, to show flexibility and try to be efficient and creative in a period marked by uncertainty and insecurity.

Teleworking is not a new concept, as it has been used since 1973 (Wojkac *et al.*, 2016), but nowadays, in an attempt to stop the spread of COVID-19 and to make sure the economic activity carries on, this work style has taken on a larger scale, being developed and implemented in many companies worldwide.

The present study aimed to identify the extent to which work efficiency was influenced by the COVID-19 crisis, in the case of a professional category that had to adopt remote work in order to meet its commitments. Inspections, interviews and other audit procedures had to be rethought so that they could be carried out remotely, by using information technology, but also by ensuring a work-life balance.

The analysis undertaken through the survey reveals that the transition to the teleworking system may be a beneficial solution for financial auditors in the future, as most of them consider it a factor that offers increased flexibility in carrying out and planning activities. The

results of our study reflect that auditors working in Romanian companies and in multinationals plan their activities better, compared to auditors who work independently, the latter being more affected by the aspects of personal life when carrying out remote audit activities. Ensuring an optimal balance between personal life and work represents a real challenge, although most respondents claimed to have a separate room in their living area, dedicated to teleworking.

We notice that the auditors included in our sample emphasize the importance of assessing the impact of the remote audit activity on the responsibility of audit engagements and on the opportunity to operationalise working procedures adapted to the new conditions meant to reduce the detection risk of significant errors.

The respondents to our study consider a remote audit activity to be efficient if it meets the established costs and deadlines and honours commitments, in the context generated by the COVID-19 pandemic. Moreover, the results of the study highlight that the decrease in time and fatigue resulting from travelling to work determines the increase in work productivity and efficiency, in accordance with the results obtained by Eulerich *et al.* (2021).

Social distancing and the limiting of face-to-face meetings have been a challenge in terms of meeting audit commitments, but teleworking and the new innovative information technologies are still a viable solution, as the participants in our study believe that teleworking will be used at least a few days per week in the field of financial audit after the COVID-19 pandemic.

The emergence of the new coronavirus and the ensuing health crisis have shown that we must be able to adapt and implement innovative solutions and technologies in order to be efficient in carrying out our activities in the "new normal" generated by the COVID-19 pandemic as well. Actually, the "new normal" is largely the "normal of the present" and it will be the "normal of the future", clearly different from the "normal of the past".

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Evolution and Diversification of the Going Concern Uncertainties Disclosed in the Auditor's Report

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Abstract

The going concern of an entity's activity is a fundamental accounting principle. The practical application of this principle has accounting, legal and financial implications. From an accounting point of view, the management of the entities shall be responsible for drawing up the financial statements in accordance with this principle. From a legal perspective, entities that go into liquidation are no longer obliged to respect the going concern principle. When auditing financial statements, auditors shall be responsible for assessing the adequacy of compliance with the principle of going concern and for including the appropriate references in their report. The objective of the paper is to analyse the reasons for including in the auditors' report the paragraph on going concern uncertainties, in the light of their evolution over time, their frequency and diversification. The sample included 120 companies listed on European stock exchanges, included in the main stock indexes for the period 2010-2020. The data was gathered from reports published by auditors that were included in the Audit Analytics database. The results showed that there was an average trend of 20 reported situations per year, but with a significant increase over the last two years analysed mainly due to the situations arising from the impact of the Covid-19 pandemic. The most common reasons were liquidity risk, substantial liabilities and the refinancing of activities. In recent years there has been a diversification of reasons, but with a reduced frequency, such as the working capital, the decrease in stockholder equity and competitor threat. Reporting on going concern issues is of particular importance so that increasing transparency in the publication of this information can contribute to a higher degree of investor confidence in the entities' financial statements.

Key words: financial audit; auditor's report; going concern; uncertainties; financial statements;

JEL Classification: M42, M48, M41

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Introduction

The ability of a company to carry out a continuous activity is presumed to last as long as possible. Since its functioning depends on both internal and external factors, continuity of business can be significantly affected. Thus, the presentation of companies' information in the financial statements is carried out by management in accordance with the principle of going concern. It is also the responsibility of the auditors to assess management's assessments of the information submitted and to intervene by additional references if they consider that the information is not complete and correct.

The auditor's report is the result of the work and is the most important link between auditors and stakeholders, being the only direct communication with shareholders about the audit process and its outcome (DeFond and Zhang, 2014). Numerous studies have been published in the literature to investigate the link between auditors and stakeholders. Most studies have concerned the consequences of going concern uncertainty (Carson et al., 2013), and other research has studied investor response to the publication of reports issued by auditors containing the going concern paragraph (Myers et al., 2018).

Thus, the *International Auditing and Assurance Standards Board* (IAASB) review of International Audit standards (ISAs) and the introduction of the ISA 701 "Communicating Key Audit Matters in the Independent Auditor's Report" have helped to improve reporting. However, there is still a need to increase the transparency of financial information published by companies to help increase stakeholder confidence.

The objective of the paper is to identify the reasons which led to the inclusion in the auditors' report of the paragraph on the going concern uncertainties, in the light of their evolution over time, their frequency and diversification. The sample included 120 companies listed on European stock exchanges, included in the main stock indexes for the period 2010-2020. The data was gathered from reports published by auditors that were included in the Audit Analytics database.

The paper contains an analysis of available data on the reporting of going concern uncertainties by companies from a perspective oriented towards the need to properly assess the adequacy of management statements. The paper can be a bibliographic source for researchers in the field of accounting and financial audit, for representatives of company management to understand the need and

importance of reporting on going concern, especially in crisis conditions.

The paper is organized as follows: after the revision of the literature and the review of the regulations on the going concern, the methodology used to carry out the research is presented. The results are presented and discussed in section four. The final section summarizes the main conclusions of the study with a brief discussion on its implications for future research as well as the limitations of this study.

1. Literature review and regulatory framework

1.1. Literature review

The going concern of the companies' activity has been extensively researched by both academics and professional bodies, as well as financial consulting companies. Previous research over time has shown that the credibility and value of auditors' reports have been questioned, as audit reports of a large number of companies in insolvency proceedings did not contain any assessment of the issues relating to the requirements of the going concern principle (Asare, S., & Wright; 2012; Carson et al., 2013).

Caserio et al. (2014) developed statistical models to identify relevant financial indicators for auditors in assessing going concern and found that auditors' views were useful in alerting the risk of bankruptcy.

For investors, the auditors' report is a source of information about their investment, so any altered auditor's opinion can be a negative signal. In their study of US companies, Geiger and Kumas (2018) found that institutional investors were better informed about going concern than other market investors.

Mentioning the uncertainty of going concern as a special paragraph in the case of the new audit report became an important aspect, confirmed by the survey conducted by Cordoş and Füllöp (2015) addressed to auditors in Romania, in which half of the respondents considered it to be a good solution.

Reporting on the uncertainty of going concern can be formulated as an additional paragraph in the report or as a key audit issue. Thus, if presented as a key audit issue, the impact of companies' viability risks can be hidden (Perez et al., 2021). Zenzerovic & Valic-Vale (2016) tested

whether the going concern paragraph included in the audit report is an indicator of financial difficulties for a company and found that it is the appropriate criterion for differentiating companies experiencing these difficulties.

Berglund et al. (2018) considered that the inclusion in the report of the paragraph on uncertainties regarding the going concern is a form of expression of the independence of auditors. The inclusion of this paragraph also contributes to the making of predictions on the viability of companies. From the study conducted by Hategan and Imbrescu (2018) on the case of companies listed on the Bucharest Stock Exchange (BVB) it emerged that uncertainties regarding the going concern reported by the auditors subsequently led to the insolvency of the companies, and the main basic factors were reported losses, negative capital and business history. Gallizo Larraz & Sadrighes Solé (2016) analyzed at the relationship between the audit opinion on going concern and certain characteristics of the company and the auditor, including the financial decline. Zdolšek, Jagrič & Kolar (2021) developed a model of predicting the auditor's assessment of going concern using various combinations of economic predictors of a company. Muñoz-Izquierdo et al. (2019) analysed the going concern information presented in auditors' reports for bankruptcy prevention purposes through the use of artificial intelligence.

Audit Analytics (2021) conducted a study on the evolution of the number of reports on the audited financial statements of companies being monitored in the United States by the Supervisory Authority - *Securities and Exchange Commission* (SEC) that contained the going concern paragraph, for the period 2000-2019. Results showed that the highest number of reports was 21% in 2008, after which it decreased each year, in 2019 the percentage being 15% of auditors' opinions. The most common reasons reported were net/operational losses, negative working capital, negative cash flow from operations, accumulated earning deficits and liquidity concerns.

Another study by *Accountancy Europe* (2021) based on data provided by *Audit Analytics* for companies listed on the exchanges of 30 countries in Europe

showed that 9% of auditors' reports on the 2019 financial statements contained the paragraph highlighting the uncertainty of going concern. From the comparison of the two studies, it is noted that European companies had a lower risk of uncertainty as a possible effect of statutory audit regulations (EU Directive/56/2014).

1.2. Regulatory framework of going concern

Going concern is regulated from both the accounting point of view and the audit of financial statements.

The Romanian accounting regulation issued by the Minister of Public Finance by Order No. 1802/2014 for the approval of the Accounting Regulations on individual annual financial statements and consolidated annual financial statements (OMFP 1802) in section 2.4. *General principles of financial reporting*, section 49, state that the principle of going concern 'assumes that the entity normally continues its operation without going into liquidation or significant reduction of activity'. At international level IAS 1 'Presentation of Financial Statements' by the *International Accounting Standards Board* - IASB contains the provision that financial statements are prepared on the basis of the principle of going concern for a period of at least 12 months from the reporting date. It also mentions management's responsibility for drawing up financial statements in accordance with the principle of going concern.

Regarding the audit of financial statements, the IAASB (2015) revised the International Audit Standards (ISAs), including ISA 570 (revised) "Going concern" which apply for the reporting period after 15 December 2016 and which auditors take into account when assessing the ability of companies to continue their business activity. Thus, if the assessment is appropriate then the auditors must include a separate section with the heading "Material Uncertainty Related to Going Concern", and if it is inadequate then they must express a contrary opinion.

Therefore, the auditor's responsibility is to include in the report assessments of going concern as required by ISA 700 "Forming an opinion and reporting on financial statements" by including a specific paragraph or reporting a key audit issue under ISA 701.

In order to highlight the going concern regulations in **Table no. 1**, the main accounting and auditing requirements are presented in parallel.

Table no. 1. Accounting and auditing requirements for going concern

Items	Accounting requirements – IAS 1	Audit requirements – ISA 570
Time period for going concern assessment	The financial statements shall be drawn up on the basis of the principle of going concern for a period of at least 12 months from the reporting date .	The auditor shall cover the same period as that used by management to make the assessment as necessary by the applicable financial reporting framework.
Responsibilities for reporting of going concern uncertainties	Where management is aware of significant uncertainties related to events or conditions that could call into question the entity's ability to continue its business, the entity shall disclose such uncertainties.	It is necessary for the auditor to report the nature and implications of uncertainties on financial statements that should not mislead the user.

Source: Own processing

The IAASB is concerned about updating the going concern ISAs to contribute to a better and more useful financial reporting system for stakeholders. Following the impact of the Covid-19 pandemic, the IAASB (2021) launched a discussion on the expectations of all stakeholders on this subject, and preliminary results showed that there are differences between public perceptions of the auditor's role and the auditor's responsibilities in an audit of the financial situation. It is therefore necessary to amend the standards on the interpretation of the concept of going concern in order to ensure that auditors issue a more detailed report containing the specific procedures carried out to address the risks of the adequacy of management's presentation of

going concern under the applicable financial reporting framework.

In view of the above, it has been found that the principle of going concern is a principle which may affect financial statements to the greatest extent, so that financial reporting should contain as much information as possible for interested parties.

Accountancy Europe (2021) has proposed 10 recommendations to improve financial reporting regarding going concern of public interest entities (PIEs) in the European Union. The summary of those recommendations is set out in **Table no. 2**.

Table no. 2. Summary of recommendations for improving financial reporting on the going concern

No.	Recommendation	Explanation
1	Extension of evaluation procedures	The need for companies to implement integrated systems and adequate procedures for developing cash flow forecasts based on realistic assumptions taking into account economic trends and prospects
2	Mandate disclosure of risk management systems on going concern	Modification of regulations and introduction of the obligation to disclose the risk management systems
3	Obligation to disclose going concern even if there are no uncertainties	Increase transparency by disclosing aspects of significant risk-mitigating, i.e., the introduction of the obligation to disclose the entity's ability to continue as a going concern.
4	Change of mentality, transparency and communication	Disclosure of additional information would demonstrate to users that they have the knowledge and skills to assess the going concern
5	Existence of an audit committee in each public interest entity	Modification of regulations and introduction of the obligation to have an audit committee at PIEs.
6	Clarification and harmonisation of the period for going concern assessment	Obligation of presentation, in notes to the financial statements, specifying the period covered by the continuous management evaluation. Legislators should ensure that the start date and duration of the going concern assessment period are harmonised.
7	Extension of the scope of the auditors' work	Audit legislation and/or audit standards should proactively support the broader role of auditors in assessing going concern.
8	Achieving the mechanisms of the auditors warning supervisors	The alert procedure used by auditors would help prevent corporate failures and allow timely restructuring when insolvency approaches.
9	Assessing the long-term viability and resilience of companies	The need for a longer-term evaluation of 12 months, the preparation of long-term viability declarations.
10	Interconnection of financial and non-financial information	Understanding the viability of a company requires examining both financial and non-financial information.

Source: Own processing, based on data published by Accountancy Europe, 2021

The recommendations set out in **Table no. 2** and the debate on going concern of the European Parliament and of the Council, requires clear rules on financial reporting leading to increased investor confidence in companies and the accounting profession.

2. Research methodology

The methodology of the research is qualitative and consists of the descriptive study of the reasons that have raised concerns about the going concern, with a focus on their evolution and types, as well as their connection with the characteristics of the companies. The sample analysed was

chosen from the companies listed on the European stock exchanges included in the main indices, existing in the *Audit Analytics* database. This database includes information on the audit of companies listed on stock exchanges in the European Economic Area and Switzerland, included in the composition of 53 stock indexes.

Thus, at the time of the consultation of the database, i.e., March, 31, 2021, information was centralised for 1981 companies. Of the total number of companies, in 120 companies the paragraph on going concern for the period 2010-2020 was presented in the auditor's report.

The geographical structure of the sampled companies and the number of observations is shown in **Table no. 3**.

Table no. 3. Sample structure

Countries/ Residences	Total number of companies	Number of companies	Number of reports
Austria	57	2	4
Bulgaria	14	1	1
Croatia	10	1	6
Cyprus	21	1	1
France	277	26	51
Germany	153	3	4
Guernsey	41	7	12
Hungary	21	1	2
Ireland	30	2	2
Italy	94	3	3
Lithuania	12	1	1
Netherlands	72	2	5
Poland	57	4	8
Romania	17	1	1
Spain	86	13	38
Switzerland	63	1	1
United Kingdom	602	51	62
Other countries	354	0	0
Total	1,981	120	202

Source: Own processing

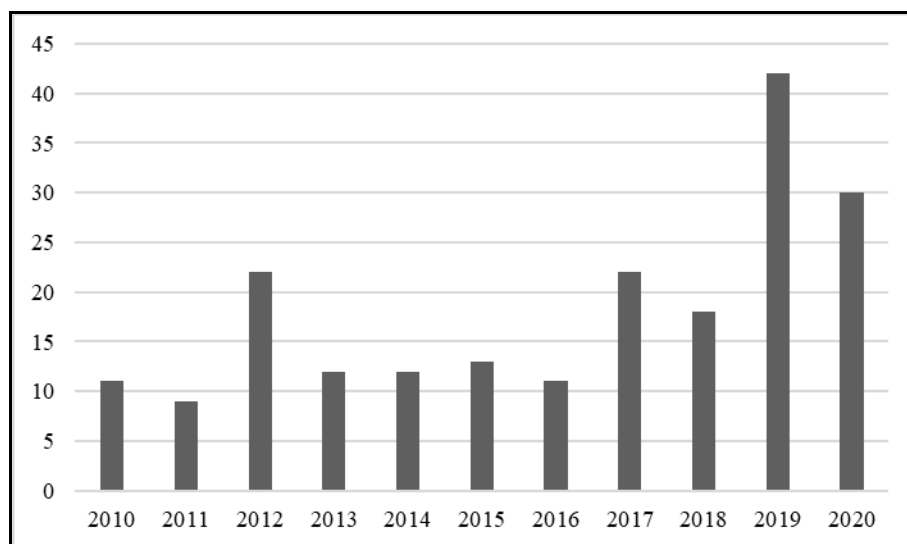
3. Results

From **Table no. 2** it follows that for 6% of the companies the auditors included in the report a paragraph on drawing attention to the going concern. Thus, most companies were those in Guernsey (17%), Spain (15%), Croatia (10%), France (9%) and the United Kingdom (8%). At companies in Switzerland, Germany and the Netherlands, auditors expressed the least

concerns. Of the total reports issued by auditors, only 4 reports contained a qualified opinion, in the case of a company in France for a single year, and a company in Spain for 3 consecutive years issued by the same auditor.

Events influencing the going concern evolved differently during the period under review, their evolution is shown in **Figure no. 1**.

Figure no. 1. Year-by-year evolution of going concern uncertainties



Source: Own processing

In **Figure no. 1** it follows that the number of uncertainties has evolved differently from year to year, but with an average trend of 20 reported situations per year. The increase in the number of reports issued by auditors regarding the uncertainty of going concern over the last two years analysed is mainly due to the situations arising from the impact of the Covid-19 pandemic.

From the study of the 202 cases of uncertainties identified by

the auditors in the report, the paragraph on going concern uncertainty was found to have been generated by 33 reasons. The categorization method was achieved by interpreting the information published in company reports. The reasons were grouped into three categories, i.e., financial aspects, operational aspects and other aspects, and their codification was carried out in descending order of frequency. The centralised information is set out in **Table no. 4**.

Table no. 4. Reasons that have led to uncertainties about the going concern

Code	Aspects	Frequency	2010-2015	2016-2020
	Financial aspects	120	56	64
2	Insufficient/limited cash, capital or liquidity concerns	16	6	10
3	Substantial liabilities	14	7	7
4	Liabilities exceed assets	13	6	7
5	Refinancing contingencies	12	6	6
7	Need for additional financing to sustain operations	11	5	6
8	Need for additional financing for growth or to meet business objectives	9	5	4
10	Notes Payable/ Debt - Default, Due, delinquency	8	4	4
11	Decline in revenue	8	3	5
12	Credit line reduced, unavailable or due	8	3	5
13	Net/Operating loss	7	3	4
14	Negative cash flow from operations	6	3	3
19	Deterioration of the financial situation	3	2	1
21	Working capital deficit	2	0	2

Code	Aspects	Frequency	2010-2015	2016-2020
22	Assets – inadequate, limited, immaterial or impaired	2	2	0
28	Liquidation of assets	1	1	0
	Operational aspects	48	24	24
6	Vendor-supplier disputes or disruptions	12	9	3
9	Restructuring contingencies	9	2	7
15	Development stage	4	1	3
16	Additional tax and tax risks	4	3	1
17	Product demand or pricing - decline or limited	3	1	2
18	High administrative and production costs	3	3	0
20	Decrease in investment	3	3	0
23	Shareholder equity - deficit or decrease	2	0	2
24	Bankruptcy	2	1	1
25	Regulatory capital - decline or deficiency	2	0	2
26	Stock/share Option Exercise Risk(s)	2	1	1
27	Seeking or needs to combine with existing company	1	0	1
29	Competitor – threats	1	0	1
	Other aspects	34	2	32
1	Impact of COVID-19	30	0	30
30	Regulatory requirements	1	0	1
31	Litigation contingencies	1	0	1
32	Bankruptcy –subsidiary in the group	1	1	0
33	Monetary depreciation	1	1	0
	Total	202	80	122
	Number of companies	120	45	85
	Average uncertainty/company	1.68	1.78	1.44

Source: Own processing

Table no. 4 shows that the average frequency of reasons was 1.68 per company, most of the reasons were due to the impact of the Covid-19 pandemic on the activity (15%), followed by liquidity risk (8%), substantial liabilities (7%) and refinancing of activities (6%). The reasons with the lowest frequency related to the liquidation of assets, competitor threat, litigation contingencies and the bankruptcy of a subsidiary in the group.

In order to identify the evolution over time of the reasons for uncertainty, their frequency was grouped over two periods delimited by the application of the new auditor's report under ISA 701 amended from 2016, i.e., the period covering 2010-2015 and 2016-2020. Thus, it was found that the average frequency of uncertainties reported by auditors was 1.78 in the period 2010-2015, higher than in 2016-2020 when it was 1.44. Thus, there was an average decrease of 20%, although the total number of companies has almost doubled in recent times. It should be noted that 10 companies showed uncertainties during both periods studied. It is also noted that the reasons for uncertainty framed as financial aspects had the highest share of

around 60%, the proportion being almost equal in the two periods analysed.

The results obtained show that in the period 2016-2020 there was a diversification of the reasons, but they had a reduced frequency, such as the working capital, the decrease in stockholder equity and competitor, as well as the requirements of the regulations on the functioning of companies.

Comparing the results obtained with those of the *Audit Analytics* study on US companies, it is found that the frequency of the most common reasons for uncertainty is not the same, so European companies have predominantly more liquidity risk issues and less those that related to net/operational loss.

The impact of Covid-19 was identified at 30 companies, 19 of which were UK companies, 3 companies from France, 2 companies from Poland and one company each from Switzerland, Germany, Guernsey, Lithuania, Romania and Spain. The main consequences of the pandemic, grouped by types of motifs, as previously codified, are set out in **Table no. 5**.

Table no. 5. Impact of Covid-19 on going concern

Code	Issues	Frequency	Field of activity
2	Insufficient/limited cash, capital or liquidity concerns	14	Tourism, Manufacturing, IT Services, Retail
11	Decline in revenue	11	Hospitality, Transport, Manufacturing, Entertainment Industry
9	Restructuring contingencies	2	Financial services, Alcoholic beverage industry
7	Need for additional financing to sustain operations	1	Social services
31	Litigation contingencies	1	Financial services
17	Product demand or pricing - decline or limited	1	Financial services
	Total	30	

Source: Own processing

From **Table no. 5** it follows that the impact of Covid-19 was on the liquidity concerns, mainly due to the decline in revenue. The areas most affected were those that provided population services, as a result of the restrictions imposed on physical distance between persons. The findings made are in line with those presented in the study by Crucean and Hategan (2021) which showed that the impact of Covid-19 on the going concern of 60 companies listed on BVB was more pronounced on those in the extractive, tourism, transport and manufacturing industries. The auditors included in their report the paragraph of uncertainty regarding going concern for 15% of the companies analysed, most of which the auditors assessed the uncertainties with a low degree of concern.

To describe the link between the uncertainty of going concern expressed by auditors and the characteristics of companies, several indicators reflecting auditors' work and company information were studied.

Based on previous research, indicators reflecting auditors'

work, such as auditor size (Levanti, 2019), Big Four membership audit companies (PricewaterhouseCoopers, KPMG, Ernst & Young and Deloitte Touche Tohmatsu) and auditors' rotation were identified.

The auditor's rotation is an indicator that can influence the opinion issued (Knechel & Vanstraelen, 2007), i.e., when the auditor changes, the new auditor tends to be more rigorous than the previous one, since he is not yet familiar with the company's activity.

The structure of the auditor's new report which came into force with 2016 may also influence the disclosure of more information on going concern.

In some sampled companies, auditors included the paragraph on going concern uncertainty for several years, even though the auditor has been changed over time, so the persistence of uncertainties over time is an important factor in the auditor's assessment.

The description of the indicators is shown in **Table no. 6**.

Table no. 6. Description of indicators

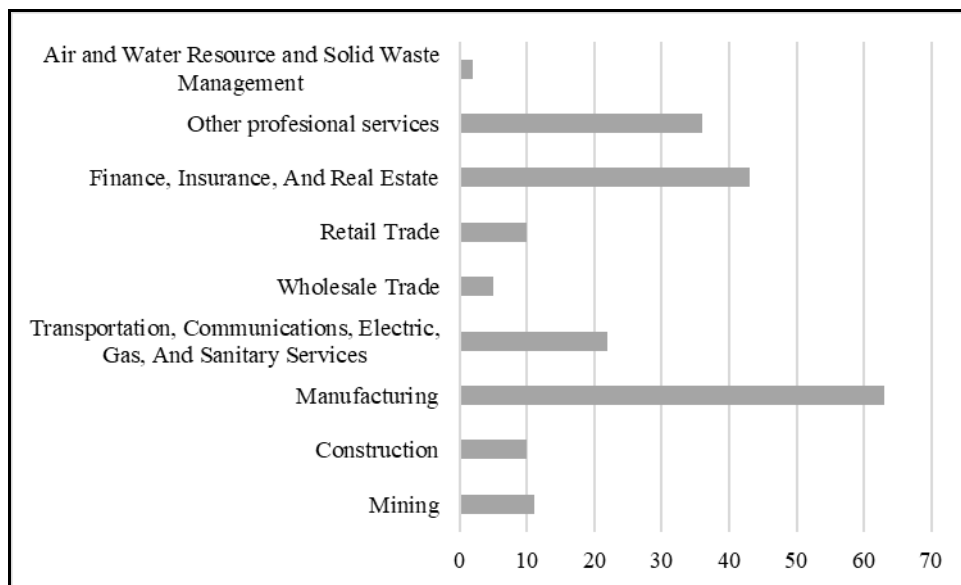
Indicator	Cod	Description
Type of reason	M	Encoded from 1 to 33 according to Table no. 4
Auditor's size	A	1 – Big4 category auditor 0 – Auditor not in The Big4 category
Auditor's rotation	R	1 – New Auditor 0 – Same auditor
Report Format	N	1 – New format 2016-2020 0 – Old format period 2010-2015
Persistence over time of uncertainties	P	1 to 10, expressed in number of years
Industry	I	According to Standard Industrial Classification (SIC), 4-digit codes

Source: Own processing

The M indicator mentioned in **Table no. 6** cannot be described statistically as regards average, error and standard deviation, as it represents only encodings of reasons. Information on indicator I is also useful only for data control. The industry in which a company operates is

important from the point of view of business continuity, because in times of crisis some areas of activity are more affected than others, as confirmed in the crisis generated by the Covid-19 pandemic. The grouping of company reports by industry is shown in **Figure no. 2**.

Figure no. 2. Grouping company reports by industries



Source: Own processing

Figure no. 2 shows that uncertainties have been reported in companies of all industries, but most situations have occurred in manufacturing companies (31%), which is explicable because companies in this industry have a significant share of the total companies. Analyzing

downwards, financial services companies (21%) and other types of services (18%) significant share in the total reported uncertainties.

Given the above, in **Table no. 7** are presented only the indicators that can be statistically described.

Table no. 7. Descriptive statistics

Indicators	Obs.	Average	Standard error	Standard deviation
A	202	0.8168	0.0273	0.3878
R	202	0.1535	0.0254	0.3613
N	202	0.6040	0.0345	0.4903
P	202	1.9703	0.1223	1.7390

Source: Own processing

As regards the size of the auditor, in **Table no. 7** can be observed that 81.68% of the auditors belonged to the Big4 category. From the study of

the reports issued, the size did not have significant influence on the uncertainties expressed regarding going concern.

As regards the rotation of auditors, it was found that in the case of 15.35% of reports were issued by new auditors, so we can appreciate that there was stability from one period to the next. The change of auditor did not influence the inclusion in the report of going concern uncertainties.

Regarding the format of the report, 60.4% of the total reports analysed were prepared in the new format, relating to the period 2016-2020. The increase in the number of business going concern uncertainties is largely due to the impact of Covid-19. If we eliminate the impact of the 30 reports related to this crisis, then the percentage would be 53.49%, i.e., it can be said that the change in the structure of the report was not a decisive factor in the inclusion by the auditors of the paragraph on the uncertainty of going concern.

The persistence of the reasons for uncertainty may be a significant factor in auditors' assessment of the companies' business. Thus, it was found that the average of the cases of uncertainties was 1.97, so on average one company presented two consecutive years uncertainty about going concern. The analysis of the sample showed that in two thirds of the companies the auditors included in the report the paragraph on uncertainties in only one year. In 15% of all companies the situation was highlighted over 2 years, and at other companies representing 15% of the total the situation was encountered over a period of 3 to 6 years. Two companies in the sample have been included in the sample where the situation persists for 10 years, the companies are in operation, a French real estate investment company audited by local auditors and a Spanish textile company audited by The Big4 auditor.

Conclusions

In assessing the adequacy of the going concern presented in the financial statements, the auditor shall rely on his professional reasoning and the requirements of the audit standards and other applicable regulations. The publication by companies of financial statements containing as much information as possible on the risks of the activity carried out has positive implications for stakeholders, who will have greater confidence in the value and relevance of the financial audit.

The objective of the paper was to highlight the main reasons identified by the auditors as going concern uncertainties, how they evolved over time and how they diversified over time. An analysis of their relationship with the characteristics of the auditors and the audited companies was also carried out.

The results of the study showed that there was an average trend of 20 reported situations per year, but with a significant increase over the last two years analysed mainly due to situations arising from the impact of the Covid-19 pandemic. Other significant reasons were generated by liquidity risk, substantial liabilities and the refinancing of activities. In recent years there has been a diversification of reasons, but with a reduced frequency, such as the working capital, the decrease in stockholder equity and competitor threat.

From the analysis carried out, it was not possible to identify a close correlation between the types of reasons that give rise to going concern uncertainty and the characteristics of auditors and companies. Thus, the size of the auditor and the rotation of the auditors did not directly influence the highlighting of uncertainties (Simaora & Hendajatno, 2019). Nor can the structure of the auditor's new report be considered a significant factor influencing reporting on this subject. Situations of going concern uncertainty did not have a high persistence, as only 32% of all companies analysed persisted in uncertainty for more than one year.

The main conclusion from the study is that the uncertainties reported by the auditors depend more on the company's field of activity and the way in which it is managed, as well as external factors, such as the crisis situation generated by the Covid-19 pandemic. As is apparent from the recommendations made by *Accountancy Europe*, as well as other research, new aspects of the auditing of going concern assessment are expected to be regulated (Hay, Shires, & Van Dyk, 2021).

The results obtained can be useful for accounting professionals to improve financial reporting, the study conducted can be a guide for auditors in which the reasons leading to going concern uncertainties are centralised. Managers can identify the critical points of companies and take early action in line with recommendations made by *Accountancy Europe*. Regulators can identify what

The paper contributes to the knowledge of the reality of financial reporting, being a source for researchers in the field of accounting and auditing, through information on the importance of comprehensive and relevant financial reporting.

The limits of the research consist in the degree of subjectivity regarding the grouping of uncertainties by types of reasons on the basis of the professional reasoning of the authors. Some of the data was

hand-gathered which may distort the results to a small extent, but to reduce the risk of biased information was verified on several database sequences.

The paper is a prerequisite for quantitative research that will include variables in the study leading to the creation of an econometric model of factors influencing the reporting of going concern uncertainties.

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Audit Risk Assessment and Influence on the Auditor's Opinion

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Abstract

Risk is one of the most controversial elements that auditors face in audit missions. This refers to the probability that significant misstatements will exist in the financial statements of companies, and the auditor will issue an unqualified opinion, therefore an erroneous opinion. For the auditor, the audit risk can be considered an economic risk, which requires the professional accountant to try to minimize this risk. Accurate identification and evaluation of the risk factors that characterize the three components of the Audit Risk - Inherent Risk, Control Risk and Detection Risk - contribute to a rigorous planning of the audit approach. In other words, the identified risks will be the basis for orienting the auditor's efforts towards those areas where distortions can lead to the alteration of the true image reported by the users' financial statements.

In this study are identified and prioritized, based on financial reports in general, and of the audit, in particular the risk factors that characterize Audit Risk on three components: Inherent Risk, Control Risk and Detection Risk.

The sample studied is represented by companies listed on the Bucharest Stock Exchange on the regulated market, and the cause-effect analysis, but also cross-sectional analysis takes into account the period 2019-2020, before the crisis caused by Covid-19 and year of installation of the crisis. By testing and validating research hypotheses using regression methods and multivariate data analysis, it is highlighted that a ranking of audit risk components can be made, the inherent risk having a greater influence on audit planning than control risks and detection risks. Also, at the level of the analyzed sample, a company profile is identified, depending on the object of activity, auditor, the size of the audit risk and the opinion formulated in the audit report for the financial year closed at the end of 2020.

Key words: audit risk; inherent risk; control risk; detection risk; audit opinion; financial reporting;

JEL Classification: C12, M41, M42, M48

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1. Introduction

It is known that the nature, duration and extent of the procedures used by the auditor to collect evidence in an audit mission are also influenced by the risks of the audit. According to International Standards on Auditing, *Audit Risk (AR)* is the risk that the auditor will express an inadequate audit opinion if the financial statements are significantly distorted (IAASB, 2018). In other words, acceptable audit risk is a measure of the degree to which the auditor is willing to accept that the financial statements may contain material misstatement, even if an unqualified audit report has been issued. The auditor is required to accept a certain level of risk, due to the inherent limitations of any audit engagement. However, the auditor should keep this risk to a minimum so that the degree of assurance offered by his opinion on the reliability of the financial statements is as high as possible. This is possible when the auditor identifies risk factors very well and directs his procedures to the areas where errors and/or fraud are most likely.

The studies have shown that a quality audit has a significant positive effect on the performance of companies, the results obtained being considered relevant especially for stakeholders in countries with emerging capital markets (Sailendra, Murwaningsari & Mayangsari, 2019). It is considered that audit risk acceptable to the auditor should be much lower, as external users rely more on audited financial statements, the higher the risk the entity of non-continuous employment is higher and as the competence and integrity of management are more doubtful. In other words, the higher the total risk (economic, financial and bankruptcy) of the company, the higher the degree of assurance of the auditor must be and the accepted audit risk must be more lower. (Muñoz-Izquierdo, 2019). Therefore, the audit risk is complementary to the degree of assurance (DA).

Practice recommends that the acceptable audit risk not exceed 5%. Under these conditions, the DA will exceed 95% (ICAS & CAFR, 2019). Among the factors that contribute to reducing the audit risk are: collecting a larger volume of evidence, assigning the mission to competent and experienced auditors, rigorous monitoring of the activity of the team of auditors, but also other factors. Compared to the significance threshold, which can be determined by categories of transactions, the audit risk is estimated only on all financial statements. The studies brought into question econometric models of material

readjustment through rapid audit tests applied on sustainable companies (Grosu, Mateș, Zlati, Mihaila, Socoliuc, Ciubotariu & Tanasă, 2020).

Although the estimation of audit risk is subjective, it can still be determined according to the following model: **Audit Risk = Inherent Risk x Control Risk x Detection Risk** (Arens & Loebbecke, 2003). Can establish a hierarchy of influence risk components of audit risk? The answer to this question is given after conducting the study in this research.

2. Literature review

The publication of a standardized audit report for public interest entities, without describing the significant risks identified during the audit process, is no longer relevant. Currently, audit reports provide more information to stakeholders. Certainly, a part of major interest is the one related to the risks identified in the audit process, which in terms of reporting are found with the name of key audit aspects - KAM (Grosu, Robu & Istrate, 2020). After changing regulations studies have shown that in Romania, most auditors complied with the ISA requirements regarding the presentation of key audit issues, noting that there are different approaches to the average number of key audit issues described in the report. their nature or the disclosure of the materiality threshold established in the audit mission (Levanti, 2019).

Inherent risk (IR) refers to the susceptibility of an account balance or class of transactions to contain distortions that could be significant (individually or cumulatively), assuming that there are no internal controls (IAASB, 2018: ISA 200). From the auditor's point of view, the inherent risk is a measure of the estimate, that he makes on the likelihood of significant misstatement of the accounts before assessing the effectiveness of internal control over the prevention or detection and correction of errors and/or fraud. Internal control is ignored because its risk is a separate factor in the audit risk model. The estimation of the inherent risk takes place after the knowledge of the client entity, when the possible areas of occurrence of erroneous presentations can be identified. The probability of error and/or fraud is higher, the estimated inherent risk will be higher. An inherently high risk forces the auditor to collect a larger volume of evidence so as to help reduce the audit risk. The Guide to a Quality Audit - GQA (ICAS

& CAFR, 2019) breaks down the inherent risk into two components: *General Inherent Risk (GIR)* and *Specific Inherent Risk (SIR)* and recommends a method based on statements that are associated with a risk factor from *Very low* to *Very high*, for the GIR estimate. The statements concern four directions: *Management, Accounting, Company Activity and Its Audit*. After evaluating the GIR, the auditor will turn his attention to the Specific Inherent Risks (SIR) of the structures of the financial statements, and for their appreciation, it will respond to a set of six questions, which are taken from the minimum standards of audit (MSA), because they are missing of GQA (CAFR, 2001).

The six questions focus on finding out why errors are expected? Based on the answers to the questions asked, the auditor determines the SIR for each significant section or area from *Very Low* to *Very High*, as in the case of GIR. A number of statements/questions related to inherent risk have in mind complex accounting policies and we can mention here increasingly difficult techniques with rapid implementation that increase the complexity of audit missions, such as those related to hedge accounting (Singh, 2019). Also in an emerging context, in which the concept of fair value, as well as its implementation and its audit, are relatively new, the studies focused on verifying the awareness of the estimation risk induced by the evaluation process, depending on the quality of internal control (Deaconu, Ciurdaș & Bonaci, 2021).

Among the aspects that characterize the inherent risk and that refer to its third direction - *the company's audit* - a frequently encountered element considers the continuity of the entity's activity, studies showing that in 30% of the analyzed reports, auditors introduced paragraphs highlighting some aspects, and the main element found here is the (non) continuity of activity (Istrate, Bunget & Popa, 2020). Currently, an inherent risk factor frequently mentioned in audit reports, either as a key issue or reported in the review paragraph, is related to the effects of the Covid-19 pandemic on business continuity, although studies have also been conducted for reporting from the end of 2019, when these aspects were reported as subsequent events (Crucean & Hațegan 2021; Apostol, 2020). Also in this register, the researchers found that the

companies for which audit reports were issued without mentioning aspects related to the discontinuity of activity report losses in the following periods more than the companies for which audit reports were issued in which they are mentioned. aspects of business discontinuity (Kim, 2021).

Control Risk (CR) refers to the probability that significant misstatements of the financial statements cannot be prevented or detected and corrected by the entity's internal control (IAASB, 2018: ISA 200). It is about the risk that the information will be significantly distorted prior to the mission (IAASB, 2018: ISAE 3000, revised). This risk is assessed by the auditor after obtaining an understanding of the entity's control environment using *Risk Evaluation Tests (RET)* and after obtaining evidence of the operational effectiveness of internal controls using *control tests (CT)*. Practice highlights that the auditors set maximum levels for control risk because often the degree of trust in the *Internal Control System (ICS)* of the entities is low. However, there are exceptions, such as: the auditor's identification of well-designed and effective internal controls or when the auditor plans to perform extensive control tests to support a lower level of control risk evaluation. It is important to know that control risk is included in the audit risk equation only when the auditor assigns a certain degree of confidence to internal control and, as a consequence, the scope of substantive analytical procedures is reduced. Among the risk factors associated with the audit risk components, those associated with the control risk are largely qualitative factors. These are, more precisely, indicators specific to corporate governance, among which are: duality - executive director / general manager, existence of the audit committee, unitary or dual management system (Dobre, 2016; Dumitrescu, Bunget, Burcă & Bogdan, 2021).

Empirical research has shown that the duality - executive director/general manager, the number of non-executive directors, the presence of women on the Board of Directors, the existence of the audit committee and the audit opinion influence the entity's performance measured by profitability indicators (Bunget, et al., 2020). The attitude of the management for the efficiency of the internal control system, as a form of quality assurance of accounting information, should not be perceived as an

obligation, but rather as an assurance of responsible reporting (Ciuhureanu, 2016). Regarding the mission, vision and organizational values, studies have shown that only 54% of companies listed on BVB present their values (Dumitrașcu & Feleagă, 2019). Once the RC is estimated, the auditor will assess the confidence placed in the substantive analytical procedures.

In terms of risk, it is about **Detection Risk (DR)**. Risk of detection is a measure of the risk that the procedures used by the auditor in collecting evidence will not detect significant misstatement (IAASB, 2018: ISA 200). It can thus be found that IR and CR belong to the audited entity and cannot be controlled by the auditor, and the risk of detection is somewhat under the control of the auditor. Certainly, the development and generalization of automatic data processing improve performance by automating processes (Lacurezeanu, Tiron-Tudor & Bresfelean, 2020), but also bring new vulnerabilities and weaknesses that may underlie the risks induced by cyber-attacks on audit activity. financial (Popescu & Popescu, 2018; Hu, K., H., Chen, F., H. & We, W., J., 2016).

We know that the auditor is not responsible for the sustainability and profitability of the audited entity, but becomes liable if the report misinforms the users of the financial statements. The audit risk is considered an economic risk for the audit firm, in the sense that the auditor may be required by law to cover certain damages required by users of the financial statements, in case the customer - entity goes bankrupt after performing an audit, so to speak, "suitable". There are studies, in recent years, that have highlighted the ways in which auditors can limit their liability and protect themselves professionally (Măgdaș, 2018).

Based on such situations, the *International Auditing Standards* (ISA) on reporting have been amended in recent years, by introducing key audit issues (KAM) in auditors' reports, as a separate part, precisely to support the audit opinion expressed, a series studies analyzing the evolution of audit reporting in recent years and the role it has (Fülöp, 2018; In, Kim & Park, 2020; Iwanowicz & Iwanowicz, 2019). The integrity and credibility of financial statements are sensitive issues that significantly influence investor confidence in the efficiency of capital markets, although the level of communication of Romanian companies with

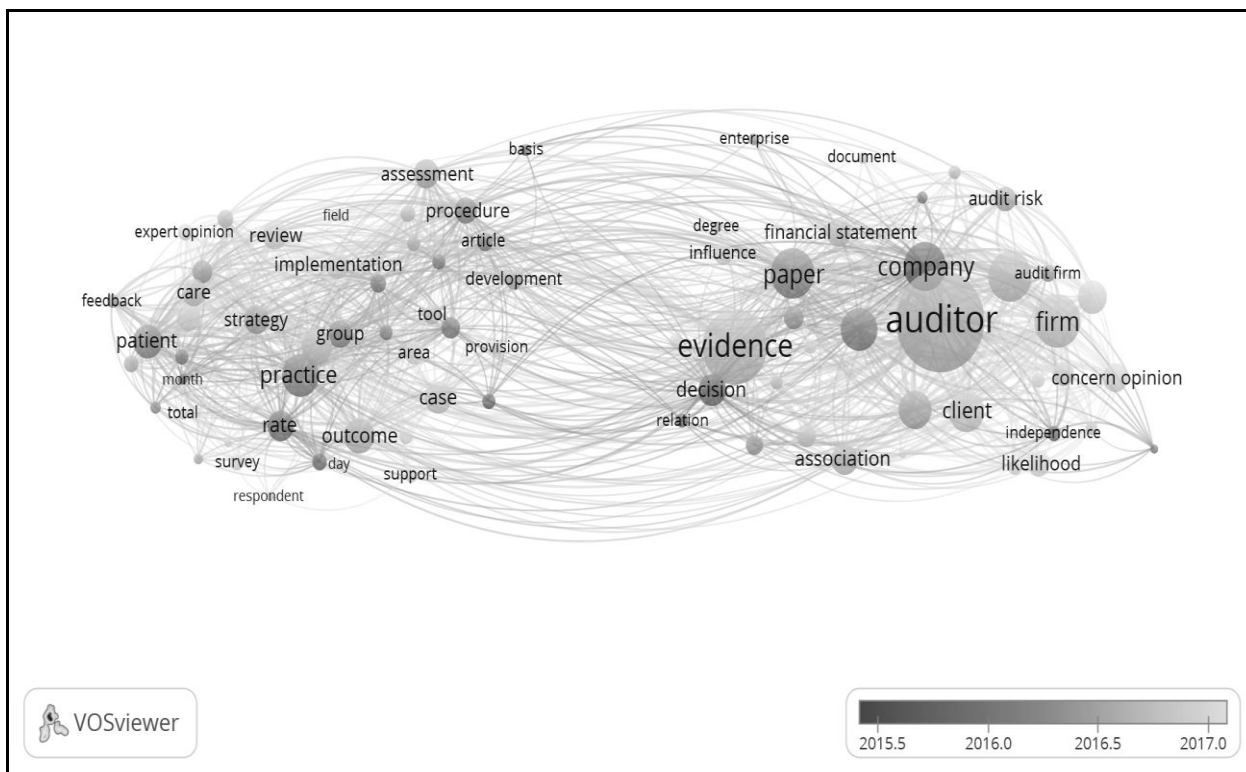
investors is considered to be still low (Hațegan, 2020). On the other hand, the research carried out highlighted the fact that the audit opinion influences the prices of financial assets (Dănescu & Spătacean, 2018; Dicu, et. Al., 2020). Also, among the main components of the financial statements (cash flow statement, profitability component and current asset structure component), only the profitability component has a significant influence on transparency in financial reporting, assessed based on the audit opinion (Robu, Istrate & Herghiligiu, 2019).

The contribution of the audit opinion to the increase of the quality of financial information, measured by the degree of sales manipulation, was studied by the authors, who concluded that in case of manipulation by overproduction, the audit opinion does not exert significant influences. possible limitations of the audit approach in terms of the ability to identify corrupt activities associated with production (Carp & Georgescu, 2019).

The audit risk evaluation method recommended by GQA is considered by some authors (Span, 2013) interpretive and with a high degree of subjectivity and come with proposals for improvement models that increase the degree of accuracy, precision and objectivity and that highlight more clearly the differences between the audited entities. Also, the research carried out at national level (Robu, 2014) classified the companies listed on the Bucharest Stock Exchange into certain groups, according to the risk of financial fraud, as part of the inherent risk or potential control risk, as well as according to the risk of money laundering (Grosu & Mihalciuc, 2020). Other studies performed for risk analysis in the financial audit took into account the method of trust functions, which gives an important role to professional reasoning at the time of planning and during the mission of the audit (Tanasă & Nuță, 2020).

A synoptic presentation of the articles on risk and audit opinion found in the *Web of Science* database over the last ten years is shown in **Figure no.1**. A number of 328 articles were selected according to the search words: *risk* and *audit opinion*. After removing the irrelevant terms, a number of 88 terms were kept for mapping.

Figure no. 1. Map on the links between the topics covered in the field of financial audit (audit risk and audit opinion) and the evolution over the last ten years (Web of Science)



Source: Own processing using VOSviewer

If we analyze the presented map, it can be seen that the topics on audit risk and reporting in this direction have focused, in recent years, on a staging as follows: in the first period of the analyzed period, the focus was on the company, taxation, decision, followed by audit practices and procedures, evaluation, audit risk, documentation, so that in the last period analyzed, the emphasis will be on quality review and on issues related to business continuity. The formed clusters highlight the fact that the audit risk is related to business continuity, documentation, financial statements, independence, and the audit opinion is related to terms such as: trust, evaluation, implementation, strategy.

Based on the results identified at the level of the consulted specialized literature, in the present study the following research hypotheses are proposed for testing and validation:

1. *At the level of Romanian companies listed on the BSE (Bucharest Stock Exchange) on the regulated market, the risk factors related to the Audit Risk components*

can be ranked according to their influence on the Inherent Risk, Control Risk and Detection Risk.

2. *A better ranking of the components of audit risk - Inherent Risk, Control Risk and Detection Risk - helps to properly plan the auditor's mission.*
3. *It can identify a profile of Romanian company listed on BSE on the regulated market, depending on the object of activity, auditor, the size of the audit risk and the opinion formulated in the audit report.*

3. Research methodology: population, sample, variables, data source, data analysis methods

Testing the research hypotheses proposed in the study involves the use of a statistical approach (Jaba, 2002).

This approach involves: identifying the population, selecting the sample, choosing the variables, establishing the data analysis methods and proposing the econometric models to be analyzed, collecting and processing the data, as well as obtaining the research results and interpreting them.

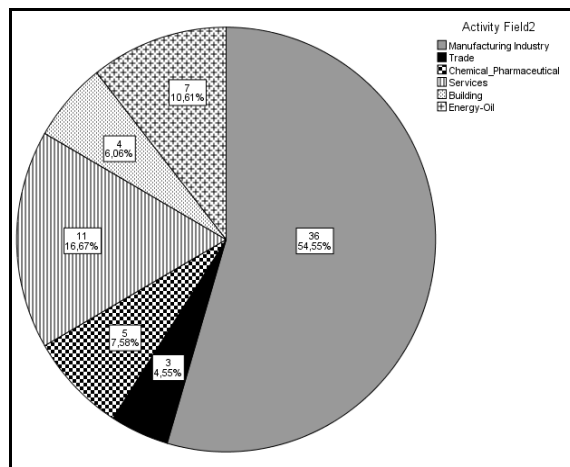
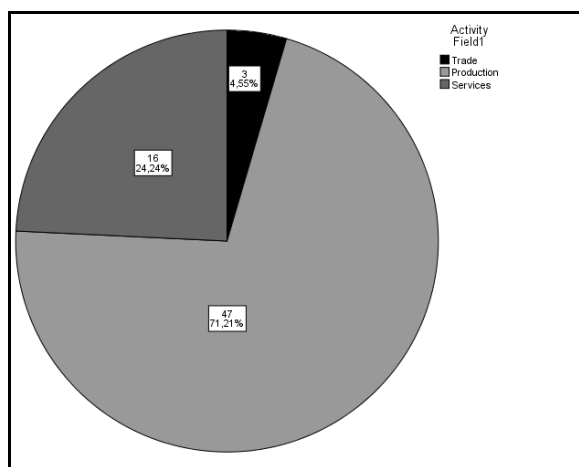
3.1. The population studied and the sample analyzed

The population analyzed in this study is represented by all companies listed on the Bucharest Stock Exchange (BSE) subject to statutory financial audit, in accordance with Law no. 162/2017 regarding the statutory audit of the annual financial statements and of the consolidated annual financial statements and of the modification of some normative acts, published in the Official Gazette of Romania no. 548/12 July 2017, and the selected sample includes only companies on the regulated market. Of the 80 companies listed at the end of the financial year 2020, a number of 14 companies were excluded, 13 companies being represented by entities in the financial-banking, insurance or financial intermediation fields, as they must meet other criteria in the financial reporting, and

the audit reports are based on the requirements of these reporting frameworks and are not comparable with the audit reports of the other firms for which the data were unavailable and a firm for which the data were unavailable. Thus, the analyzed sample includes 66 listed companies, for which data were collected related to the financial years ended at the end of 2019 and 2020. The study covers only the financial years 2019 and 2020, in order to compare the results obtained before the crisis generated by the Covid-19 pandemic and those obtained even in the year of the crisis.

Depending on the activity field, the analyzed sample includes 47 companies in the field of *production*, 16 companies in the field of *services* and 3 companies in the field of *trade*. After a more analytical classification of objects of activity, the analyzed sample includes 36 companies operating in the *manufacturing industry*, 11 companies in the *service* field, 7 companies in the *energy-oil* field, 5 companies in the *chemical-pharmaceutical* field, 4 in the *building* field and 3 companies in the field of *trade*. The graphs in Figure no. 2 show the distribution of the sampled companies by activity field.

Figure no. 2. The sample analyzed by activity field



Source: Own processing in SPSS 23.0

3.2. The variables analyzed, the data source and the models proposed for testing

In order to test and validate the proposed research hypotheses, the study aims, first of all, to identify the factors that characterize the components of audit risk, namely inherent risk, control risk and risk of detection, starting from

the literature, to remove evidence which of these factors has a significant influence on the risks mentioned. Subsequently, the hypothesis regarding the manifestation of the influence of the three risks on the audit risk is tested. A better ranking of the components of audit risk - inherent risk, control risk and detection risk - is considered to help in a proper planning of the auditor's mission. Finally, the aim is to identify the profile

of the Romanian company listed on BSE on the regulated market, depending on the object of activity, auditor, the size of the audit risk and the opinion formulated in the audit report.

The data were collected manually from the individual financial statements prepared in accordance with IFRS, from the audit reports, from the directors' reports, as well

as from the corporate governance statements of the companies included in the sample analyzed for the financial years ended 2019 and 2020, and the analysis data was made with SPSS 23.0 software.

For processing, the identified variables and their description are presented in **Table no. 1**.

Table no. 1. List of identified variables and their description				
Variable	Variable Symbol	Value		
1. General Variables				
Field_act1	Activity Field 1	Production		
		Trade		
		Services		
Field_act2	Activity Field 2	Manufacturing Industry		
		Trade		
		Chemical-Pharmaceutical		
		Services		
		Building		
		Energy-Oil		
Auditor	Auditor	Big Four and International Affiliates		
		Not Affiliated International		
Opinion_20_1	Audit Opinion 2020 1	Unqualified		
		Qualified		
Opinion_20_2	Audit Opinion 2020 2	Unmodified opinion		
		Opinion with reservations		
		Contrary Opinion		
		The Impossibility to Express an Opinion		
2.1. Inherent Risk Factors - Managerial				
Lead_Share	Leading Shareholders	Over 10%		
		Less than 10%		
Fin_Poz	Financial Position	Financially dependent ($E^1/EL^2<0,33$)		
		Financially independent ($E/EL>0,33$)		
Immed_Liquid	Immediate liquidity	Liquidity problems ($CCE^3/STL^4<0,3$)		
		Satisfactory liquidity ($CCE/STL>0,3$)		
2.2. Inherent Risk Factors - Accounting				
Trans_Relat	Transactions with Related Parties	Yes		
		Not		
Complex_Op	Complex operations and significant accounting estimates	Yes		
		Not		
Changes_DFA	Changes in the Department Financial Accountant	Yes		
		Not		
2.3. Inherent Risk Factors - Operational				
Litig	Litigation with significant impact	Yes		
		Not		
ST_Loans	Short-Term Loans	Yes		
		Not		
TR_20_19	Turnover Rate 2020/2019 (NI ⁵ /T ⁶)	Decrease		
		Maintenance / Growth		

Variable	Variable Symbol	Value
2.4. Inherent Risk Factors - Audit		
Opinion_19	Audit Opinion 2019	Qualified Unqualified
Go_Conc	Going Concern	Business continuity issues Business continuity
App_Audit	Appointment Auditor Late	Yes Not
Limit_acces_inf	Limiting access to information / Non- confirmations	Yes Not
IR	Inherent Risk	High Medium Low
3. Control Risk Factors		
Code_Eth	Code of Ethics	Not Yes
Struct_IA	Distinct Structure of Internal Audit	Not Yes
Code_G_BSE	Respected BSE Governance Code	Partial Integral
Mg_Syst_QEHOS	Mg System of Quality, Environment, Health and Occupational Safety	Partial System - Quality and Environment Integrated System
AC_Pol	Anti-Corruption Policies	Not Yes
NAS_2016_2020	National Anticorruption Strategy 2016-2020	Non-adherence Adherence
Indep_audit_Comm	Independent Audit Committee	Not Yes
Mg_Syst	Management System	Unitary Dual
Change_Lead	Change of Leadership	Yes Not
Int_Ctrl_Syst	Internal Control System	Inefficient Efficient
Own_Sh	Own Shares	Yes Not
Loans_Assoc	Loans received from Associates	Yes Not
Rem_Pol	Remuneration Policy	Nontransparent Transparent
CR	Control Risk	High Medium Low
4. Detection Risk Factors		
NI_Var_20_19	Net Income Variation 2020-2019	Significantly Insignificant
T_Var_20_19	Turnover Variation 2020-2019	Significantly Insignificant
E_Var_20_19	Equity Variation 2020-2019	Significantly Insignificant
A_Var_20_19	Asset Variation 2020-2019	Significantly Insignificant

Variable	Variable Symbol	Value
NE_Var_20_19	Variation in the Number of Employees 2020-2019	Significantly Insignificant
DR	Detection Risk	High Medium Low
AR	Audit Risk	High Medium Low
Notes: ¹ E – Equity ² EL – Equity and Liabilities ³ CCE – Cash and Cash Equivalent ⁴ STL – Short Term Liabilities ⁵ NI – Net Income ⁶ T – Turnover		

Source: Own processing

The variables presented in Table no. 1 are structured as follows: general variables, variables related to inherent risk, variables related to control risk and variables related to detection risk. The General Variables identified include: the field of activity with values for a synthetic and a more analytical variant; the auditor, who is part of the Big Four or is an international affiliate, respectively is not part of these categories; unqualified or qualified opinion, with the related variants. The variables related to the Inherent Risk are structured on four directions: Management, Accounting, Activity of the entity and its Audit. For each direction, variables were identified depending on their relevance, but also depending on the availability of data to be collected. The category of Control Risk variables includes factors that characterize the entity's internal control system and give a measure of control risk. Most variables are qualitative, and numerical variables have been transformed into categorical variables by discretizing some economic and financial indicators. To characterize the Risk of Detection, the identified variables are numerical variables transformed into categorical variables. The more important the variations of the mentioned indicators, the higher the risk of detection (ICAS & CAFR (2019). At the synthetic level, the inherent risk, the control risk and the detection risk were established as having the qualifier: high, medium and small, starting from the identified variables, which represent risk factors. For the inherent and control risks, a number of 13 risk factors are identified, and for the risk of detection, 5 risk factors. The risk assessment followed an approach similar to that of the GQA (with a step more serious than reality), only that

we first assigned quantitative factors, depending on the existence of the identified risks and, subsequently, ratings (≥ 6 , high risk; 3-5, medium risk: ≤ 2 , low risk). The same was done with the risk of detection, the maximum number of identified variables being equal to 5 (≥ 3 -high risk; 2-medium risk; 1-low risk). The audit risk was finally assessed starting from its components and applying the same reasoning - a step worse than reality.

Therefore, starting from the literature, to estimate the audit risk components, a quantitative approach was followed, followed by a qualitative approach (Demartini & Trucco, 2016), in the sense that, first, a risk factor was associated with each component, depending on the number of risk factors identified by data collection, and then, depending on the risk factor, the ratings were associated, going only on three variants: high, medium, low.

Multiple linear regression models are used to test the influence of risk factors on the components of audit risk, but also of the inherent risk, control and detection on audit risk (Jaba, 2008), and to identify the associations between the object of activity, auditor, the size of the audit risk and the opinion formulated in the audit report use the Factor Analysis of Multiple Correspondences (FAMC), as a method of multivariate data analysis (Pintilescu, 2007).

4. Results and discussions

To test the first research hypothesis: 1. At the level of Romanian companies listed on the BSE on the regulated market, the risk factors related to the audit risk

components can be ranked according to their influence on the Inherent Risk, Control Risk and Detection Risk, models are used of multiple linear regression (1, 2 and 3).

The first regression model shows the influence of risk factors on the inherent risk, as indicated in equation 1:

$$IR_i = \beta_0 + \beta_1 \text{Lead_Share}_i + \beta_2 \text{Fin_Poz}_i + \beta_3 \text{Immed_Liquid}_i + \beta_4 \text{Trans_Relat}_i + \beta_5 \text{Complex_Op}_i + \beta_6 \text{Changes_DFA}_i + \beta_7 \text{Litig}_i + \beta_8 \text{ST_Loans}_i + \beta_9 \text{TR_20_19}_i + \beta_{10} \text{Opinion_19}_i + \beta_{11} \text{Go_Conc}_i + \beta_{12} \text{App_Audit}_i + \beta_{13} \text{Limit_acces_inf}_i + \varepsilon_i \quad (1)$$

where:

- IR_i represents the Inherent Risk assessed for the company i , with $i=1, \dots, 66$, who can receive one of the three grades described in Table 1;
- $\text{Lead_Share}_i, \text{Fin_Poz}_i, \text{Immed_Liquid}_i, \text{Trans_Relat}_i, \text{Complex_Op}_i, \text{Changes_DFA}_i, \text{Litig}_i, \text{ST_Loans}_i, \text{TR_20_19}_i, \text{Opinion_19}_i, \text{Go_Conc}_i, \text{App_Audit}_i, \text{Limit_acces_inf}_i$ are the risk factors related to the

inherent risk described in Table 1 for the company i , with $i=1, \dots, 66$;

- $\beta_{i=0, \dots, 13}$ represents the parameters of the regression models;
- ε_i represents the error component, $\varepsilon \sim N(0, 1)$.

For the interpretation of the processing, an extract from the results obtained is presented in **Table no. 2**.

Table no. 2. Estimates of the parameters of the first regression model (IR)

Variables included in the model	β	Stand β	t	Sig
<i>Lead_Share</i>	.274	.214	3.267	.002
<i>Fin_Poz</i>	.233	.141	1.633	.108
<i>Immed_Liquid</i>	.364	.283	3.541	.001
<i>Trans_Relat</i>	.300	.205	2.749	.008
<i>Complex_Op</i>	.419	.202	2.944	.005
<i>Changes_DFA</i>	.309	.197	2.958	.005
<i>Litig</i>	.179	.136	2.112	.039
<i>ST_Loans</i>	.112	.086	1.119	.268
<i>TR_20_19</i>	.407	.316	4.755	.000
<i>Opinion_19</i>	.232	.155	1.984	.053
<i>Go_Conc</i>	.328	.229	2.630	.011
<i>App_Audit</i>	.657	.245	2.792	.007
<i>Limit_acces_inf</i>	-.066	-.397	-.397	.693
<i>Constant</i>	-4,207		-7.194	.000

R^2 is 0,798; $N=66$

Regression Model 1 (IR): $IR_i = \beta_0 + \beta_1 \text{Lead_Share}_i + \beta_2 \text{Fin_Poz}_i + \beta_3 \text{Immed_Liquid}_i + \beta_4 \text{Trans_Relat}_i + \beta_5 \text{Complex_Op}_i + \beta_6 \text{Changes_DFA}_i + \beta_7 \text{Litig}_i + \beta_8 \text{ST_Loans}_i + \beta_9 \text{TR_20_19}_i + \beta_{10} \text{Opinion_19}_i + \beta_{11} \text{Go_Conc}_i + \beta_{12} \text{App_Audit}_i + \beta_{13} \text{Limit_acces_inf}_i + \varepsilon_i$

Source: Own processing in SPSS 23.0

After the statistical processing performed, it can be seen that the Determination Ratio R^2 , of about 80%, shows that in this proportion, the variation of the inherent risk is explained by the independent variables. The difference is explained by the influences of other variables not included in the model. Based on the results obtained, a *hierarchy of inherent risk factors* can be made on the three directions on the sample studied: *Management* (in the first place is the risk factor: Immediate liquidity), *Accounting* (in the first place is the risk factor: Complex operations), *company*

Activity (risk factor: Profitability of the entity), *company Audit* (risk factor: Delayed appointment of auditor). Smaller influences have risk factors: the existence of short-term loans, financial dependence and limiting the auditor's access to information. The explanation lies in the fact that for the financial year ended at the end of 2020, the sampled entities were not over-indebted to banks, had a favorable degree of financial independence, and limited access to information by the auditor occurred in very few cases which the influence of this risk factor is the lowest.

The second regression model shows the Influence of Risk Factors on Control Risk, as indicated in equation 2:

$$CR = \beta_0 + \beta_1 \text{Code_Eth}_i + \beta_2 \text{Struct_IA}_i + \beta_3 \text{Code_G_BSE}_i + \beta_4 \text{Mg_Syst_QEHOS}_i + \beta_5 \text{AC_Pol}_i + \beta_6 \text{NAS_2016_2020}_i + \beta_7 \text{Indep_audit_Comm}_i + \beta_8 \text{Mg_Syst}_i + \beta_9 \text{Change_Lead}_i + \beta_{10} \text{Int_Ctrl_Syst}_i + \beta_{11} \text{Own_Sh}_i + \beta_{12} \text{Loans_Assoc}_i + \beta_{13} \text{Rem_Pol}_i + \varepsilon_i \quad (2)$$

where:

- CR_i represents the Control Risk assessed for the company i , with $i=1, \dots, 66$, who can receive one of the three grades described in Table 1;
- Code_Eth_i , Struct_IA_i , Code_G_BSE_i , Mg_Syst_QEHOS_i , AC_Pol_i , NAS_2016_2020_i , $\text{Indep_audit_Comm}_i$, Mg_Syst_i , Change_Lead_i , Int_Ctrl_Syst_i , Own_Sh_i , Loans_Assoc_i , Rem_Pol_i are

the risk factors related to the control risk described in Table 1 for the company i , with $i=1, \dots, 66$;

- $\beta_{0, \dots, 13}$ represents the parameters of the regression models;

- ε_i represents the error component, $\varepsilon \sim N(0, 1)$.

For the interpretation of the processing, an extract from the results obtained is presented in Table no. 3.

Table no. 3. Parameter estimates for the second regression model (CR)

Variables included in the model	β	Stand β	t	Sig
<i>Code_Eth</i>	.271	.206	1.151	.255
<i>Struct_IA</i>	.229	.160	2.035	.047
<i>Code_G_BSE</i>	.418	.239	2.937	.005
<i>Mg_Syst_QEHOS</i>	.029	.023	.303	.763
<i>AC_Pol</i>	.289	.218	2.219	.031
<i>NAS_2016_2020</i>	.542	.240	3.307	.002
<i>Indep_audit_Comm</i>	.040	.030	.348	.729
<i>Mg_Syst</i>	.348	.154	2.543	.014
<i>Change_Lead</i>	.146	.100	1.492	.142
<i>Int_Ctrl_Syst</i>	.046	.035	.187	.852
<i>Own_Sh</i>	.332	.214	2.953	.005
<i>Loans_Assoc</i>	.507	.162	2.439	.018
<i>Rem_Pol</i>	.185	.141	1.821	.074
<i>Constant</i>	-3.512		-6.254	.000

R^2 is 0,818; N=66

Regression Model 2 (CR):

$$CR = \beta_0 + \beta_1 \text{Code_Eth}_i + \beta_2 \text{Struct_IA}_i + \beta_3 \text{Code_G_BSE}_i + \beta_4 \text{Mg_Syst_QEHOS}_i + \beta_5 \text{AC_Pol}_i + \beta_6 \text{NAS_2016_2020}_i + \beta_7 \text{Indep_audit_Comm}_i + \beta_8 \text{Mg_Syst}_i + \beta_9 \text{Change_Lead}_i + \beta_{10} \text{Int_Ctrl_Syst}_i + \beta_{11} \text{Own_Sh}_i + \beta_{12} \text{Loans_Assoc}_i + \beta_{13} \text{Rem_Pol}_i + \varepsilon_i$$

Source: Own processing in SPSS 23.0

According to the Determination Report R^2 , over 80% of the variation of the Control Risk is explained by the independent variables. The difference is explained by the influences of other variables not included in the model. Here, too, a hierarchy of control risk factors can be made, in the first places are the risk factors: non-adherence to the National Anticorruption Strategy, the existence of loans received from associates and partial compliance with the Corporate Governance Code. In the last places, there are risk factors that refer to the

inefficiency of internal control and the adoption of the Management System of Quality, Environment, Health and Occupational Safety. The result obtained is explained by the fact that for the risk factor, the inefficiency of internal control, only the data from the audit reports were taken, which reported this aspect in a few cases.

The third regression model shows the Influence of Risk Factors on Detection Risk, as shown in equation 3:

$$DR_i = \beta_0 + \beta_1 NI_Var_20_19_i + \beta_2 T_Var_20_19_i + \beta_3 E_Var_20_19_i + \beta_4 A_Var_20_19_i + \beta_5 NE_Var_20_19_i + \varepsilon_i \quad (3)$$

where:

- DR_i represents the Detection Risk assessed for the company i , with $i=1, \dots, 66$, who can receive one of the three grades described in **Table no. 1**;
- $NI_Var_20_19_i$, $T_Var_20_19_i$, $E_Var_20_19_i$, $A_Var_20_19_i$, $NE_Var_20_19_i$ are the risk factors

related to the detection risk described in Table 1 for the company i , with $i=1, \dots, 66$;

- $\beta_{=0, \dots, 5}$ represents the parameters of the regression models;
- ε_i represents the error component, $\varepsilon \sim N(0, 1)$.

For the interpretation of the processing, an extract from the results obtained is presented in **Table no. 4**.

Table no. 4. Parameter estimates for the third regression model (NR)

Variables included in the model	β	Stand β	t	Sig
$NI_Var_20_19$	.323	.206	5.067	.000
$T_Var_20_19$	.688	.379	8.896	.000
$E_Var_20_19$	.859	.387	9.143	.000
$A_Var_20_19$	.519	.234	5.415	.000
$NE_Var_20_19$	.771	.424	10.118	.000
Constant	-3.162		13.172	.000

R^2 is 0,908; $N=66$

Regression Model 3 (DR):

$$DR_i = \beta_0 + \beta_1 NI_Var_20_19_i + \beta_2 T_Var_20_19_i + \beta_3 E_Var_20_19_i + \beta_4 A_Var_20_19_i + \beta_5 NE_Var_20_19_i + \varepsilon_i$$

Source: Own processing in SPSS 23.0

In order to assess the risk of detection, according to the GQA, the auditor uses analytical procedures to verify whether there are significant variations from one period to another. If we analyze the results of the processing performed, we find that 90% of the inherent risk is explained by the calculated variations, representing the independent variables. The greatest influence is exerted by the variation of Equity, followed by the variation of the Number of employees and the variation of the Turnover for the analyzed sample. The explanation for these influences lies in the fact that in the financial year 2020, severely affected by the Covid-19 pandemic, the entities suffered due to the fact that sales fell in many sectors of

activity and some employees were laid off. The average layoffs on the analyzed sample appear to be an important risk factor for the audit risk. The results obtained are comparable to those of other studies conducted in other countries, such as the United Kingdom and Italy (Demartini & Trucco, 2016).

The second research hypothesis: 2. A better ranking of the components of audit risk - inherent risk, control risk and detection risk - helps in proper planning of the auditor's mission is tested using the regression model given in the equation below. The fourth regression model shows the Influence of Inherent, Control and Detection Risks on Audit Risk, as shown in equation 4:

$$AR_i = \beta_0 + \beta_1 IR_i + \beta_2 CR_i + \beta_3 DR_i + \varepsilon_i \quad (4)$$

where:

- AR_i represents the Audit Risk assessed for the company i , with $i=1, \dots, 66$, who can receive one of the three grades described in **Table no. 1**;
- IR_i , CR_i , DR_i represents the Inherent Risk, the Control Risk and the Detection Risk for the company i , with $i=1, \dots, 66$;

- $\beta_{=0, \dots, 3}$ represents the parameters of the regression models;
- ε_i represents the error component, $\varepsilon \sim N(0, 1)$.

For the interpretation of the processing, an extract from the results obtained is presented in **Table no. 5**.

Table no. 5. Parameter estimates for the regression model four (AR)

Variables included in the model	β	Stand β	t	Sig
IR	.393	.475	6.764	.000
CR	.240	.296	4.138	.000
DR	.299	.430	5.871	.000
Constant	-.202		-1.409	.164

R^2 is 0,715; N=66

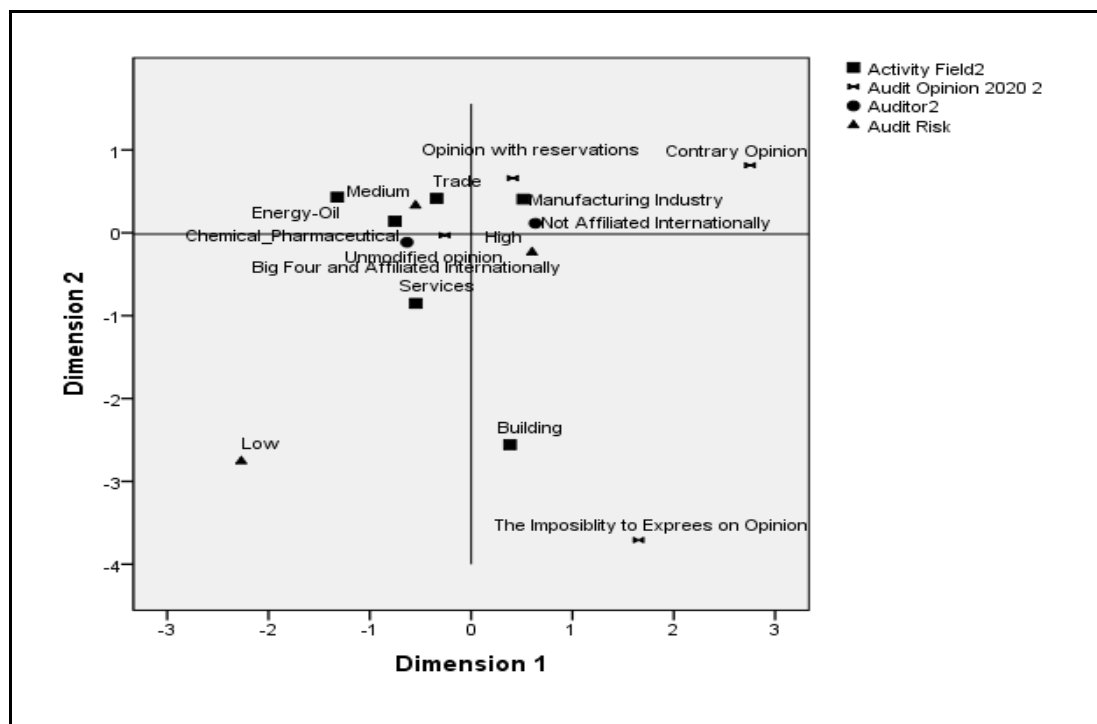
Regression model 4 (NR): $AR_i = \beta_0 + \beta_1 IR_i + \beta_2 CR_i + \beta_3 DR_i + \varepsilon_i$

Source: Own processing in SPSS 23.0

From the model described, it can be concluded that over 70% of the identified risk factors explain the audit risk, the inherent risk having the largest contribution. The difference of 30% is explained by the variables not included in the model, among which, certainly, the variable *professional reasoning* has an important influence. The results confirmed the results obtained in other studies conducted internationally (In, Kim & Park, 2020).

By testing the Research Hypothesis no. 3: *It is possible to identify a profile of the Romanian company listed on the BSE on the regulated market, depending on the object of activity, auditor, the size of the audit risk and the opinion formulated in the audit report.* auditor, the size of the audit risk and the opinion formulated in the audit report by applying the multivariate data analysis method: Factor Analysis of Multiple Correspondences (FAMC), as shown in **Figure no. 3**.

Figure no. 3. The association between the object of activity, the auditor, the size of the audit risk and the opinion formulated



Source: Own processing in SPSS 23.0, using FAMC

From **Figure no. 3**, it can be seen that the entities in the sample analyzed that operate in the *manufacturing industry* are audited by auditors that are not part of the Big Four and are not internationally affiliated, are characterized by a high audit risk, and opinions expressed in audit reports for these entities are, on average, modified opinions (with or without reservations). Companies operating in the *chemical-pharmaceutical and energy-oil fields* are audited, on average, by auditors that are part of the Big Four or are internationally affiliated, the risk assessed for these entities is medium and the opinion is unqualified. For the *trade and services fields*, at the level of the analyzed sample, the results show that the assessed audit risk is medium and low, respectively, they are audited by auditors from Big Four or who are internationally affiliated, and the opinions issued are, on average, unqualified. The *field of constructions* differs more, in view of the fact that the risk assessed for companies operating in this field is high, for the sample analyzed, auditors are often unable to issue an opinion and auditors are not affiliated internationally.

Conclusions

In audit missions, planning is a very important step, directing the auditor's entire approach. Good planning will help streamline the audit process in terms of costs and the quantity and quality of audit evidence collected. At the planning stage, an important place is held by the audit risk assessment. It is up to him to establish the significance threshold and, subsequently, the sample required for the audit. It is known that the auditor's objective is to obtain the highest possible level of assurance regarding the accuracy of the financial statements, and in order to achieve this goal, he will seek to reduce the audit risk to a minimum. A 100% degree of assurance and a complete elimination of the risk of omitting certain distortions are not possible.

In this study, at the level of the analyzed sample, a series of risk factors related to the three components of audit risk - inherent risk, control risk and detection risk - were identified and ranked in order to perform a ranking. The general conclusion is that of the three components of audit risk, the inherent risk has the greatest influence on audit risk, which leads us to the idea that the accurate

assessment of this type of risk will contribute to a good planning of the entire audit approach.

Starting from the research hypotheses formulated and tested, the results obtained from the processing highlighted a number of important aspects. First, testing the influence of risk factors on inherent risk showed that the financial indicator *immediate liquidity* has a significant influence on inherent risk, most entities in the sample studied having liquidity problems in the financial year ended late 2020. All inherent risk factors not under the control of the auditor, but a good knowledge of them by applying risk evaluation Tests help to more accurately assessing audit risk.

Regarding the control risk, most variables take into account aspects related to corporate governance, the transparency of information in this direction being a problem. However, from the published information, it was found that, at the level of the analyzed sample, there is no full compliance with the provisions of the Corporate Governance Code of BSE (Bucharest Stock Exchange). The adoption of anti-bribery and anti-corruption policies is also an important risk factor, in addition to the non-adherence of entities to the National Anticorruption Strategy. Also, the crediting of the company by the associates is a significant risk factor. The variables related to the risk of detection took into account variations of some indicators for the two analyzed periods: 2020 compared to 2019. Being the financial year affected by the Covid-19 crisis, it is observed that the primary risk factors are profitability and number of employees. The integrative regression model that reflects the influence of the inherent, control and detection risks on the audit risk highlighted the fact that the inherent risk has the greatest influence in the audit risk model. The testing of the last research hypothesis showed that certain characteristics can be identified, from the point of view of the auditor, of the risk size and of the opinion formulated by fields of activity for the companies in the analyzed sample.

Clearly, the study conducted has limitations caused by lack of transparency of financial reporting, which meant that for risk evaluation to be selected certain variables from the longer list of them. However, the relevance of the research is given by the actuality of the topic, highlighted by the map obtained with the help of VOSviewer software, which brings to the fore the risk factor: problems of business continuity, and the originality derives from the way it is approached.

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Internal Audit in ERP Systems Context

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Abstract

Through this paper, the authors wanted to highlight how important and useful are ERP systems for any company that requires internal auditing. ERP - Enterprise Resource Planning systems are intelligent software that can be adapted to the needs of each company allowing the combination of all business processes in a single database. They are also a way of internal control over the data entered and employees. From an internal audit perspective, these systems can be considered an appropriate solution because they provide an opportunity to more effectively manage internal and external audit risks. The main objective of this paper is to demonstrate the satisfaction of internal audit needs with the help of integrated systems. These systems facilitate the operation of data and their security. Another objective was to analyse how much these systems can reduce certain risks. The risks of significant misstatement may be mitigated by these systems, and any operation introduced may be analysed, verified and approved / disapproved. Therefore, a quantitative research was conducted, using the questionnaire as an analysis tool. Based on the answers received, the profile of the respondents was outlined and at the same time a statistical analysis was performed. The results obtained demonstrate that respondents appreciate ERP systems' utility. They perceive a reduction in financial and operational risk but also an increase in technical risk. Of course, these technical risk issues can be mitigated by the internal audit department's ability to assess and manage any issues that may arise. However, respondents also emphasize the need of training employees in using the system and understanding the data generated by it. Without well-trained employees, performance at the company level, as well as at the internal audit level would not be achieved. It is essential to have training at employees' level who manage data in an ERP system. This training is also valid for internal auditors who can recommend this system to reduce audit risks.

Key words: ERP Systems – Enterprise Resource Planning; internal audit; internal control; audit risks;

JEL Classification: A19, M40, M42, P00, P42

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Introduction

This research started from the idea of demonstrating how effective ERP systems are for any company that is operating on the market. They offer multiple benefits for any organization. These systems are also considered data integration software packages and are composed of several modules, such as financial, human resources, procurement, logistics, sales, and production (Eslam Nazemi et al., 2012).

In addition, these systems can be adapted to the needs of a company according to the specific features. They also perform integrated management of the business components through access to a single and unique database.

ERP are based on client/server architecture and can integrate all economic processes by optimizing available resources. The architecture of these systems leads to a transparent integration of modules. This ensures the transverse data flow between all functions of a company. Systems can be defined as functionality and integration. ERPs are integrated systems that ensure connectivity and communication between flows of economic functional processes (Fotache et al, 2013).

Moreover, the system offers data security, because it automates and standardizes all operational processes. With the help of the ERP system, managers can have total control over the employees as well as the operations they carry out in the system. In some cases, it is possible for managers to approve transactions/transfers. ERP eliminates the need to manage manually the information flows and provides an update of all operations entered into the database. The system provides accessibility, and any information can be accessed in real time. ERP also incorporates local legislation, country-specific standards of co-ability, and labour legislation.

Of course, all these mentioned benefits can be achieved only if, ERP system is implemented correctly. In many cases, the implementation of an ERP system entails significant technical and organizational challenges. From an organizational point of view, it is very important that users of this system also receive full training in order to understand precisely its functions and what it can do.

From an internal audit perspective, ERP systems have created new opportunities as well as new challenges (Debreceňy et al., 2005).

On the one hand, the use of an integrated system increases transparency in business processes and eliminates the need for controls ensuring the data consistency and accuracy as information is embedded in the system.

In Romania the most popular ERP systems are those with an impressive number of users, such as SAP, Oracle, CIEL, and Charisma. But there are many other recognized names, such as WinMentor, Navision, DAX, CDMS etc.

Literature review

The ERP concept can be viewed from a variety of perspectives. First, and most obviously, ERP is a smart software that can be operated on multiple devices, in real time, from different locations. Secondly, and fundamentally, ERP can be seen as an objective of developing all the processes and data of an organization in a comprehensive integrative structure. Thirdly, ERP can be seen as a key element of an infrastructure providing a business solution (Klaus et al., 2000).

Similarly, Nah et. al., (2001) and Stemberger and Kovacic (2008) define the ERP system as advanced software that enables companies to manage resources (material, human, financial) efficiently and effectively, integrating all information to meet the needs of organizations/companies.

ERP systems have been in place since the 1960s, being referred to at the time as electronic computing systems, under the abbreviation of MRP, and later becoming MRP II. In the 1990s an American company Garther Group proposed the name ERP to designate the next generation of MRP II systems (Fotache et al, 2013).

Klaus et al., (2002) define the ERP system as a complete software package, which on an organizational level aims to integrate all business processes and functions in order to present an overview of the organization with a single IT architecture.

An ERP system is considered a business management software that manages and integrates all business processes and functions within an organization (Shehab et al., 2004).

ERP systems are based on a client/server architecture and are developed for transaction processing. Facilitates the integration of all processes, from the planning phase to the development of production, by facilitating the relationship with business partners, customers or

suppliers. They can also be rated as the most accurate expression of economic interdependence and information technology (Fotache and Hudrean, 2004).

The ERP system includes a standard software package. All standard packages during the system implementation process must be adapted to the specific and individual requirements of the company. This process of individualizing the software is called customization. There are additional deployment tools, remote checks, and other useful materials (e.g., generic presentations, and videos). The rich configuration potential of the ERP software derives from the range of pre-configured alternatives (e.g., number and variety of accounts chart) and the number of alternatives, processes and transactions (Klaus et al., 2002).

Among the most important features of the ERP system that can bring global benefits are its ability to automate and integrate business processes based on functions in certain organizational locations. The system enables the implementation of all variants and best business practices, providing real-time data throughout the organization (Soh et al., 2000).

The system includes a set of applications and business tools for financial and management accounting, sales and distribution, material and human resources management, production planning, supply chain and customer-related information (Boykin, 2001).

Over time this system has been expanded beyond production and introduced into companies dealing with services, finance, healthcare, hotel chains, education, insurance, retail and telecommunications sectors (Chen, 2001).

As a commercial product, ERP software is offered by a range of suppliers specializing in this market segment. This ERP market is significant. ERP software is extremely comfortable to meet the users' different needs in most economic sectors (Klaus et al., 2000).

ERP systems must be used to ensure access to an efficient and highly reliable information infrastructure. These technologies must be used in an integrated manner, using information engineering methodologies ensuring the correct processing of data, integrity, consistency, reliability and usability for a company (Murray and Coffin, 2001).

Traders of ERP systems often come with the promise to improve processes and reduce costs. Moreover, the system offers the possibility of creating an electronic

business and improving supply chain management (Wang et al., 2001).

The ERP system is also considered a centralized data repository, which can provide essential controls on reporting standards (Sia et al., 2002; Ignatiadis and Nandhakumar, 2009).

Managers, accountants and internal auditors have a responsibility to develop and improve internal control systems. More specifically, these responsibilities include preventing, detecting and correcting control weaknesses and risks that may cause failure to achieve operational and information processing objectives (Turner and Turner Ohorso, 2009).

Implementing an ERP system can reduce barriers to the use of audit programmers. In Romania, the problem of auditing information systems appeared in the middle of 2003. In 2004 a normative act was drawn up approving the payment instruments with remote access. In 2015 companies operating in the European Union were obliged to prepare financial reports in accordance with the provisions of the IAS. The audit took into account the modules of the ERP packages, such as the structure of the system and its operation. The integrity of the system processes is also very important (Fotache and Munteanu, 2006).

The information can be provided and used much more precisely to change and improve the quality of audit tasks. In the context of ERP systems, the use of audit software may allow the internal auditor to easily use a common database. It can also have access to technology for audit tasks such as process monitoring or business monitoring, fraud analysis and transaction integrity constraints testing (Debreceeny et al., 2005).

Weidenmier and Ramamoorti (2006) said that internal auditors should be careful when examining the risks that may be associated with the ERP system.

An efficient internal system is a strategic audit function. Internal audit has become a powerful force in promoting effective controls, management and governance risks (Hermanson, et al., 2008). The work of internal auditors is very relevant for the financial reporting of companies (Prawitt et al., 2009). The audit reports shall present the formal opinions and responses of the auditors. They are based on their perceptions of an organizational system (Schick and Ponemon, 1993).

The quality of an audit report is always based on auditors' perceptions (Sundgren, 2009).

Since the auditor's formal opinion is influenced by his perceptions, changes in the ERP system and their impact on the perception of quality of service become essential for an audit commitment (Brazel, 2005).

The quality of the audit is a subjective assessment of the likelihood that the auditor discovers and report a legal violation of the financial-accounting part of the client (Deis and Giroux, 1992). As it is set out in the audit report, in accordance with the standards, auditors must plan and carry out the audit in order to achieve sufficient audit quality. The audit risk should be limited in terms of appropriate professional judgment for expressing an opinion on financial operations. The perceived quality of an audit focuses on providing reasonable assurance that financial transactions are not materially distorting (whether caused by errors or fraud). Neither absolute assurance nor quality are achievable because of the subjective nature of the audit evidence and the fraud characteristics. Therefore, an audit carried out in accordance with generally accepted audit standards cannot detect a significant distortion (Nwankpa and Datta, 2012).

Research hypotheses

The current hypothesis refers to those companies that, although they currently use an integrated system, do not take advantage of all the benefits that an ERP system can offer. At the same time, this research started with the idea of demonstrating and making known the importance of an ERP system in any organization. A first achievement of its fruition would be the correct implementation according to the specifics of the company. In addition, it is very important that both employees and managers understand how to accurately use the system at full capacity. If they do not know or do not understand exactly the functions of the system, the implementation of such a system can be a failure, and the working time for the performance of certain tasks would increase. However, ERP system traders have often offered advice to companies that want to implement such a system. A first question of the research was: *How effective is an ERP system for any organization to meet its needs, marking performance and increased data security?* This question highlighted the usefulness of ERP systems for sustainable performance and at the same time analysed the

perspective of Romanian respondents on this subject.

The system offers more efficient data management, centralizing it according to the criteria chosen by a user, and ensures increased data security. This high level of security that the system benefits from is an important factor for companies that organize internal audit. ERP provides a centrally secure database, and privacy breaches risks can be more easily identified.

Another question was: *How much can an ERP meet the needs of an internal audit?* It was also intended to demonstrate that this system is useful for any control as well as for internal audit.

An integrated and well-controlled system helps to improve audit planning and execution. If transaction control procedures are well defined and managers have control over the operations performed by their employees, audit risks are mitigated.

One last question of the research was: *How much can an ERP system reduce audit risks?* It was also shown that the effectiveness of this system was also in reducing financial and operational risks.

This category includes, in particular, operational risks, employees no longer work manually, most tasks are automated, and the risk in terms of operational activity is much lower with such a system. The large flow of documents is taken by the system, and it can centralize them into categories, thus eliminating the human risks of omitting certain documents.

Financial risks are also mitigated, because the most transactions are processed by the system. And this eliminates the human error of entering certain financially wrong transactions. If the system is configured in accordance with the legal provisions and actual standards, all transactions and operations entered should be compliant. Of course, that's where the technical risk comes in, which is very high. This risk can occur very often, and requires a rigorous configuration as well as an update of the periodic system according to all rules, decisions and standards that have recently emerged, or promulgated by the country authorities. The system must take over all legislative developments in such a way that, from a financial point of view, all existing operations are

correct and compliant. It is very important the ERP system merchant and the package of benefits that it can offer. In addition, a help-desk package from the trader is also recommended. There are quite a few operations that require support from them. It can be connected to both the financial-accounting, management, logistics, or even production part. In addition to the training they provide, after-system implementation services are also recommended for optimal performance. These consultancy services may be helpful in reducing technical risk.

It is recommended that for any audit process, the auditor investigate the data accuracy processed by the system. Auditors often identify ways to strengthen and improve policies and operational-technical procedures. Auditors always analyse, evaluate and manage any technical problems. They are thoroughly investigated, so that the auditors should give an accurate opinion on possible irregularities that may affect the company in the future. At the same time their opinion is a certification on the real company situation and greatly influences the future perspective of managers and what they would have to improve. The company that benefits from a well-implemented integrated system, trained employees, and an internal audit department/service can achieve sustainable overall performance.

Research methodology

The used method was a case study based on quantitative research. The questionnaire was used as a measurement tool and analysis study to outline the profile of respondents. A free platform (Survio) was used to carry out this questionnaire. The questionnaire focused on the current theme, namely how useful an ERP system is for a company and for internal auditing.

Thus, based on the answers obtained, statistical research was conducted to achieve the objectives. The questionnaire had 23 questions. There were 3 questions about identifying the profile of respondents and 20 that could be subject to statistical analysis. These general questions were intended to accurately outline the profile of information users.

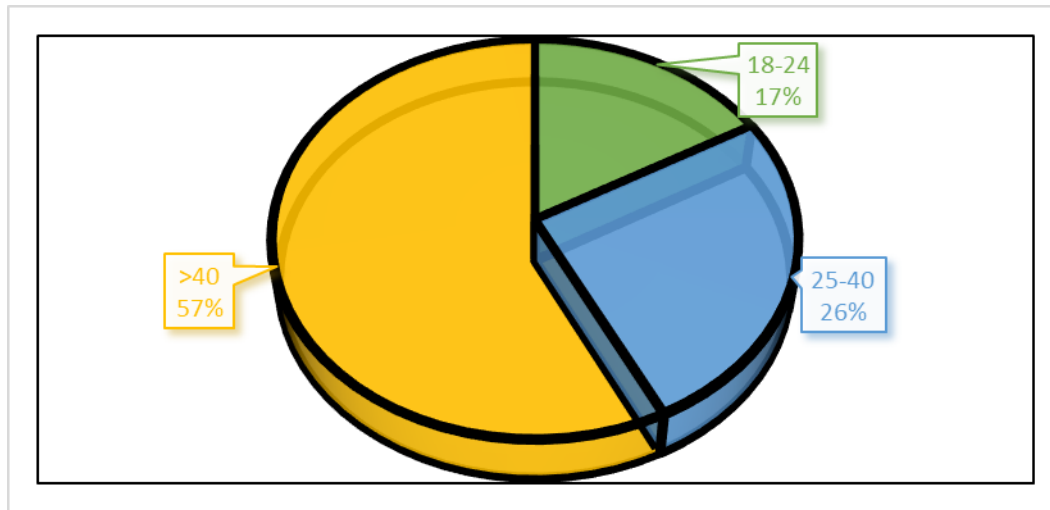
The total number of respondents who completed this questionnaire was 108 people. The profile of respondents is represented by people with higher education, and the most of them work in the economic field. They are between 18 and 60 years old, so the perceptions of the proposed questions are different and concern their opinion on the current topic.

The people who complete our questionnaire are of Romanian nationality, Chinese, Greek, French and operate or work in Romanian market. They hold either a management or an execution function. The questionnaire was sent to respondents from January to May 2021. With different experiences in the field in which they operate, respondents come from both private and public sector, but mainly from the private sector. Thus, with the help of the Survio research platform, 20 numerical answers were obtained for statistical analysis.

Results and discussions

Based on the responses received, statistical research was carried out, and the profile of the respondents was also presented. The questions were chosen strategically to analyse the population's perception of the current theme. They also achieved all of those objectives. In the first part of the study, the profile of respondents was sketched with three graphs that analyse their identity and their seniority in the field. In order to identify as accurately as possible, the profile of the respondents who completed this questionnaire, the age category in which they fall was presented.

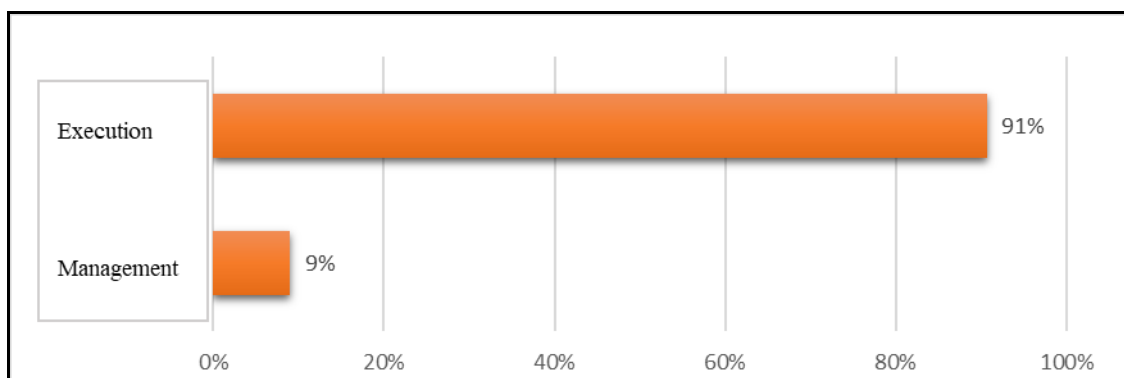
How it is presented in *Figure no. 1*, the highest percentage of 57% is represented by the adult population over 40 years. It is followed by the average population aged between 25-40, 26%. This demonstrates that respondents who have completed have the necessary experience, so that they can correctly assess the objectives of the study represented by the questions.

Figure no. 1. Age of respondents

Source: Author research. Results of the questionnaire

For an even more detailed analysis of respondents it was mentioned, whether they hold an execution or management position. As expected, according to **Figure no. 2**, people holding an execution function represent the majority of 91%. It can be appreciated that 10 people who

have completed the questionnaire, hold a management position (9%). Thus, the topic of the questionnaire could be analysed from the perspective of the persons who is performing the activity as well as by those who is managing it.

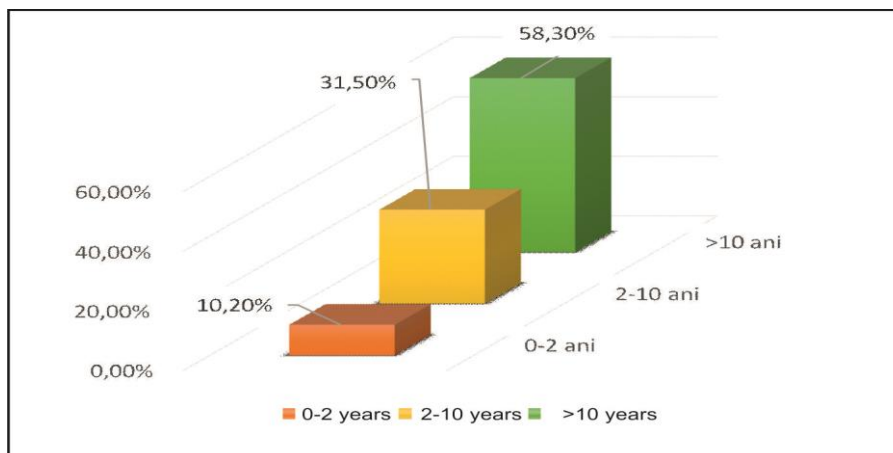
Figure no. 2. Function of respondents

Source: Author research. Results of the questionnaire

The third question that concerned the profile of respondents referred to their experience in the field in which they operate. Experience is an important factor in the labour market. Thus, the persons who completed this questionnaire have an overview and can assess exactly the hypothesis in question. Their experience has been classified into 3

categories: up to 2 years, between 2 and 10 years and over 10 years. As can be seen in **Figure no. 3**, the highest percentage of 58,3% is recorded by respondents who have more than 10 years of experience in the labour market. Then another significant percent 31.5% is recorded by respondents with average experience.

Figure no. 3. Experience of respondents



Source: Author research. Results of the questionnaire

Thus, in order to better analyse the subject, 20 numerical questions were made.

Respondents had to choose only one option from 1 to 5. Option 1 means the least and option 5 the most. The questions could be assessed

quantitatively. Of course, in order for any reader to have a fair and transparent overview of the data mentioned, all the questions and answers received were highlighted. The results were summarized in **Table no.1.**

Table no. 1. Theme of all questions

Question theme	The least	Little	Medium	Much	The most
Frequency of an integrated system use	5	3	10	16	74
System Accessibility	4	2	13	31	58
System Efficiency vs. Daily Tasks	3	2	13	24	66
Real-time information	3	6	13	26	60
System vs. working time	4	4	18	26	56
Complete task by the system	10	3	17	26	52
Data processing	8	8	31	26	35
Regulatory situations	3	2	16	20	67
Generating/reporting situations	3	5	26	28	46
Existing data security	4	4	28	18	54
Data security entered	6	5	32	28	37
Delimitation of employee access	6	4	20	25	53
Secure internal control	3	7	16	40	42
Risk management	7	8	26	25	42
Checking generated data	3	13	29	28	35
System vs. Internal Audit	4	5	29	24	46
Employee training	1	1	8	17	81
Data security training	1	1	5	10	91
Employee-system-performance	3	1	7	23	74
Employee contribution to data security	2	2	8	18	78

Source: Author research. Results of the questionnaire

To better analyse the responses received, the statistical analysis was applied. The model was based on a regression. The research presents the questionnaire aimed at a multifactorial model and includes the 5 types of responses received (responses ranged from 1 to 5). Variable Y was the questions asked. This variable addressed the theme of the efficiency of the ERP system use for internal audit. Variable X was the responses received. In our case, the dependent variable was represented by X (the answer depends only on the question), and the independent variable was represented by Y (the question asked).

With the help of statistical analysis, we wanted to demonstrate that respondents appreciate the subject, having a significant impact on them. Moreover, as Table 1 can be appreciated, the majority of respondents chose the variants with high and very high medium impact 3, 4 and 5. Most respondents turned to variant 5 and thus agreeing that ERP systems are frequently used and bring real benefits even for internal auditing. Strong dependencies demonstrate that respondents are aware of the topic and believe that internal audit needs can be met with an integrated system. This question has already been asked, and the majority of respondents have chosen variant 5 - the most.

The topic of internal control and audit risks was also addressed, and most respondents agreed that ERP software is most useful for internal control and is also the most effective type of security risk management system.

The response variants received materialized in percentages represent the statistical population.

The range of questions asked is the statistical sample. The linear statistical model is the results obtained.

Therefore, for a more precise understanding of dependent and independent variables, the following can be assessed: All questions asked (Table no.1) represent the independent variables and address the topic. Then, the full range of responses received (the least, less, medium, more and the most) with each number, represents the dependent variables. Any answer depends on the question asked and

the subject it addresses (independent variable). The resulting regression is showed in Table no. 2.

Table no. 2. Summary output

Regression Statistics	
Multiple R	0.9999
R Square	0.9999
Adjusted R Square	0.9333
Standard Error	0.0008
Observations	20

Source: Author research. Results of the questionnaire

Multiple R measures how a given variable can be predicted using a linear function of a set of other variables. It is the correlation between variable values and the best predictions that can be calculated linearly from predictive variables. Also, Multiple R is the correlation coefficient and in the current case, it has a value close to extreme amounting to 0.9999. It indicates a direct and strong connection between the question topic and the answers received. The subject has a strong impact on respondents.

R Square is a statistical measure in terms of the proximity of data to the regression line. It is also known as the coefficient of determination. The result for R Square is 0.9999, which shows that 99% of Y's variation is determined by the variables influence. The answers are strictly related to the subject matter.

Adjusted R Square represents 93% of y's variation, which is influenced by x. The remaining up to 100% is caused by residual components (deviation factor - 7% from the topic addressed by the questions).

Standard Error is the standard deviation of the statistical sampling distribution. Standard error is a statistical term that measures the accuracy of a sample representing a population. The result obtained in the current example is 0.08%, which indicates a stronger estimate of the average population. The results of ANOVA analysis are shown in Table no. 3.

Table no. 3. ANOVA

	Df	Ss	Ms	F	Significance F
Regression	5	19.9999	3.9999	6236143.651	6.5499
Residual	15	9.6213	6.4142		
total	20	20			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
The least	1.0068	0.0102	99.1516	1.5072	0.9852	1.0284	0.9852	1.0284
Little bit	1.0059	0.0103	97.6707	1.8883	0.9839	1.0279	0.9839	1.0279
Medium	0.9981	0.0034	293.6806	1.2844	0.9908	1.0053	0.9908	1.0053
Much	0.9988	0.0031	320.4336	3.474	0.9922	1.0055	0.9922	1.0055
The most	1.0007	0.0008	1311.6167	2.2921	0.9991	1.0024	0.999	1.0024

Source: Author research. Results of the questionnaire

The sum of the variation is due to the regression that sums the value 5 as well as the residual one in number of 15, on a total of 20 questions. The sum of the squares of the regression amounts to 19.9999, and the sum of the squares of the residual value is represented by the value of 9.6213.

MS - the mean of the squares or the corrected dispersion represent the values of 3.9999 for regression having degree of freedom k and respectively 6.4142 for the residual value with degree of freedom of $n-k-1$, from the total degree of freedom, $n-1$.

Significance F is the test F for table ANOVA, more precisely the set of hypotheses. Null hypothesis: The model is not statistically valid; and the alternative hypothesis: the model is statistically valid.

Critical region F calculated $> F; k; n-1-k$, represents the value of 6.5499, which confirms that x is valid as a significant factor. If Significance F is less than 0.05 (5%), there is no significant correlation. In the current case, these conditions met, the value obtained being 6,5499, the multifactorial regression model being valid (statistically significant).

The questions represent the free term, and the answers received are the chosen variable. The coefficients represent the values of the variable $-Y$ of 1.0068, 1.0059, 0.9981, 0.9988, 1.0007, for X . Test statistics represent the tests of significance for parameters.

According to all data presented, the subject had a significant influence on respondents. Questions related to the use of the ERP system to facilitate internal auditing had a strong impact on the answers. It directly and strongly influenced the response options chosen by the respondents. They appreciated the questions asked, and largely agreed that the ERP system is an effective solution for internal audit, due to the fact that it is considered an intelligent software in terms of risk management. The majority of them chose the most influential response options, thus confirming that ERP system is also useful in internal auditing because it provides increased data security.

Conclusions

To conclude, this research validated the ERP systems usefulness for any company that requires internal auditing. Starting from the objective of meeting internal audit needs with the help of an ERP system, a statistical test was carried out which validated this hypothesis. Through the variable proposed by authors to reduce audit risks with the integrated system, the elements that had the greatest and most important influences were established. The topic addressed had a high impact on respondents, and according to the statistics applied, a strong relationship was obtained between the subject and the answers received. In addition, their responses vary to 5- the most, indicating that respondents are familiar with the topic and fully agree with the general idea of meeting internal audit needs with an ERP system. Even if a minority of them was skeptical about management risk, overall, the ERP system is considered useful for any company operating in the market, in terms of general performance, and in terms of internal control over the business. Most respondents considered data security training essential for all existing personnel in a company. Employees must accurately understand the functionality of the system, the dangerous attempts that may endanger the proper functioning of the activity and risk generation. It can also be said that the training of company managers is important. Any manager or administrator must have full control over the activities, employees and they have to eliminate data security risks. If this training is not applied, performance cannot be performed at the company or internal audit level.

This mention can also answer the research questions, which were also included in the questionnaire. According to the answers received, the ERP system is efficient for any organization (74 respondents considered that the system together with the efficient activity of employees can lead to a sustainable performance at the company level). The system can also meet the needs of the internal audit, as it participates in risk mitigation (46 respondents considered that the ERP system adds

value and meets the needs of the internal audit). In terms of risk management, the ERP system can reduce some audit risks, but not completely. Therefore, the ability of the internal audit department to assess, analyse and manage issues that may arise is further tested. However, the paper has some limitations, as the number of respondents who completed the

questionnaire is not very large. Respondents were selected based on their knowledge of internal audit and integrated ERP systems. Therefore, further research can be done in this regard. In the future, we will do even more detailed research on the experience and adaptability of these systems in daily tasks of internal audit.

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Performance Audit of Public Revenues of the Administrative Territorial Units

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Abstract

The financial indicators reported in the budget execution accounts of the local public administrations have implications in the assessment of the level of performance regarding the achievement of the own revenues of these public entities. The objective of the paper is to examine the causal link between the level of performance in achieving own revenues and that of the financial autonomy of local public administrations. The paper includes a summary of the evolution of legal regulations in Romania specific to local public administration and own revenue management, as well as an analysis of information highlighted in budget execution accounts published by entities for 2018-2020, and the latest annual reports published by the Court of Accounts of Romania regarding the deviations found and the audit opinion formulated following the financial audit missions in order to identify the aspects that may influence the level of performance in achieving its own revenues at the level of local public administrations. The sample consists of territorial administrative units classified as cities in the Western Region of Romania, which are not municipalities and are found in Arad County. The results of the study revealed that some cities had a fairly high level of performance in generating their own revenues, and some reported increasing capital expenditures from year to year, but in most cases the degree of achievement of their own revenues still remains quite low. The conclusion is that the degree of achievement of own revenues is in most cases at a level that needs to be improved, and payments for capital expenditures are still quite low, so none of the cities in the selected sample have the opportunity to be financed exclusively from own revenues.

Key words: performance audit; own revenues; expenditures; public sector; territorial administrative units;

JEL Classification: M41, M42, M41, M48

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Introduction

An important element for the proper functioning of public administration is the trust of citizens in public institutions. This is constantly measured by international organizations because the trust of citizens is considered a good indicator of the performance of public institutions within a state (Radu, 2020). The activity reports of national audit institutions play an important role in the use of public funds, and maintaining a database for a particular process - such as external public audit - is not only a legal obligation, but also serves as a basis for informing researchers and practitioners (Xhani, Avram & Avram, 2020). External public audit activity is imperative in ensuring public sector accountability (Cordery & Hay, 2018). In a democratic state, the existence of trust is essential for the compliance of citizens with a mandatory legal framework (de Vries & Sobis, 2018) and with the tax system. Reputation is increasingly seen as a valuable intangible asset (Boon & Salomonsen, 2020) so it is increasingly necessary to analyze and quantify the performance of public institutions in terms of training, management and use of financial resources in this sector. Also, the level of performance in achieving the own revenues of local public administrations can be associated with the trust of citizens towards institutions that manage public funds, such as a level of trust that is closely linked to the reputation of these institutions and which is of growing interest. public bureaucracies (Overman, Basil & Wood, 2019).

The objective of this paper is to highlight how the level of performance in achieving the revenues of local public administrations can lead to full financing of these administrations from these sources, which can be translated into financial autonomy from central governments given that the concept of decentralization seems to be more and more current and represents a trend towards which it tends more and more in the conditions in which the regionalization of our country seems to be imminent.

The paper is organized as follows: after reviewing the literature and reviewing the legislative history, the methodology used to synthesize financial data on revenues provided by the entities analyzed and the realization of these revenues, reported at the end of the year budget and published on its own web pages and also the comparison of the information obtained with the audit opinion expressed by the external public auditors of the

Court of Accounts of Romania in the audit reports prepared following the audit missions performed at the territorial administrative units analyzed.

The fourth section presents and comments on the results obtained. The main conclusions of the study are highlighted in the final section as well as a brief discussion on its implications for future research as well as the limitations of this study.

1. Literature review and regulatory framework

1.1. Literature review

The more citizens trust public institutions, the more likely they are to pay their taxes and comply with various regulations that require them to declare income or property. Public sector entities are entities that implement public policy through the provision of mainly non-market services and the redistribution of income and wealth, with both activities supported mainly by mandatory taxes on other sectors. The public sector is made up of governments and all publicly controlled or publicly funded agencies and enterprises and other entities that provide public programs, goods or services (Jovanović, T. 2015)

Citizens' tax compliance behavior is driven by their level of government confidence, which is triggered by how they perceive government performance in tax collection and wealth distribution (Bătrâncea & Nichita, 2015). Taxation is the essential element for any government or governor concerned with ensuring a certain level of well-being for the governed population (Akay et al., 2012; Coelho, 2013; Corral, 2009; Dalziel & Saunders, 2014; Oishi, Schimmack & Diener, 2012). The dynamic developments of the European Union reveal the need for a reformed and harmonized financing and a fiscal policy capable of ensuring performance management, while concepts such as performance, transparency, accountability and efficiency have become common in the language of public institutions (Nistor et al., 2016). Performance measurement and reporting were born as a necessary response to the public pressure for accountability, public entities being continuously encouraged to disclose information and be responsible for their actions (Nistor & Ștefănescu, 2021)

The slippery slope of fiscal compliance emphasizes the importance of trusting the authorities as a substantial

determinant of tax compliance alongside the traditional application of instruments such as audits and fines (Batrancea et al., 2019). Severe tax problems, insufficient comparability of financial information and growing demands for better accountability require national governments and international organizations to change their current accounting regimes and move towards a system of standardized accounting practices (Frintrup et al., 2020). Auditing public sector financial statements is becoming increasingly important in a context where financial information systems have been aligned with an increased level of accountability and transparency (Brusca & Martinez, 2018).

External public audit is of increasing importance given that the public administration is managed by all those who, for one reason or another, represent it and who, in some cases, can link private and public interests, making the system vulnerable to potential conflicts, with damage to the main purpose of public administration, i.e., maximizing the common good (Comite, 2020). Research indicates that local audit institutions can detect misconduct and breaches of financial and public spending reports and make appropriate decisions to address these issues (Liu & Lin, 2012), with auditors playing a central role in the fight against corruption and error detection, or fraud with a significant impact on financial statements or other management reports (Bunget & Dumitrescu, 2009). Also, the role of external audit in detecting errors and fraud is important, because fraud is related to money laundering and corruption (Ionescu, 2017).

Lawson (2015) explained that public financial management is a set of laws, rules, systems and processes for allocating and distributing public revenues and funds, suggesting that public financial management is related to the general budgeting process, starting from training and resources, budgeting, continuing with budget execution, accounting, financial reporting and, implicitly, external audit (Sugeng & Triwibowo 2019). Public sector accounting can be described as a system that collects, records, classifies and summarizes public sector transactions in accordance with the requirements of financial accountability and transparency, providing information to interested users related to public institutions (Kara, 2012).

The determining factor of the local public administration reform process is the reform of the local public finance field from the perspective of creating an autonomous local public administration and which will have the necessary resources to provide quality public services (Vacarenco & Putină, 2018).

1.2. Regulatory framework for the administration and use of revenues at the level of local public administrations

In Romania, the formation, administration and use of own revenues at the level of local public administrations was regulated by several normative acts, in **Table no. 1** being presented the chronology of the most relevant of them.

Table no.1. Chronology of the normative acts that regulated the way of formation, administration and use of own revenues at the level of local public administrations

Act/ Art.	In effect	Summary	Remarks Modifications
Law no. 215/2001 on public and local administration (* republished *) (L215/2001)			
Art. 27	February 20, 2007	<i>"In order to ensure local autonomy, local public administration authorities have the right to establish and collect local taxes and fees, to develop and approve local budgets of communes, cities, municipalities and counties, in accordance with the law."</i>	Republished pursuant to art. III of Law no. 286 of June 29, 2006 for the amendment and completion of the Law on local public administration no. 215/2001. In force until July 4, 2019 Repealed by art. 597 of GEO 57/2019 on July 5, 2019
Law no. 273/2006 on local public finances (L273/2006)			
Art.1	June 29, 2006	<i>Alin (1) "This law establishes the principles, general framework and procedures for the formation, administration, employment and use of local public funds, as well as the responsibilities of local public administration authorities and public institutions involved in local public finance."</i>	Regulation of the general framework on public funds and the responsibilities of the local public administration in relation to these funds

Act/ Art.	In effect	Summary	Remarks Modifications
Art.5	June 29, 2006	Alin (1) "Local budget revenues consist of: lit a) own revenues, consisting of: taxes, fees, contributions, other payments, other revenues and quotas deducted from revenues tax;"	Composition of local budgets and how to set up own revenues
		Alin (2) "The substantiation of the own revenues of the local budgets is based on the finding, evaluation and inventory of the taxable matter and of the tax base according to which the related taxes and fees are calculated, the evaluation of the rendered services and the revenues obtained from them, for the purpose of correct assessment of revenue "...	How to substantiate the own revenues
Government Emergency Ordinance no. 54/2006 regarding the regime of public property concession contracts (OUG 54/2006)			
Art. 3	June 30, 2006	ART. 3 "The object of the concession contract is the goods that are public property of the state or of the administrative-territorial units, according to the Constitution and the legal regulations regarding the public property."	Effective until July 4, 2019 Repealed by art. 597 of GEO.57 / 2019 on July 5, 2019
Art. 4	June 30, 2006	Alin (1) "The royalty obtained by concession is made revenue to the state budget or to the local budgets, as the case may be."	Effective until July 4, 2019 Repealed by art. 597 of GEO.57 / 2019 on July 5, 2019
Law no. 227 / 08.09.2015 regarding the Fiscal Code (L 227/2015)			
Art. 454	Sept 8, 2015	"Local taxes and fees are as follows: a) the building tax and the building tax; b) land tax and land tax; c) the tax on means of transport; d) the fee for issuing certificates, approvals and authorizations; e) the fee for the use of advertising and publicity means; f) the performance tax; g) special taxes; h) other local taxes. "	Effective January 1, 2016
Government Emergency Ordinance no. 57/2019 regarding the Administrative Code (OUG 57/2019)			
Art. 99	July 3, 2019	Alin (1) "The city is the basic administrative-territorial unit declared as such by law, based on the fulfillment of the criteria provided by the legislation on the arrangement of the national territory."	Information on the definition of the city
Art. 129		Alin. (1) "The local council has initiative and decides, in accordance with the law, on all issues of local interest" Alin. (2) The local council exercises the following categories of attributions: "lit. b) attributions regarding the economic-social and environmental development of the commune, city or municipality; Lit. c) attributions regarding the administration of the public and private domain of the commune, city or municipality;" Alin. (4) "In the exercise of the attributions provided in par. (2) lit. b), the local council: "a) approves, at the proposal of the mayor, the budget of the administrative-territorial unit, the transfers of credits, the way of using the budgetary reserve and the closing account of the budgetary exercise;" "c) establishes and approves local taxes and fees, in accordance with the law;"	Duties of the local council

Act/ Art.	In effect	Summary	Remarks Modifications
		<i>"e) approves the strategies regarding the economic, social and environmental development of the administrative-territorial unit; f) ensures a favorable environment for the establishment and / or development of businesses, including by capitalizing on the existing patrimony, as well as by making new investments that will contribute to the fulfillment of regional and local economic development programs;"</i>	
Art. 307	July 3, 2019	Alin. (1) <i>"The royalty obtained by concession is constituted as revenue to the state budget or to the local budgets, as the case may be".</i>	Royalty information
Art. 333	July 3, 2019	Alin. (1) <i>"The lease of the public property of the state or of the administrative-territorial units is approved, as the case may be, by decision of the Government, of the county council, of the General Council of the Municipality of Bucharest or of the local council."</i>	Information on renting public property

Source: Own projection

From **Table no. 1** it results that the collection of local taxes and fees has a well-defined purpose, regulated by art. 27 of L 215/2001, namely, ensuring local autonomy, and by art. 1 par. (1) of Law 273/2006 established the general framework, rules and principles regarding the formation, administration, employment and use of public funds as well as the responsibilities of local public authorities regarding these funds. Also, through the provisions of art. 5 par. (1) of the same normative act regulates the composition of budgetary revenues, respectively of own revenues which are composed of "taxes, fees, contributions, other payments, other revenues and quotas deducted from the income tax;" and par. (2) of the same article regulates the substantiation of own revenues at the level of local public administrations based on the finding, inventory and evaluation of taxable matter.

In 2006, by GEO 54/2006, the legislator established that the public property goods are the object of concession contracts, and the royalty collected on the basis of these contracts is made revenue to the state or local budget depending on the owner of the property under concession.

The administrative code approved by GEO 57/2019 defines the city at art. 99 as "the basic administrative-territorial unit declared as such by law". Also, the regulations regarding the attributions of the local council, initially established by Law 215/2001 in force until the entry into force of the Administrative Code adopted by GEO no. 97/2019 are provided in art. 129 thereof, among the most important being those on "economic and social development and environment", public and private administration, budget approval, establishing and

approving local taxes and fees, ensuring a favorable environment business development and, including, new investments to ensure the contribution to the implementation of regional and local economic development programs.

Also, by GEO 57/2019 was repealed GEO 54/2006, the regulations of this ordinance regarding the concessions of goods from the public and private patrimony of the territorial administrative units being also taken over by the Administrative Code, which also regulates the rental of public property with approval of the local council at the request of the local public administrations.

Regarding the audit exercised by the Court of Accounts of Romania on public financial resources, it is regulated by Law 94/1992 (* republished *) on the organization and functioning of the Court of Accounts, which at art. 1 paragraph (1) stipulates that the Court of Accounts exercises control "over the manner of formation, administration and use of the financial resources of the state and of the public sector". Also, at art. 26 lit. d it is specified that "the Court of Accounts performs the financial audit on the annual accounts of execution of the local budgets, of the Bucharest municipality, of the counties, of the sectors of the Bucharest municipality, of the municipalities, of the cities and communes".

2. Research methodology

The research methodology is qualitative and consists in synthesizing the financial data regarding the revenues provided by the analyzed entities and realizing these revenues, data reported at the end of the budget year and

published on their own web pages and also comparing the information obtained with the audit opinion expressed by the auditors. external auditors of the Romanian Court of Accounts in the audit reports prepared as a result of the audit missions performed at the analyzed territorial administrative units.

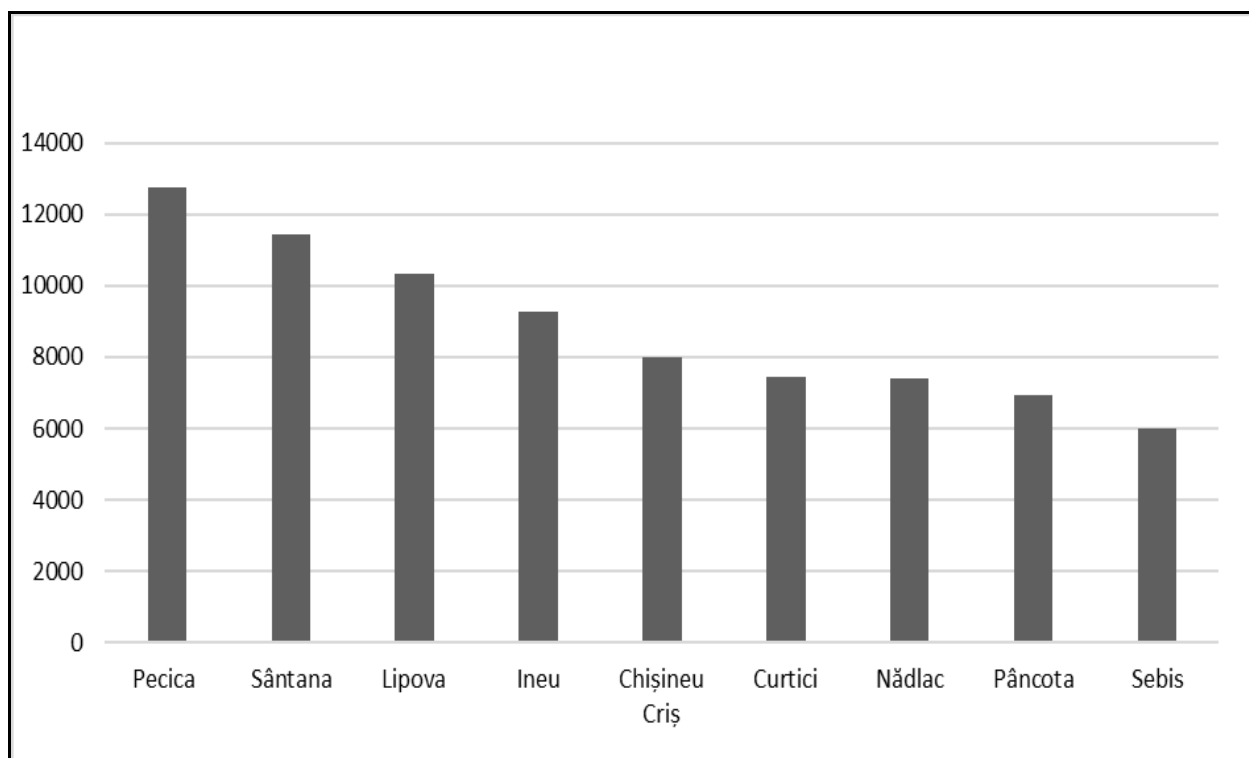
The study aimed at analyzing the performance of administrative territorial units (ATUs) in achieving revenues and the role of financial audit in verifying their administration.

The selection process was based on four criteria; ATU must: i) be classified as cities, ii) be part of the Western region as a geographical position, iii) not be municipalities, iv) be in Arad County. A first step consisted in the scientific documentation meant to deepen the already

existing information in the field of study of performance audit in the realization of revenues at the level of territorial administrative units and addressed the impact of revenue collection on their financial independence. Thus, out of the total of 319 existing cities in our country, following the filter applied according to the second selection criterion, 45 cities located in the 4 counties of the Western region were identified.

After the application of the third criterion, 5 cities that are municipalities in the counties that are part of the Western Region were eliminated, leaving in the sample a number of 40 cities that are not municipalities. Following the application of the fourth criterion, the 9 cities of Arad County remained in the sample, cities presented graphically in **Figure no. 1**, according to the number of inhabitants.

Figure no. 1. Cities in Arad County that are not municipalities, classified by number of inhabitants



Source: Own projection, based on the population census in 2011

The level of established entitlements of revenues made in terms of own revenues and payments made for each city in the selected

sample, in the period 2018-2020, ordered in descending order, by number of inhabitants is highlighted in **Table no. 2**.

Table no. 2. The established rights, the own revenues collected and the payments made by the cities of Arad County during 2018-2020 (in lei)

The city	The year	Rights found	Receipts made	Payments made
PECICA	2018	27,562,238	19,772,131	22,813,384
	2019	29,480,904	19,609,869	27,429,199
	2020	34,264,632	22,565,339	30,569,148
SÂNTANA	2018	20,949,933	17,096,708	18,152,196
	2019	23,594,893	21,220,162	22,248,218
	2020	28,607,683	24,397,168	32,029,524
LIPOVA	2018	14,992,420	12,292,351	20,900,759
	2019	16,208,430	13,992,701	21,717,234
	2020	22,902,060	14,373,715	33,112,130
INEU	2018	21,362,546	17,046,059	22,590,070
	2019	29,079,297	25,655,380	34,769,563
	2020	28,066,941	23,118,492	30,432,350
NĂDLAC	2018	19,808,822	14,461,519	12,647,050
	2019	19,287,772	13,784,170	17,813,410
	2020	20,108,348	13,981,668	19,047,011
CHIȘINEU CRIȘ	2018	22,300,925	21,056,766	20,259,245
	2019	18,726,345	17,556,800	20,372,325
	2020	21,840,011	20,218,443	24,371,643
CURTICI	2018	20,731,008	16,972,361	20,207,261
	2019	19,878,972	15,465,828	25,087,564
	2020	19,468,542	12,266,228	30,708,600
PÂNCOTA	2018	12,296,259	9,948,679	10,658,572
	2019	13,337,774	10,565,789	13,425,952
	2020	16,479,673	14,902,369	14,025,448
SEBIȘ	2018	19,388,450	12,701,354	15,788,615
	2019	23,176,579	16,192,466	16,948,311
	2020	18,714,500	14,902,369	16,287,394

Source: Own projection, using the websites of the town halls of the 9 cities

3. Results and discussion

Following the analysis of the degree of own revenues achievement compared to the rights found to be collected during a budget year, own revenues collected from the local budgets of cities following the collection of local taxes and fees from the population and/ or legal entities, as well as of the payments of incomes due from economic agents and public institutions of local importance, it is possible to observe the fluctuating level of the degree of realization of own revenues for each budget year and in the entire analyzed interval, respectively 2018-2020.

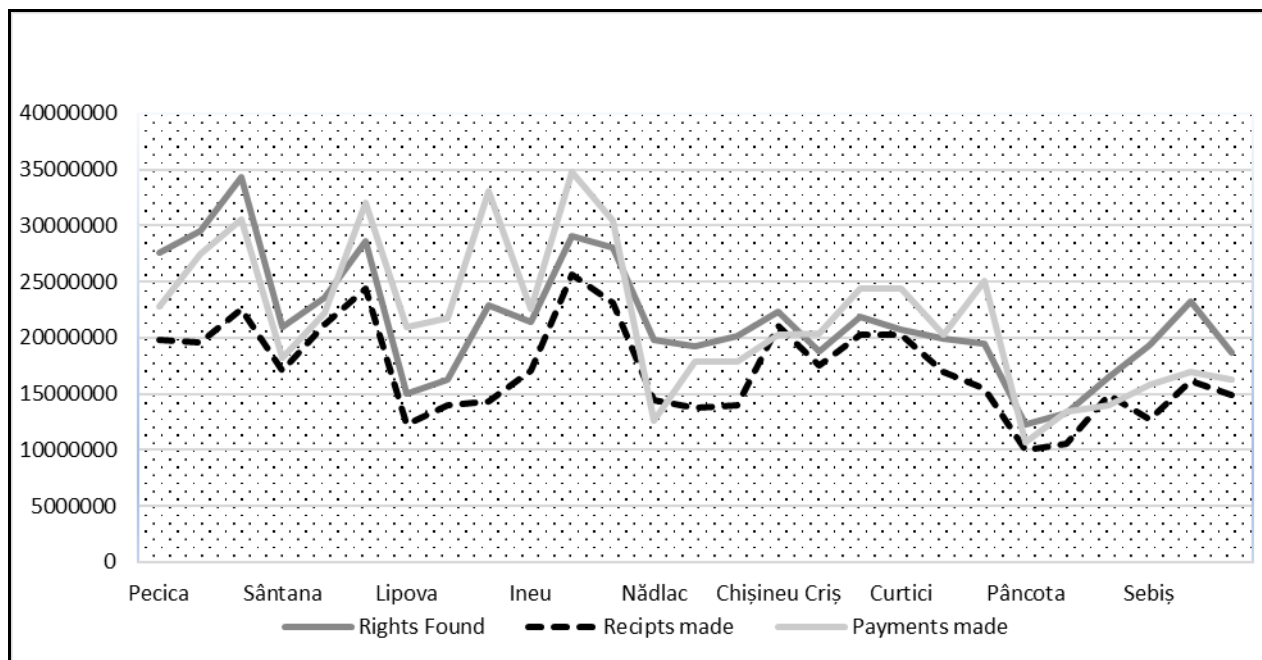
Thus, during the entire analysis period of the performance of own revenues at the level of the 9 cities in the selected sample, there were oscillations, in 2018 the lowest level of own revenues collected was 9,948,679 lei, and the highest level of collection of own revenues was 21,056,766 lei, also

the fluctuating level of collection of own revenues was maintained in 2019 and 2020 when revenues were collected between 10,565,789 lei and 25,655,380 lei in 2019, respectively between 12,266,228 lei and 24,397,168 lei in 2020.

Regarding the payments made at the level of the analyzed local public administrations, we can also observe their fluctuation from one year to another as well as from one city to another. If the lowest level of payments made was 10,658,572 lei in 2018, in 2019 the minimum level of payments made was 13,425,952 lei, and in 2020 it was 14,025,448. Also, this trend was maintained for the maximum level of payments made, which was 22,813,384 lei in 2018, of 34,769 lei in 2019 and of 33,112,130 lei in 2020.

Graphically, the data from Table no. 2 were summarized in *Figure no. 2*.

Figure no. 2. Evolution of rights charged, own revenues collected and payments made



Source: Own projection

Furthermore, based on the financial data published on the own web pages of the selected cities, an analysis was performed for each city and for each year of the analyzed period on the degree of realization of own revenues and their dynamics in 2018-2020.

In **Table no. 3** are presented the data regarding the degree of achievement of own revenues as well as the evolution of these revenues at the level of each city in the selected sample.

Table no. 3. The degree of own revenues achievement and the evolution of these revenues in the period 2018-2020 at the level of the cities of Arad County

The city	The year	Degree of own revenues achievement	Revenue evolution	
			2019/2018	2020/2019
PECICA	2018	71.73%	107.32%	106.33%
	2019	71.97%		
	2020	65.85%		
SÂNTANA	2018	82.00%	114.69 %	124.41 %
	2019	83.10%		
	2020	85.28%		
LIPOVA	2018	81.99%	113.83 %	102.72 %
	2019	86.32%		
	2020	62.76%		
INEU	2018	79.79%	150.50 %	90.11 %
	2019	88.25%		
	2020	82.36%		

The city	The year	Degree of own revenues achievement	Revenue evolution	
			2019/2018	2020/2019
NĂDLAC	2018	73.00%	95.31 %	101.43 %
	2019	71.46%		
	2020	69.53%		
CHIȘINEU CRIȘ	2018	94.42%	83.37 %	115.16 %
	2019	93.75%		
	2020	92.57%		
CURTICI	2018	81.86%	91.12 %	99.15 %
	2019	77.79%		
	2020	78.77%		
PÂNCOTA	2018	80.90%	106.20 %	116.09 %
	2019	79.21%		
	2020	74.43%		
SEBIȘ	2018	65.50%	127.48 %	92.03 %
	2019	69.86%		
	2020	79.63%		

Source: Own projection, using the web pages of the town halls of the 9 cities

From the analysis of the data presented in table no. 3 results the fact that the own revenues collected in the period analyzed by the city of Pecica reach the maximum level in 2019, respectively 71.97%, and the minimum level of revenues stood at 65.85% in 2020. In dynamics, the situation of own revenues does not present important fluctuations, respectively the trend is to increase revenues by 7.32% in 2019 compared to 2018 and by 6.33% in 2020 compared to 2019.

Analyzing the situation of the city of Sântana we can see that the highest degree of realization of own revenues was in 2020, receiving a percentage of 85.28% of the total rights found to be collected, the lowest level of this indicator being recorded in year 2018, being 82%. The dynamics of collecting these revenues showed an upward trend, increasing by 14.69% in 2019 compared to 2018 and by 24.41% in 2020 compared to 2019.

If in 2019 the city of Lipova had revenues of 86.32% of the total rights found, a percentage that represents the highest degree of collection of own revenues for the analyzed period, in 2020 was recorded the lowest degree of collection, respectively of 62.76%. This aspect can be observed in the dynamics of the evolution of the volume of own revenues collected, which, although increased by 13.83% in 2018 compared to 2019, the increase recorded in 2020 compared to 2019 was only 2.72%.

Regarding the city of Ineu, we can see the lowest degree of realization of own revenues located at 79.79%,

recorded in 2018, and the highest degree of realization of own revenues was recorded in 2019, being 88.25%, then registering a slight decrease, reaching 82.36% in 2020. In dynamics, the evolution of the volume of own revenues collected is oscillating, as although the level of these revenues registered a significant increase of 50.50% in 2019 compared to from 2018, in 2020 these revenues decreased by 9.88% compared to their value in 2018.

For the city of Nădlac, the highest degree of own revenues collected, compared to the established rights was 73% and was reached in 2018. The trend of this indicator was decreasing in 2019 and 2020 when its values were 71.46 %, respectively 69.53%. Also, the volume of revenues collected decreased by 4.69% in 2019 compared to 2018, respectively increased by 1.43% in 2020 compared to 2019.

The highest level of collection of own revenues was registered by the city of Chisinau Cris, which generated own revenues of over 90% throughout the analyzed period, respectively 94.42% representing the highest level, in 2018, 93.75% in 2019 and 92.57% in 2020, this representing the lowest value in the analyzed range. However, the volume of revenues collected was fluctuating as their level decreased significantly in 2019 compared to 2018, by 16.63% and increased in 2020 by 15.16% compared to 2019.

The city of Curtici also registered fluctuations in terms of the degree of realization of its own revenues. Thus, the

lowest level was in 2019, of 77.79%, and the highest level of this indicator was 81.86% in 2018. Regarding the volume of own revenues, it had a trend decrease, namely by 8.88% in 2019 compared to 2020 and by 0.85% in 2020 compared to 2019.

The degree of realization of own revenues related to the value of the rights found for the city of Pâncota shows a decreasing trend, respectively from 80.90% in 2018, to 74.43% in 2020, the values representing the minimum and maximum reached by this indicator in the interval 2018-2020. However, the evolution of the volume of own revenues is an ascending one, registering an increase in the collection of these revenues by 6.2% in 2019 compared to 2018 and by 16.09% in 2020 compared to 2019.

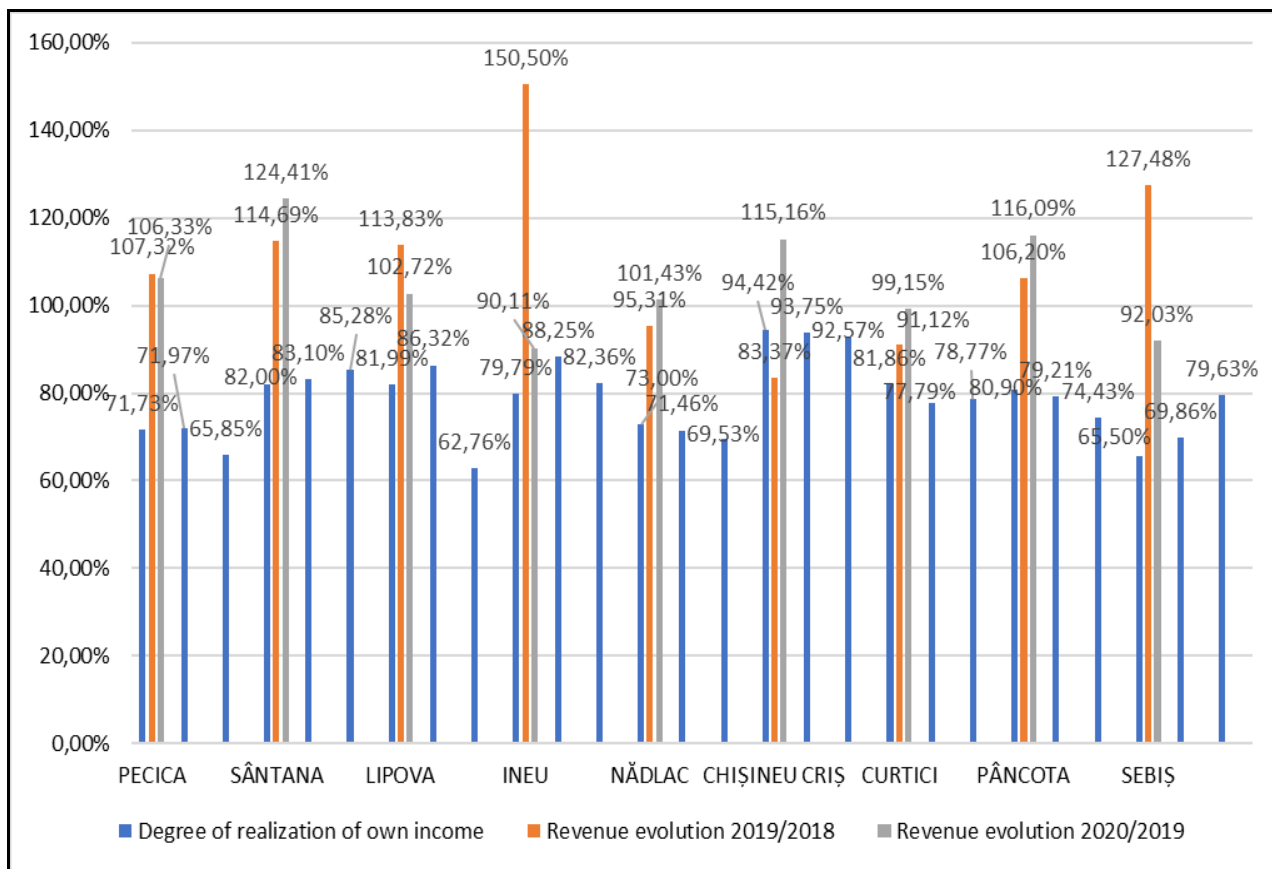
The city of Sebiș registered the lowest degree of realization of its own revenues realized in relation to the

rights found in 2018 when it stood at 65.50%, and the highest degree of realization of these revenues was in 2020, respectively 79.63%. Analyzing the dynamics of own revenues, we can see an increase of 27.48% in 2019 compared to 2018 and a decrease of 7.97% in 2020 compared to 2019.

From the analysis of the above indicators on each city of the selected sample we can see that the trend of increasing or decreasing the degree of revenue in relation to the rights found to be collected during the budget year is not maintained in the dynamics of revenue volume actually collected.

Figure no. 3 presents the degree of realization of own revenues and the dynamics of these revenues in the period 2018-2020 at the level of the cities of Arad County from the analyzed sample.

Figure no. 3. The degree of own revenues achievement and their revenues dynamics in the period 2018-2020 at the level of the cities of Arad County



Source. Own projection

Table no. 4 presents the data regarding the total payments made by each city in 2018, 2019 and 2020 as well as the payments for capital expenditures made during this period, also

calculating the share of capital payments in the total payments made by reporting the actual value of total payments made to the payments for capital expenditure out of the total payments made.

Table no. 4. Payments made, payments for capital expenditure and their share in total payments made				
The city	The year	Payments made	Payments for capital expenditures	Share of payments for capital expenditures in total payments
PECICA	2018	22,813,384	4,677,342	20.50 %
	2019	27,429,199	6,829,136	24.89 %
	2020	30,569,148	4,810,031	15.73 %
SÂNTANA	2018	18,152,196	3,076,935	16.95 %
	2019	22,248,218	4,244,245	19.07 %
	2020	32,029,524	9,804,749	30.61 %
LIPOVA	2018	20,900,759	0	0
	2019	21,717,234	773,648	3.56 %
	2020	33,112,130	185,630	0.57 %
INEU	2018	22,590,070	0	0.00 %
	2019	34,769,563	7,241,060	20.82 %
	2020	30,432,350	3,953,455	12.99 %
NĂDLAC	2018	12,647,050	2,588,846	20.46 %
	2019	17,813,410	2,303,914	12.93 %
	2020	19,047,011	5,912,289	31.04 %
CHIȘINEU CRIȘ	2018	20,259,245	8,378,571	41.35 %
	2019	20,372,325	6,638,017	32.58 %
	2020	24,371,643	7,622,825	31.27 %
CURTICI	2018	20,207,261	7,326,753	36.25 %
	2019	25,087,564	10,677,303	42.56 %
	2020	14,025,448	9,117,073	65.00 %
PÂNCOTA	2018	10,658,572	2,480,627	23.27 %
	2019	13,425,952	810,305	6.03 %
	2020	16,287,394	3,837,776	23.56 %
SEBIȘ	2018	15,788,615	2,697,303	17.08 %
	2019	16,948,311	1,736,452	10.24 %
	2020	16,287,394	0	0

Source: Own projection, using the websites of the town halls of the 9 cities

Analyzing the financial data presented in **Table no. 4** we can observe that the city of Pecica registered the highest level of payments made in 2020, of 30,569,148 lei, while the lowest level was registered in 2018 of 22,813,384 lei. Regarding the payments for capital expenditures, they had a share between 15.73% in 2020 and 24.89% in 2019 of the total payments made, in absolute value the highest value of payments for capital expenditures was recorded. in 2019 when it was 6,829,136 lei, and the lowest value was registered in 2018 of 4,677,342 lei.

The city of Sântana had an increasing trend in terms of the three indicators analyzed so that the total payments increased every year, starting from a minimum of 18,152,196 lei in 2018 and reaching in 2020 a maximum of the period of 32,029,524 lei. The same growth trend had the payments made for capital expenditures which increased significantly from 3,076,935 lei in 2018 to 9,804,749 in 2020, aspects also reflected in the share of capital payments in the total payments made, respectively from the value of 16.95% registered in 2018 reaching the value of 30.61% in 2020.

The trend of payments made, payments for capital expenditures made and their share in the total payments made could be analyzed only for the period 2019-2020, for 2018 no information is available on the website of Lipova City Hall. Thus, the total payments increased from 20,900,759 lei in 2018 to 33,112,130 lei in 2020. Payments for capital expenditures registered a rather low level and a decreasing trend, from 773,648 lei in 2019 to 185,630 lei in 2020. This downward trend was also recorded in terms of the share of payments for capital expenditures in total payments made, respectively it was 3.56% in 2019, reaching a minimum of 0.57% in 2020.

A special situation presents the city of Ineu which, although it registered a high level of payments made, from a minimum of the period of 22,590,070 lei registered in 2018 to a maximum registered in 2019 of 34,769,563 lei, in 2018 according to the data published on its website no payments were made for capital expenditures. However, in 2019 the capital payments were 7,241,060 lei representing 20.82% of the total payments made, and in 2020 they were 3,953,455 lei, respectively 12.99% of the total payments made.

The city of Nădlac registered a level with a tendency to increase the payments made in the analyzed interval, from 12,647,050 lei in 2018 to 19,047,011 lei in 2020. The share of capital expenditures was 20.46% at an absolute value of these payments of 2,588,846 lei in 2018, of 12.93% and an absolute value of payments for capital expenditures of 2,303,914 lei in 2019, respectively of 31.04% and an absolute value of 5,912,289 lei in 2020.

The payments made for each year of the period analyzed by the city of Chisinau Cris were on an increasing trend, from a minimum of 20,259,245 lei in 2018 to a maximum reached in 2020 of 24,371,643 lei. Regarding the payments for capital expenditures, they had a fluctuating level, the minimum being of 6,638,017 lei, registered in 2019, while the maximum of the period was registered in 2018 being of 8,378,571 lei. In 2020 the share of these payments registered the lowest value, respectively of 31.27% of the total payments made, while in 2018 the highest share of payments for capital expenditures in the total payments was registered, namely 41.35%.

For the city of Curtici, the highest share of payments for capital expenditures was in 2020 with a value of 65.00%, and the lowest value of this indicator was in

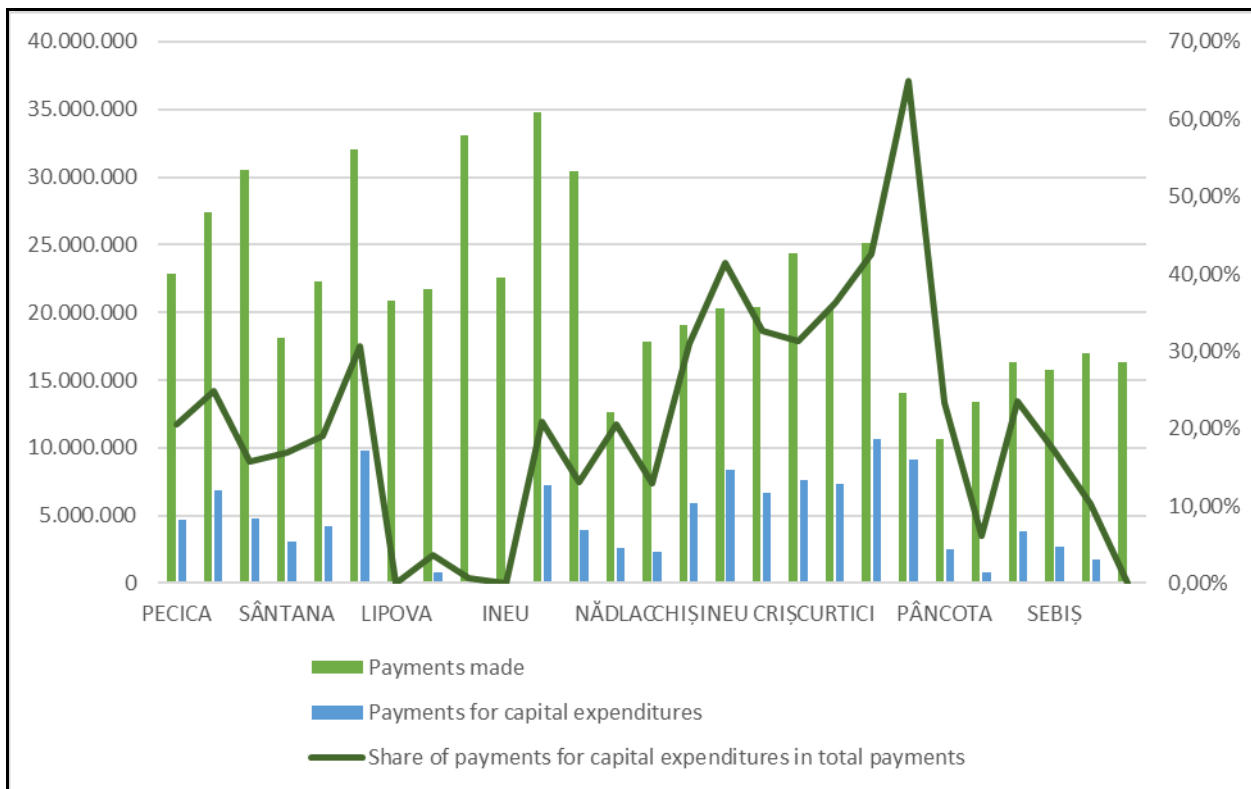
2018 - 36.25%. Regarding the total payments made, they were of 14,025,448 lei in 2020, representing a minimum level registered, the maximum level being of 25,087,564 lei in 2019. The payments made for capital expenditures registered a maximum value of 10,677,303 lei in 2019 and a minimum in 2019 of 7,326,753 lei.

Although at the level of payments made the city of Pâncota registers an increasing trend for the three years analyzed, from the value of 10,658,572 lei in 2018 to the value of 16,287,394 lei in 2020, this trend is not maintained for payments made for expenses of capital whose minimum value was 810,305 lei in 2019, and their maximum value was 3,837,776 lei in 2020. Also, in 2019 there was the lowest value of the share of payments for capital expenditures in total payments made, respectively 6.03%. The largest share in the total payments made had the payments for capital expenditures in 2020, its value being 23.56%.

In the case of Sebiş, the full analysis could only be performed for two years, respectively 2018 and 2019, as no information was available on the website of the city hall on the payments for capital expenditures made in 2020. The value of all payments made by was between 15,788,615 lei in 2018 and 16,948,311 lei in 2019. The largest share was capital expenditures in the total payments made in 2018, of 17.08% at a level of payments for capital expenditures of 2,697,303 lei. In 2019, the payments for capital expenditures were 1,736,452 lei, this value representing a share of 10.24% in the total payments made.

Analyzing the data presented in **Table no. 4** we can observe the fluctuating trend of payments made for each year analyzed and for each city, as well as the relatively small share of payments made for capital expenditures in total payments made during a budget year, the maximum level for the entire period analyzed and for all cities from the analyzed sample being 65.00%, while the minimum does not reach the threshold of 1% being 0.57%.

The data from Table no. 4 regarding the payments made, the payments for capital expenditures and their share in the total of the payments made were summarized graphically in **Figure no. 4**.

Figure no. 4. Share of payments for capital expenditure in total payments made

Source: Own projection

Table no. 5 contains information regarding the degree of realization of own revenues, their share in the total payments made as well as the audit opinion expressed following the last financial audit mission performed by the Romanian Court of Accounts through the Arad Chamber of Accounts.

The share of own revenues in the total payments made from Table no. 5 was calculated as the ratio between the value of own revenues reported by entities in the local budget execution account and the value of payments made.

Table no. 5. Revenues, payments and audit opinion in the period 2018-2020 at the level of the cities of Arad County

The city	The year	Degree of own revenues achievement	Share of own revenues in total payments made	Share of capital payments in total payments	Audit opinion
PECICA	2018	71.73 %	86.00 %	20.50 %	Adverse - audited period 2017-2019
	2019	71.97 %	77.36 %	24.89 %	
	2020	65.85 %	73.81 %	15.73 %	
SÂNTANA	2018	82.00 %	94.18 %	16.95 %	Adverse - audited period 2016-2018
	2019	83.10 %	95.37 %	19.07 %	
	2020	85.28 %	76.17 %	30.61 %	
LIPOVA	2018	81.99 %	58.81 %	0	Adverse - audited period 2015-2017
	2019	86.32 %	64.43 %	3.56 %	
	2020	62.76 %	43.40 %	0.57 %	

The city	The year	Degree of own revenues achievement	Share of own revenues in total payments made	Share of capital payments in total payments	Audit opinion
INEU	2018	79.79 %	75.45 %	0.00 %	Adverse - audited period 2015-2017
	2019	88.25 %	73.78 %	20.82 %	
	2020	82.36 %	75.96 %	12.99 %	
NĂDLAC	2018	73.00 %	114.34 %	20.46 %	Adverse - audited period 2017-2019
	2019	71.46 %	77.38 %	12.93 %	
	2020	69.53 %	73.40 %	31.04 %	
CHIȘINEU CRIȘ	2018	94.92 %	103.93 %	41.35 %	Qualified, with a paragraph highlighting certain aspects - audited period 2016-2018
	2019	93.75 %	86.17 %	32.58 %	
	2020	92.57 %	82.95 %	31.27 %	
CURTICI	2018	81.86%	83.99 %	36.25 %	Qualified, with a paragraph highlighting certain aspects - audited period 2015-2017
	2019	77.79%	61.64 %	42.56 %	
	2020	78.77%	49.93 %	65.00 %	
PÂNCOTA	2018	80.90%	93.33 %	23.27 %	Adverse - audited period 2016-2018
	2019	79.21%	78.69 %	6.03 %	
	2020	74.43%	87.45 %	23.56 %	
SEBIȘ	2018	71.73%	80.44 %	17.08 %	Adverse - audited period 2015-2017
	2019	71.97%	95.54 %	10.24 %	
	2020	65.85%	91.49 %	-	

Source: Own projection, using the websites of the town halls of the 9 cities and the website of the Romanian Court of Accounts

Analyzing the data from **Table no. 5** it can be observed that the own revenues collected in the period analyzed by the City of Pecica have a degree of achievement between 65.85% and 71.97% and do not reach the level of payments made, which means that they cannot cover the financing needs of the city. The share of own revenues in total payments made, calculated as the ratio between own revenues received and payments made is between 73.81% and 86.00%, and the allocation of amounts representing payments for capital expenditures was between 15.73% and 20.50% of the total payments made. The audit opinion expressed following the financial audit mission carried out in 2019 for the period 2016-2018 is adverse, which underlines the fact that at the city level there are certain dysfunctions that need to be corrected.

Following the analysis of the data regarding the City of Sântana, it can be seen that the own revenues collected in the analyzed period, although both in 2018 and in 2019 exceed 90%, still do not reach the level of payments made, which means that they cannot cover totally the financing needs of the city of Sântana. The share of own revenues in total payments made, calculated as a ratio between own revenues received and payments made is between 76.17% and 95.37%, and the share of payments made for capital expenditures has values between 16.95%

and 30,61%. Also, the audit opinion expressed following the financial audit mission carried out in 2019 for the period 2016-2018 is adverse, which underlines the fact that at the city level there are certain dysfunctions that need to be corrected.

According to the data presented for the city of Lipova, it results that the own revenues collected in the analyzed period do not reach the level of payments made, which means that they cannot fully cover the financing needs of the city. The share of own revenues in the total of payments made, calculated as a ratio between own revenues received and payments made is low, ranging between 43.40% and 64.43%. Also, during 2019-2020 the payments for capital expenditures had a small share, respectively 3.56% in 2019 and only 0.57% in 2020. The audit opinion expressed following the financial audit mission performed in 2018 for the period 2015-2017 it is the opposite, which emphasizes the fact that at the city level there are certain dysfunctions that need to be corrected.

Following the analysis of the financial data of Ineu City we can conclude that even in this case the own revenues collected in the analyzed period do not reach the level of payments made, which means that they cannot fully cover the financing needs of Ineu City. The share of own

revenues in the total payments made, calculated as a ratio between the own revenues received and the payments made has a linear level, with small fluctuations, ranging between 75.96% and 75.45%. Regarding the allocations for financing capital expenditures, they have a share between 12.99% and between 20.82% in relation to the total payments made during a budget year. Also, the audit opinion expressed following the financial audit mission carried out in 2018 for the period 2015-2017 is adverse, emphasizing the fact that also at the level of this city were identified some dysfunctions that need to be corrected.

According to the data regarding the city of Nădlac we can see that the own revenues made in 2018 exceed the total payments made, which means that in 2018 the financing needs of the city were covered only from own revenues. However, this trend is not maintained for 2019 and 2020, when the share of own revenues in total payments is between 73.40% and 77.38%. At the same time, the share of payments for capital expenditures is between 12.93% and 31.04%, and the existence of certain dysfunctions is also underlined by the adverse audit opinion expressed following the financial audit mission carried out in 2020 for the period 2017-2019.

Although in 2018 the city of Chisineu Cris could support payments made only from its own revenues, their share in total payments made being 103.93%, this trend could not be maintained throughout the analyzed period, so that in 2019, respectively 2020 the share of these revenues in the total payments made was 86.17%, respectively 82.95%. Also, at the city level have the payments for capital expenditures represented between 41.35% and 31.27% in the total payments made. However, the audit opinion expressed following the financial audit mission in 2019 for the period 2016-2018 was a reserved opinion with a paragraph highlighting certain issues, which highlights that some dysfunctions have been identified in this city.

In the case of Curtici, as it results from the analysis of the data presented in Table no. 5, the own revenues collected during the analyzed period cannot fully ensure the financing of the city during the budget year. The share of own revenues in total payments made, calculated as a ratio between own revenues collected and payments made, fluctuates between 49.93% and 83.99%. Also, the share of payments for capital expenditures calculated as a ratio between the payments made for capital expenditures and the total payments made fluctuated, its values being between 36.25% and 65%. The audit opinion expressed following the financial audit mission carried out in 2018 for

the period 2015-2017 is qualified with a paragraph highlighting certain issues, which highlights the fact that in the city of Curtici were identified certain malfunctions that need to be corrected.

According to the data presented in Table no. 5 regarding the city of Pâncota, results that the own revenues collected during the analyzed period do not reach the level of payments made, which means that they cannot fully cover the financing needs of the city of Pâncota. The share of own revenues in total payments made, calculated as the ratio between own revenues received and payments made fluctuates, from 78.69% to 93.33%, while the values of the share of payments for capital expenditures in total payments made it is between 6.03% and 23.56%. The audit opinion expressed following the financial audit mission carried out in 2019 for the period 2016-2018 is adverse, which underlines the fact that at the city level there are certain dysfunctions that need to be corrected.

Analyzing the financial data presented in table no. 5 we can appreciate that in the city of Sebiș the own revenues collected in the analyzed period do not fully cover the financing needs of the city, and the share of own revenues in the total payments made, calculated as a ratio between own revenues collected and payments made shows a level between 95.54% and 80.44%. The share of payments for capital expenditure calculated as the ratio between payments for capital expenditure made and total payments is not high, ranging from 10.24% to 17.08%. We can also appreciate the existence of certain malfunctions by expressing the opposite audit opinion, an opinion expressed following the financial audit mission carried out in 2018 for the period 2015-2017.

Analyzing the data of this table as a whole, it can see that only in the case of 2 cities, the auditors not expressed adverse opinion, which indicates that the level of deviations was below the threshold of significance set by external public auditors and, at the same time, it can be seen that in the case of these cities – Chișineu Criș and Curtici – the degree of collection of own revenues is over 92% in the case of Chisineu Cris with a share of payments for capital expenditures in the total payments made of over 30%, respectively over 77% in the case of Curtici with a share of payments for expenditures total payments reaching the level of 65% in 2020. It can also be seen that the other cities that obtained an adverse audit opinion show a lower level of payments for capital expenditures in the total payments made.

In Table no. 6 we will make a synthesis of the results of this study regarding the indicators

analyzed at the level of the 9 cities in the selected sample.

Table no. 6. Strengths and weaknesses identified at the level of each of the 9 cities		
THE CITY	STRENGTHS	WEAKNESSES
PECICA	Upward trend in own revenues; Level between 15-20% of payments for capital expenditures	Relatively low degree of own revenues, Adverse audit opinion
SÂNTANA	Upward trend in own revenues Level between 16-30% of payments for capital expenditures High share of own revenues in total payments made (2018, 2019)	Relatively low degree of own revenues Adverse audit opinion
LIPOVA	Upward trend in own revenues	Very low level of payments for capital expenditure Low share of own revenues in total payments made Adverse audit opinion
INEU	Upward trend in own revenues Significant increase, by 50%, of the revenues collected in 2019 compared to the previous year	10% decrease in revenues achieved in 2020 compared to the previous year Failure to make payments for capital expenditures in 2018 Adverse audit opinion
NĂDLAC	Possibility of full financing from own revenues in 2018 Share of payments for capital expenditures over 20% in the last two years	Relatively low degree of realization of own revenues Adverse audit opinion
CHIȘINEU CRIȘ	The highest degree of realization of own revenues between 92-94% Payments for capital expenditure over 30% Possibility of self-financing from own revenues in 2018 when the share of own revenues in total payments was 103%	Qualified audit opinion Significant decrease in revenues collected in 2019 compared to the previous year
CURTICI	The highest level of payments for capital expenditures - 65% in 2020	Qualified audit opinion The decrease of the revenues collected in 2019 compared to 2018 and in 2020 compared to 2019
PÂNCOTA	Relatively high level of payments for capital expenditure in total payments, over 20% in two of the three years analyzed	Adverse audit opinion
SEBIȘ	Relatively high level of own revenues in total payments in the first two years of the analyzed period	Adverse audit opinion

Source: Own projection

Analyzing the strengths and weaknesses of the analyzed cities, we can see that only two cities had the ability to self-finance their own revenues and only in 2018, the degree of realization of their own revenues often did not exceed 90%, and overall, the share of payments for capital expenditures can be said to be

quite low. We can also note that the audit opinion expressed following the last audit mission performed by the Court of Accounts was not unqualified in any of the cases, highlighting the existence of irregularities above the significance threshold set by external public auditors.

Conclusions

A first conclusion that we can draw from this study according to the financial data published by the 9 cities is that the collection of local public revenues, respectively taxes and fees as an important part of the cities' own revenues must be sized to ensure better collection. theirs.

We consider that this deficiency may be due to the fact that it is not always in the construction of the budget is achieved by the real quantification of the level of own revenues that can be collected.

We can also conclude that economic development, which directly influences the increase / decrease of own revenues, directly influences the degree of realization of own revenues. Thus, we consider that the deliberative bodies at the city level - local councils - can act by adopting fiscal measures, exemptions, tax cuts and local taxes for investors, which would contribute on the one hand to the increase of own revenues collected as well as to the economic development of the city, which would ensure a good collection of local taxes and fees from the citizens as well as to increase the quality of living and working conditions for the inhabitants of the cities.

The purpose of the ATU performance audit is to assess how the proposed revenues have been achieved and how they are managed. The study on the performance of own revenues in the 9 selected cities revealed that an increase in own revenues and their collection would ensure the development of decentralization and local autonomy, thus creating the possibility that local public finances are not in close dependence on the state budget.

The limitations of the research are the small number of cities included in the sample, as well as the fact that the data were collected manually, with the risk that some information may not have been taken into account. Also, due to the expression of the audit opinion following the audits performed by the Court of Accounts of Romania, in and for different periods of time, as a result of the inclusion of cities in the Annual Activity Program usually at an interval of 3 years, the time gap is a research limit. In future research, the analyzed sample will be extended, by including the other cities of the Western Region. The study will also include other indicators that lead to the creation of an econometric model on the factors that can influence the performance of cities' own revenues.

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ERP Integrated Instruments – Opportunities and Challenges for Audit

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Abstract

The digital era affects all the fundamental areas known so far.

In meeting the high levels of competition and industry pressures, the organizations used IT systems to help them achieve market advantages by saving resources, developing domestically and adapting to the challenges posed by the external environment.

This paper includes in the first part a description of the role of systems such as ERP, Business Intelligence, "Analytics", "Big Data" and Computer Assisted Audit Techniques – CAAT's in the activity of auditors but also in collecting and processing a large volume of data by those in charge with the financial accounting field. In the second part, with the help of the questionnaire, data on the use of these systems by Romanian auditors were collected and analysed.

Key words: integrated systems; financial audit; ERP; BI;

JEL Classification: M40, M42, O33

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Introduction

Technology plays an important part in today's business environment. Many companies are increasingly relying on computers and software to provide accurate information within the shortest delay which helps the business management. The need for an IT solution in all businesses is growing for better functioning.

Therefore, many corporations have widely adopted information technology by implementing ERP (Enterprise Resource Planning) decision support systems to carry out their business transactions and meet their data processing needs.

The new business models, which are based on an ERP system, contain process-oriented operations, thus increasing productivity but also meeting the requirements of economic performance.

The survey addresses the field offered by Business Intelligence in terms of the options it offers for financial audit, especially in the processing of financial and accounting data and the capabilities of real-time monitoring and control of the main activity indicators present in organizations.

The audit profession must "lean" towards both the opportunities and the challenges posed by the integration and adoption of ERP systems, as they have the opportunity to learn, evolve and capitalize on their already proven ability to adapt to the needs of a world. business in rapid change (Farcane, 2020).

All today's theoretical approaches bring to the fore the notion of information. Around this term are built work systems, communication channels, procedures, norms, theoretical foundations, value units. Obtaining and evaluating information as well as assessing its compliance with pre-established criteria is a systematic process that defines the audit in general.

The role of this research focuses on the types of IT applications developed and the manner in which audit professionals assimilate and use them for their missions.

The article is based on a quantitative study obtained by analysing the data collected with the help of a questionnaire.

1. Literature survey

In the era of emerging technologies, auditing is considered a constantly changing profession because technology

impacts all areas of this profession (Chan et al., 2018; Schmitz & Leon, 2019). Specialized publications certify the need for knowledge about how these technologies streamline and accelerate economic processes, in order to simplify audit procedures, improve organizational performance and reduce risk.

In the literature, the audit activity is defined as the professional testing of information aimed at expressing a responsible opinion, independent in relation to a quality criterion (Oprean, 2007) In general terms, the audit may be defined as the process of issuing of an opinion based on the correspondence between the existing situation and a frame of reference (Grand & Verdalle, 1999).

Over time, the financial audit has undergone a continuous evolution with a direct connection with the current relations of the dynamics of the global economy. Issuing authorized opinions on a company's financial statements is a complex task that requires intensive and adequate training of auditors, along with sound legislative knowledge.

What is the objective of the audit mission?

The objective of the audit mission depends on the type of audit: internal or external audit, compliance or legality, financial attestation, performance or results, operational, management, etc.

The most complex is the audit of financial statements, conducted by independent auditors, according to International Standards on Auditing, in compliance with the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants (IESBA code). It is organized in Romania by Law no. 162/2017 of July 6, 2017, which regulates the statutory audit of the annual financial statements and the consolidated annual financial statements¹, prepared in accordance with the accounting law and the General Financial Reporting Framework applicable to that entity.

Starting with 2017, the statutory audit is coordinated by the Authority for Public Supervision of the Statutory Audit Activity (ASPAAS).

The purpose of the financial audit mission is determined by expressing an opinion on the extent to which the financial statements comply with the key objective, namely offer a true and fair view in accordance with the accounting requirements.

¹ Published in the Official Gazette of Romania, Part I, no. 548 of July 12th, 2017.

The main purpose of the auditors is to detect whether the financial statements comply with the requirements mentioned by them but also:

- warns the organization's management about possible problems existing in accounting and suggests solutions;
- helps to detect errors and frauds, trying to eliminate some of them.

The Romanian Chamber of Financial Auditors defines financial audit as "the activity performed by financial auditors in order to report an opinion on the financial statements".

The auditor is considered to be a guarantor of the proven professionalism of management within an entity, so the *need* appears very clearly *to elaborate a common regulated framework on international level. The audit norms or standards* are recognized as the set of rules defined by a professional authority, to which auditors must be accountable for the qualification of their work.

Recent technological changes have led to a reconsideration of the approach of an enterprise as a whole, with specific processes and mechanisms.

The use of intelligent systems and their development within an organization allow managers to use the information and knowledge stored to make strategic decisions and solve more complex problems (Oprea et al., 2005).

The information explosion has led to the reconfiguration of databases, the emergence of data warehouses, Big Data, the widespread use of Data Mining processes, Cloud Computing techniques and methods, while redefining security procedures, access or data collection and processing. The Business Intelligence technique came in response to the needs of large companies to process large volumes of data, in real time, to obtain valuable information and at the right time, in order to efficiently and cost-effectively manage organizational processes in the new dynamics of the competitive environment. (Tofan, O.D., 2018).

We see how worldwide the integration of the **"Analytics"** and **"Big Data"** concepts as well as the acceptance of the reality imposed by them have led to a constant concern among audit companies but also of audited companies.

Ernst & Young in their work *EY Reporting* mention that accepting "Analytics" as a working tool is a complex task

for financial auditors, but the adoption of this way of processing can become an asset in differentiating competing companies in the future.

At the same time, the KPMG staff see this aspect of direct access to internal data through the capabilities offered by Data Analytics, as a faster way to detect transactions whose risk is high, therefore giving greater visibility to organizational structures in order to detect anomalies.

On the other hand, Ramlukan thinks that the integration of "Big Data" and "Analytics" tools in auditing is done more conceptually because accepting reports or views as audit evidence becomes quite difficult, even if they are consisting of a whole series of algorithms or rules.

The term of BI (Business Intelligence) was used by Richard Millar Devens in the study "Cyclopædia of Commercial Business Anecdotes" in 1865, which describes how a banker used various information about the business environment in order to make a profit and to develop competition-wise.

BI can also be defined as a combination of products, technology, and methods of organizing key information that an enterprise needs in order to enhance profit and performance. The main role of BI is to capitalize on information assets in business information and business analysis whose processes lead to accurate decisions and actions resulting in improved (Williams and Williams, 2006).

In order to add value through the information generated, the implementation of BI systems must take into account the following conditions:

- Offering real-time information on impact factors: employees, suppliers, partners, customers;
- Providing information in accepted formats such as e-mail, pdf, Excel;
- Enhancing users' abilities to interact with information.

Therefore, by analysing the data provided by BI systems, financial auditors can avail themselves of these benefits in order to complete their audit engagement, with a variety of ways in which they can identify the elements of fraud.

New information technologies come with dedicated solutions for organizations that face large volumes of data, whose transaction speeds exceed the capabilities of basic software, and which must apply multiple scenarios in order to obtain predictable analyses. It is observed how the urgent need for predictability is given by the increasingly complex economic environment, the current reality being

marked with numerous opportunities but also with challenges (Turban & Sharda, 2011).

Decision support systems (ERP) have as key features integration, routinization, standardization and centralization. They allow managers access to more comprehensive, real-time information so they can make better decisions. However, the implementation of ERP systems affects not only internal processes but also the external audit environment. Using Enterprise Resource Planning, companies can integrate data from different departments or business segments, which requires group-level consolidation, standardize data, improve financial control, and significantly reduce financial closure cycles, as well as data entry / validation errors (O'Leary, 2004).

These benefits have the ability to eliminate the main impediments known to auditors for delaying audit reports, such as poor data standardization, poor financial control, inefficient financial closure, and even poor integration of various systems (Behn et al., 2006). Thus, ERP systems can help professionals in performing the audit report.

Furthermore, Morris (2011) found that firms that have implemented an ERP system "are less likely to report internal control deficiencies" and this leads external auditors to consider that organizations with ERP have stronger internal controls compared to those who do not have this technology.

Mainly ERP involves a new policy that reflects what it means to act and think in the direction of economic processes, thus being considered a strategic management solution.

PwC (2015) suggests that entities can better use their systems (ERP) to analyse financial activity and make decisions that will ease the burden on the tax department when performing compliance tasks at the end of the year.

The recent economic challenges that have taken place globally as well as the transformations in the information area, generated especially by technological progress, have put pressure on the financial audit both at the level of the regulatory framework and the working tool.

Thus, a series of changes are recognized and applied at the level of standards and laws meant to give the audit adapted and updated working methodologies that maintain the role of guarantor of the correctness of the audited information in front of those who are interested.

Computer Assisted Audit Techniques (CAATs) is also a tool used by auditors, being placed in almost any

company where advanced auditing or accounting takes place. This tool facilitates the search for irregularities in the data obtained, and the accounting department will be able to provide more analytical results. It is considered a really useful tool that helps the auditor to work in an efficient and productive way, moreover, more "forensic accounting" can be done with more data.

CAATs can be used in any of the stages of the audit mission in order to systematize the data using different query techniques, calculations and sample selection, using mathematical functions but also economic-financial analysis, examination of internal control and data integrity, finding the risks of the entity and their evaluation, control of accounting processing and other systems used by the information system of the audited company.

CAATs may be defined as "any use of technology that helps to complete the audit mission". This "broad" definition includes automated working documents (R. L Braun, 2003) or "the use of software that can help the auditor perform and achieve the objectives of the audit engagement" (S.A. Sayana, 2003).

The International Auditing Standards that mention the importance of the auditor's use of CAAT's are ISA 315, ISA 330, ISA 330, reformulated standards relating to the planning of the audit of financial statements, the identification and assessment of risks of material misstatement by understanding the entity and its environment; to the auditor's response to the assessed risks. (ACCA, 2015).

In general, any economic entity faces many internal or external challenges, such as legislative changes, the socio-political context or changes in the labour market. There is a continuous dependence between the success of the activity and the way in which the organization manages to manage its resources in a concrete and realistic way, constantly evaluating its activity, competitive environment, cost structure, opportunities but also threats of any kind. Thus, the managerial act cannot be efficient without constantly having under analysis a real overview, but also in detail of the coordinated activities. Its objective is to lead and guide an organization in the sense of developing organizational values, responsibilities and capabilities and an administrative system that links and streamlines operational, strategic and tactical decision-making at all hierarchical levels (Bensoussan & Flesher, 2009).

Regulators of financial auditors around the world are following technological developments in this area with great interest. Martin Baumann, PCAOB's auditing director, said in a video interview that "regulators need to ensure that audit standards facilitate possible improvements in auditing rather than serve as an obstacle to progress in this area."

On the other hand, according to the director of the Rutgers University Accounting Research Center and the Continuous Auditing & Reporting Lab, "changes in the audit approach are needed to take advantage of the new environment, and these changes will continue to occur as corporate processes develop".

The American Institute (AICPA) launched in 2014 an initiative to improve the auditor's quality, namely "Enhancing Audit Quality" (EAQ), providing annual

reports on their website www.aicpa.org on the use of new audit technologies and methodologies, which will allow auditors to provide ongoing assurance and faster and more relevant results in their reporting.

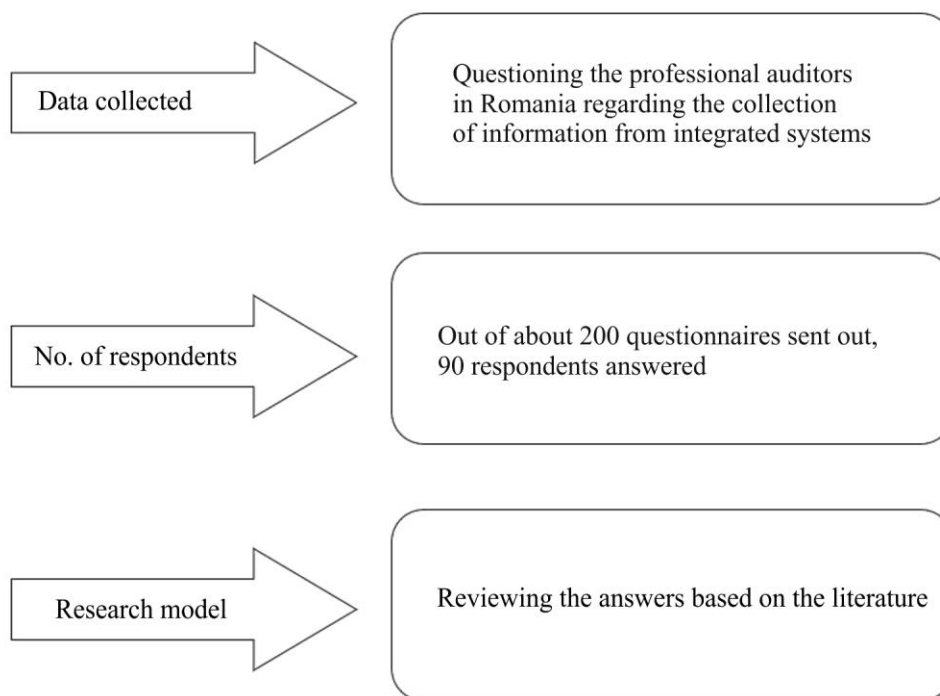
2. Research methodology

The method used in the study is a quantitative one, based on a questionnaire addressed to both public and private auditors.

Its objective is to know what software / tools they use in the audit activity, the advantages and disadvantages of the customer's use of an ERP system. Thus, they constitute an opportunity and at the same time a challenge for the fulfilment of the audit mission.

The research methodology applied to this study was synthesized in *Figure no. 1*.

Figure no. 1. The basis of the research methodology



Source: Processed by the author

3. The results of the study

We shall continue by presenting and interpreting the results of the quantitative study by analysing the data collected based on a questionnaire addressed especially to professionals who perform audit missions.

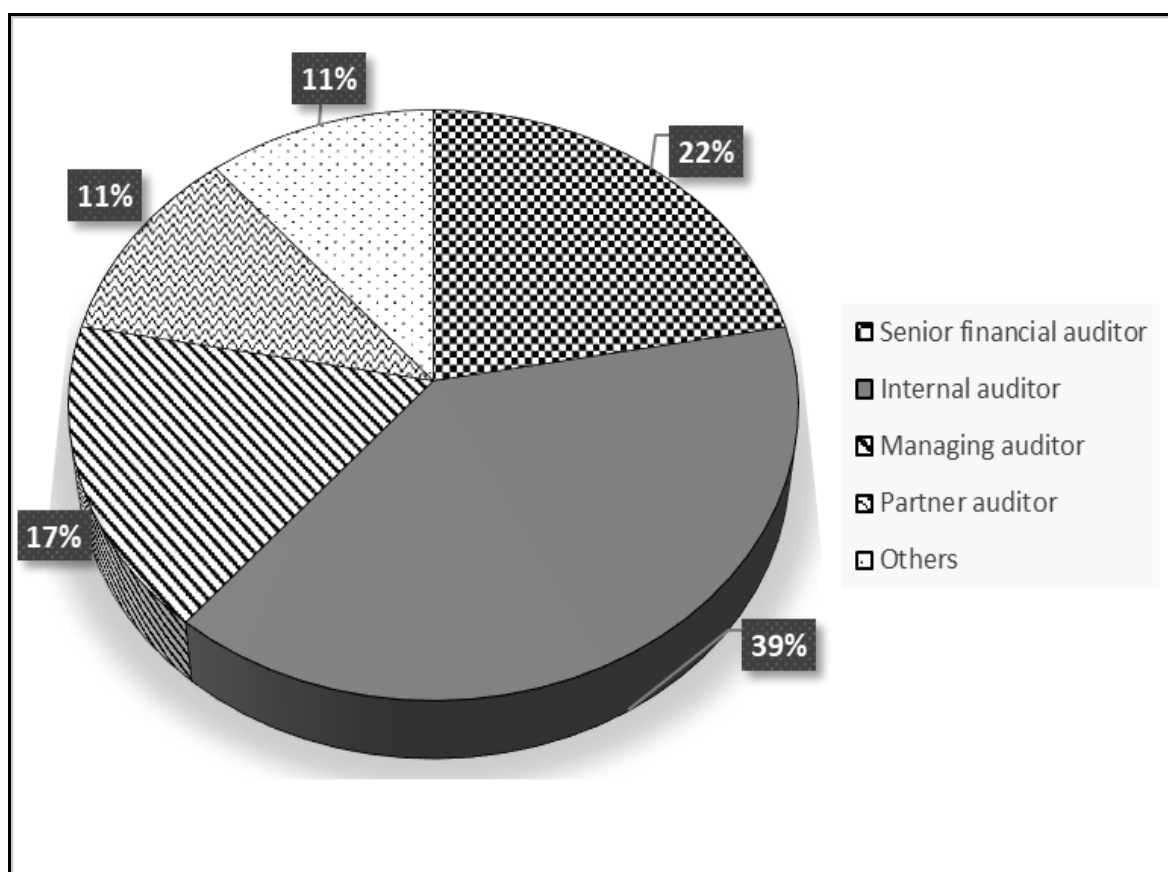
The questionnaire includes 8 questions through which we identified the auditor's position and professional experience, their sampling methods as well as the

experience regarding new technologies accumulated during the audit missions.

The questions were designed based on the presentation of the advantages, disadvantages and reasons for implementing such a system by integrated system distributors.

The position within the company is very important, it shows: the age, the experience and the professional training of the auditor.

Figure no. 2. Respondents' position within the company



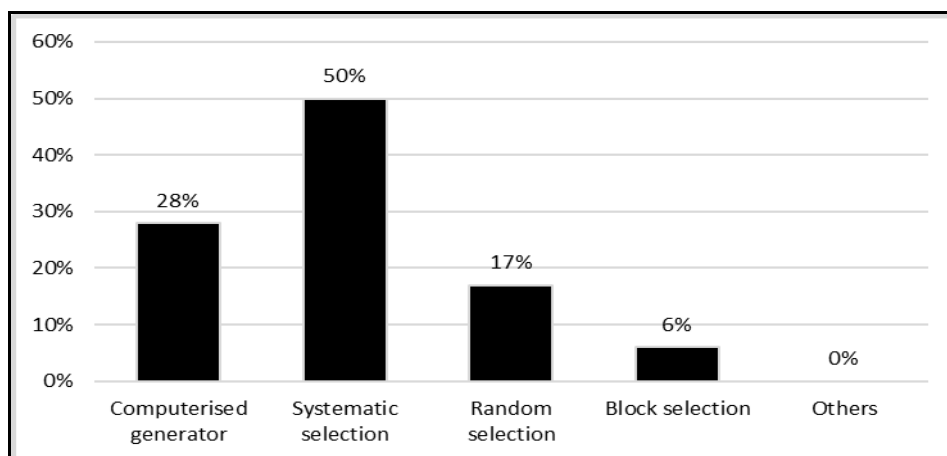
Source: Processed by the author

Analysing the data collected through the questionnaire, from **Figure no. 2** results that we have a varied / representative range of positions held by respondents in various companies that provide audit services or in their own company.

Thus:

- internal auditors hold a share of 39%;
- managing auditors represent 17%;
- senior financial auditors' share is 22%;
- partner auditors represent a quota of 11%.

Figure no. 3. Sampling method



Source: Processed by the author

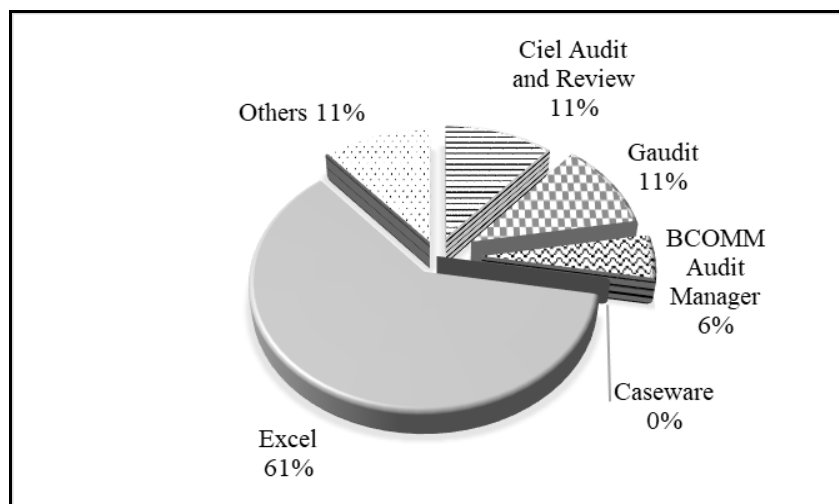
Given that the auditor processes a lot of data and often has to apply a sampling method because it cannot test 100% of the population, we considered it necessary to know which sampling method they use (**Figure no. 3**). These are listed and presented as a methodology in International Auditing Standard 530 *Audit Sampling and Other Selective Testing Procedures*. Sampling methods can be statistical or non-statistical. The decision whether to use the statistical or non-statistical approach depends on the professional judgment of the auditor as to the most

effective way to obtain appropriate audit evidence, sufficient in those circumstances.

Thus, from the centralization of the answers provided by the auditors it resulted that:

- The systematic method is used by 50% of the respondents;
- Computer generation holds 28% of the answers;
- Random selection is used by 17% of respondents;
- Block selection is used by 6% of respondents.

Figure no. 4. Audit-dedicated software



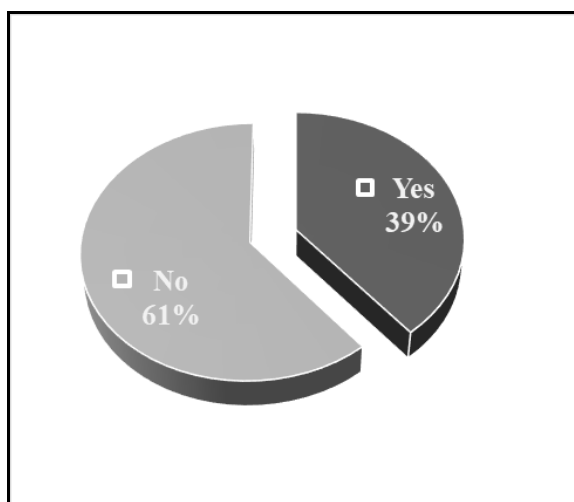
Source: Processed by the author

The analysis of the answers related to the type of software used in the audit activity showed the following (**Figure no. 4**):

- over 61% of auditors use Excel worksheets;
- 11% use Ciel Audit Review and Gaudit;
- 6% use BCOMM Audit.

On the one hand, we conclude that the vast majority of financial auditors have become accustomed to Excel worksheets and on the other hand some auditors have not tested or do not trust the dedicated programs to carry out the audit stages.

Figure no. 5. CAAT's in the financial audit activity

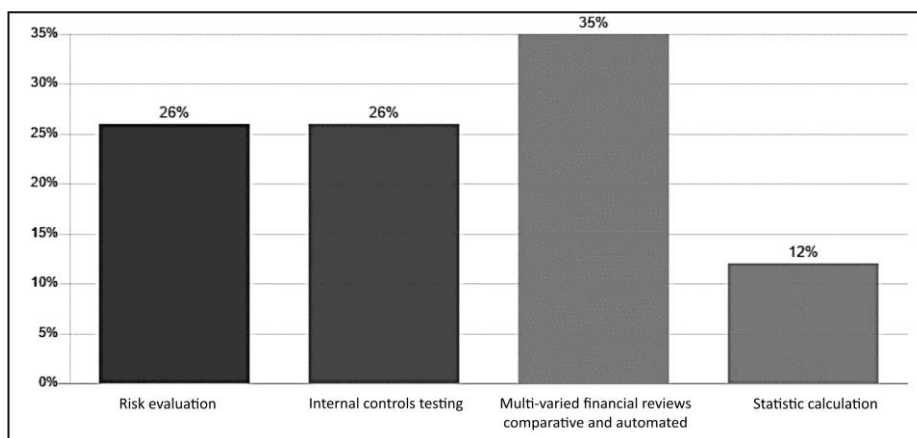


Source: Processed by the author

CAATs may be used in any of the stages of the audit mission in order to systematize the data using different query techniques. Only 39% of the respondents answered

that they use these tools, and 61% said that they do not use them or have not tested them yet (**Figure no. 5**).

Figure no. 6. The stages of the audit mission in which CAAT's tools can be useful



Source: Processed by the author

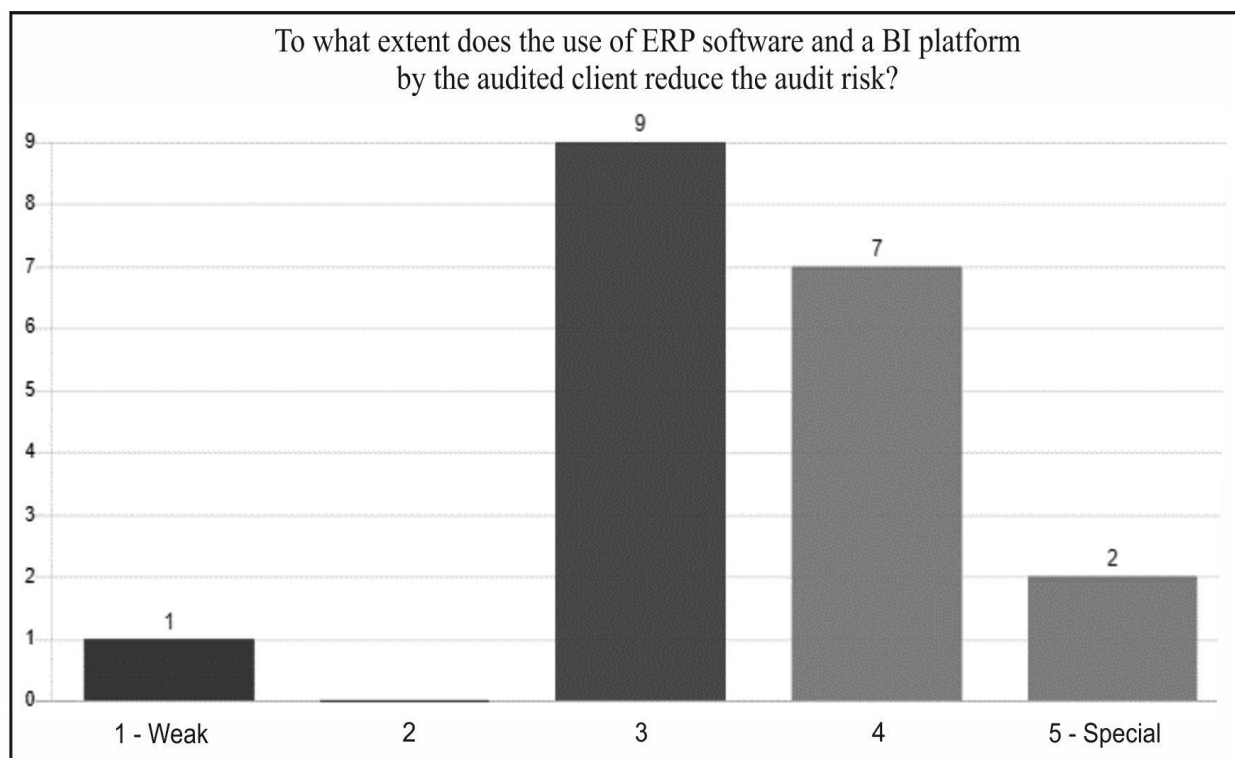
We further examined the stages in which an audit engagement involves computer-assisted audit techniques (CAAT's). As we see from the answers summarized in **Figure no. 6**:

- 35% declared that these techniques are useful in performing multivariate financial analyses,

comparative and automated calculations;

- 26% answered equally that the usefulness is observed in the risk assessment stage and in the testing of internal controls;
- whereas 12% of respondents consider CAAT's audit techniques useful in the statistical calculation stage.

Figure no. 7. Reducing audit risks by using ERP software and / or a BI platform



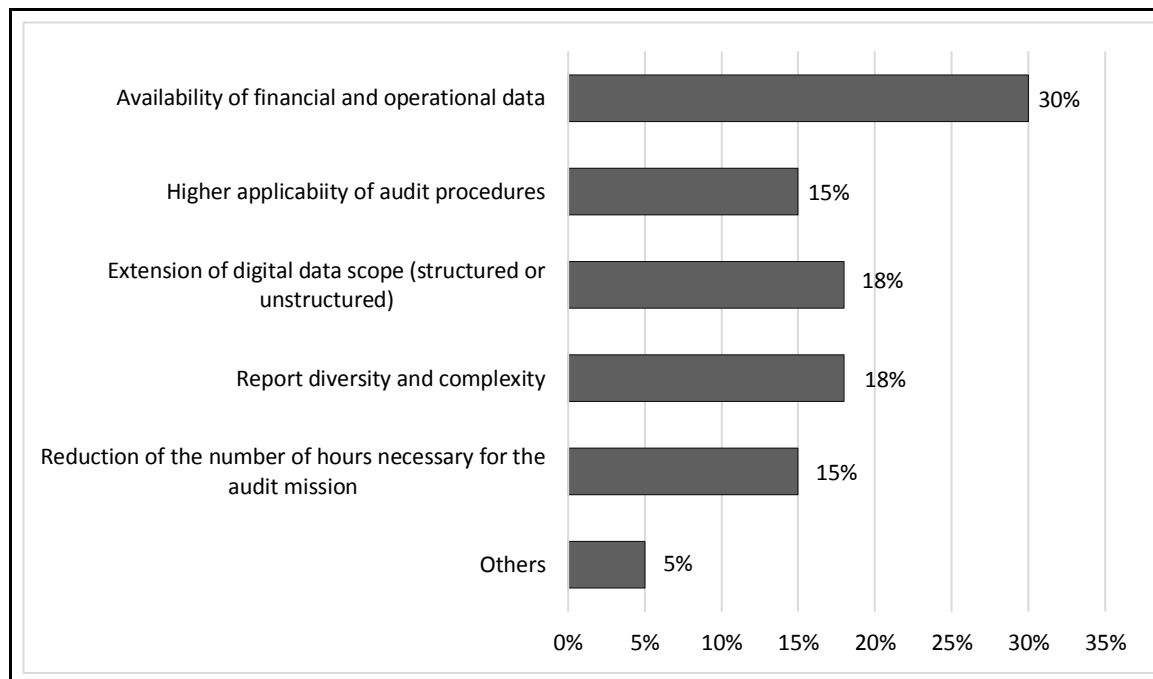
Source: Processed by the author

We considered it important to find out to what extent the auditors consider that the use of ERP systems or BI platforms by client companies can reduce the audit risk.

Following the results obtained, we noticed that in a proportion of 50% on a scale from 1 to 5, where 1 is the level "to a low extent" and 5 is the level "to a high extent", the respondents consider it important to use these types of systems,

and if we look at **Figure no. 7**, we conclude from the answers that few auditors still do not believe in the usefulness of decision support tools, namely only 6% of respondents appreciated the minimum reduction of audit risk using ERP systems.

The evolution of technology also ensures progress in the financial field, implicitly changing and adapting auditors to the new future prospects of the Romanian market.

Figure no.8. Advantages of ERP in auditing

Source: Processed by the author

From the data presented in **Figure no. 8**, we can see which are the advantages of ERP considered by financial auditors as the most important.

Of the total respondents, 29% considered the *availability of financial and operational data* as an advantage of using ERP. Integrated systems combine all the financial information from all departments, which creates a real advantage for anyone who needs it. Information is found in real time, and this can be considered another reason why the vast majority of auditors trust the ERP systems used by their clients.

Diversity and complexity of reports as well as the *data extension in digital format (structured or unstructured)* were chosen by 18% of respondents. It is clear that the use of an ERP provides a wide range of reports that can help auditors fulfil their mission. If, in addition to the existence of an ERP, we also add a BI platform, the collection and processing of information related to values becomes easier and the information easier to interpret.

Greater applicability of audit procedures is another advantage noted by 16% of respondents. They found that the use of an ERP system by the audited client helps in the audit mission by the fact that the applicability of the procedures is much more efficient and covers a larger volume of data.

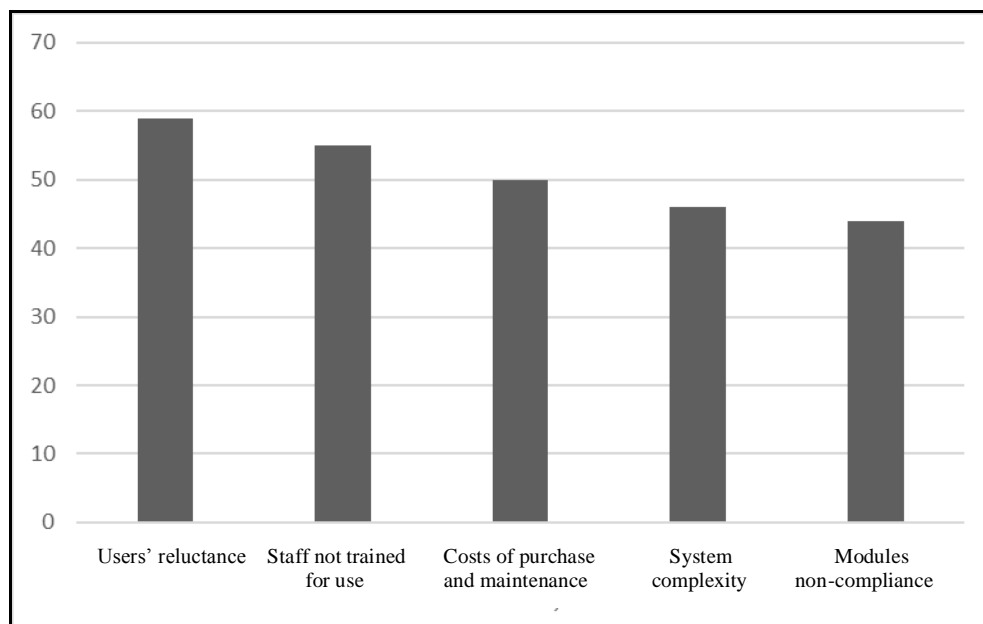
Decrease in the number of hours required for the audit mission was considered an advantage of 13% of the responding auditors. This can also be influenced by how users know or not how to use the program and how well they have been trained since the implementation of the system.

Also 2% of the total respondents considered that the benefits depend on the *type of ERP used by the customer*.

In the study we proposed to know the disadvantages considered by auditors as the most common in extracting data from customers using ERP.

I submitted to my attention a number of five statements for which a score was given from 1 - minimum to 5 - maximum.

Figure no. 9. Disadvantages of using ERP by the audited client



Source: Processed by the author

Thus, as can be seen from the centralized data in **Figure no. 9**, the ranking was as follows: user reluctance, staff not trained for use, cost of purchase and maintenance, system complexity and lastly the non-compliance of the modules.

By analysing the answers to the last two questions, we conclude that integrated ERP systems are an opportunity but also a challenge for performing audit missions.

4. Conclusions and recommendations

The empirical study reveals that the two areas, financial audit and information technology (ERP and / or BI) are mutually influenced and enhanced on a permanent basis.

Both notions presented, "financial audit" and "Business Intelligence", have as final product the information, in a correct, accessible, verified form and that respects certain quality standards. The financial audit must be based on information that meets certain quality criteria, as established by the IASB (International Accounting Standards Board, International Financial Reporting Standards, 2011): relevance, accurate representation,

comparability, verifiability, timeliness, intelligibility. The validation of the annual accounts is possible by complying with these conditions and the financial audit plays a key role in this regard. The processing of accurate and relevant data and information becomes a basic condition for achieving consistent results that reflect the reality of an organization's financial situation. In the spirit of this idea is highlighted the notion of financial-accounting information around which the whole plea on the convergence of the two approached fields is built. The quality criteria pursued in obtaining such information determine the application of the best processing methods which must take into account the scale of the activity, the costs, the availability of resources, the reference criteria etc.

From the analysis of the literature, we may conclude that the integration of Business Intelligence reports and ERP systems into the sphere of information sources of a financial audit mission creates opportunities and decisive results can be reached in formulating a reasoned opinion on the financial statements. The quality criteria imposed for the processed information, both in the financial audit and in the intelligent IT systems, can create a common frame of reference with can result in obtaining valuable financial-accounting information for those interested.

Accuracy of calculations, elimination of sampling, processing capabilities of large volumes of data lead to the conclusion that, at the current level of development and implementation, Business Intelligence applications can contribute to the correct information of the organization's management and external auditors.

Given all the aspects mentioned above regarding the role of technologies in organizations everywhere but also the increasing complexity of accounting systems and the multitude of recorded transactions, there is an accelerated replacement of "usual" audit techniques with modern techniques. The fact that most supporting documents, such as invoices, notices, accounting records, orders are available in electronic format, facilitates the work of users in drafting, sending, viewing and also changes the audit methods used by auditing professionals, this constituting a challenge.

The quantitative study based on the questionnaire showed the following: on the one hand the audit activity is performed by most auditors by using Excel spreadsheets, the systematic sampling method is most often used, and on the other hand the use by companies client of an ERP system has multiple advantages but also disadvantages.

The usefulness given by the integration of information technologies, thus increases the efficiency and effectiveness of the activities performed by financial auditors by:

- automation of cyclical operations and focus on certain critical processes;
- increasing the quality level of audit missions by standardizing audit methods and by covering an increased volume of data;
- discovering anomalies or errors by performing detailed analyses;
- considerably shortening the duration of an audit etc.

In our opinion, auditors must learn continuously during the professional activity and permanently leave the area of professional comfort. Continuing to promote the principle of lifelong learning, they are the solution for ensuring high quality professional services. In an economy based on globalization and digitalization, information means power, and many companies are interested in obtaining data in the hope that they can rank higher on the competitive market top.

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Considerations on the Advantages of Using Leasing in Small and Medium-Sized Enterprises

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Abstract

Throughout the evolution of our society, accounting has played an important and sometimes decisive role in making or influencing certain decisions. Accounting research can provide social and cultural studies with important insights into how society and culture is produced and shaped by calculations, technologies and management control practices. An exciting challenge and opportunity for young researchers is to explore the role and impact of accounting in companies as well as in non-governmental organizations, given the many times when the issue of further reform has arisen because of sensitive events in the lives of companies. Increasing quality criteria as well as lowering costs by using leasing as a form of financing has generated part of the evolution of modern society. Thus, the management of companies has constantly had to establish new and new strategies to bring companies to our reputation and esteem through higher performance indicators than in previous periods. The main objective of the article is to understand the concept of leasing financing, to get familiar to the use of leasing, also to validate the hypothesis that leasing means a good manner of financing for small and medium enterprises using a variety of different strategy of economic development and obtaining economic benefits, having as a start point a right interpretation of accounting politics highlighting the true and fair view of the company. In order to validate the hypothesis that leasing is a factor of economic growth, the authors conducted a questionnaire consisting of nine questions in which respondents expressed their opinion on leasing as a form of financing. Following the study, the authors concluded, within the sample analyzed, that the use of leasing is a factor of economic growth, having as a start point the company development strategy, and also, the risk appetite of the shareholders. Also, using the leasing as a manner of finance offered the opportunity for a quickly technological growth and real appearing of the modern historical challenge - globalization.

Key words: leasing; accounting policies; strategy; influence; economic growth;

JEL Classification: M40, M41

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Introduction

Accounting is perceived as an international language of communication in the business environment and is a key element in determining the potential directions of economic development of any company. Thus, the economic environment around the world recognises the need for a single set of standards, providing a high degree of transparency and comparability, so that current or potential investors are well informed about the performance of the companies in which they are involved. The existence of such a single set of financial statements favours much clearer financial analyses, which generate capital growth resulting from increased investor confidence in the company's actual performance.

Moreover, the core of sustainable development is based on the transformation process whereby exploitation, future investment orientation, technological evolution and institutional changes are in harmony, thus generating a high level of human satisfaction, based on the premise that "No one is left behind" (UN, 2015).

The paper focuses on defining the advantages of using leasing as a form of financing that could be used by companies when developing financing methods and provides an overview of the financing methods used, taking into account the availability of data.

Since the organisation of economic activities in companies, they have tried to diversify their scope, aiming at a natural and lasting development, so that the persons responsible for the governance of the company can enjoy a favourable result from one period to another.

Reporting various information (e.g., environmental, social, financial, etc.) is often a real challenge and companies need to carefully manage these moments so that their reports present the totality of events in a financial year. These requests come from various sources that require consideration, even though these requests are often complex and it is not easy for managers to decide on the priority of the issues they need to respond to, given that company resources are limited. Managers therefore need to continuously assess how they respond to different categories of stakeholders, taking into account their specificities. It is worth remembering that sometimes "management may consider an investor as inconsequential or minor one day; but find the same investor as an important part for the management in next day" (Stephens et al., 2011).

This led to the emergence of new typologies of corporate existence (styles in accounting) that presented the action or inaction of people in various situations by translating from theory to practice as well as from practice to theory, with the main objective of presenting an accurate picture of the company throughout a financial year.

The true image is one of the main benchmarks for analyzing the evolution of a company and is followed by the company as well as by customers, suppliers, employees and any other third party directly or indirectly interested in the company (Feleagă and Feleagă, 2007).

Among the emerging countries of Central and Eastern Europe (CEE) we identify Romania, a country that has been in the spotlight through numerous reforms based on strong influences from the international arena, but especially with Romania's accession to the European Union (EU) (Albu et al., 2011). After 1989, Romania was marked by a prolonged period of reform that brought to light numerous problems including political, economic and social ones. Romania's accession to the European Union as well as sustained external legislative efforts led the national regulator to pay attention to the implementation of international standards and norms, such as accounting standards, auditing, corporate governance, reporting and regulation of the profession (Albu et al., 2014; Ionașcu et al., 2014). These emerging changes of orientation towards strong influences from the international space have started to be analysed (Jamali and Neville, 2011), but the historical evolution as well as the national context provides a conducive and interesting environment for research, due to the numerous changes in the economic, political and social environment, which have caused the legislation, practices and information provided to register a constant improvement.

According to the IASB "IFRS 16 specifies how an IFRS reporter will recognise, measure, present and disclose leases. The standard provides a single lessee accounting model that requires lessees to recognise assets and liabilities for all leases unless the lease term is 12 months or less or the underlying asset has a low value. Lessors continue to classify leases as operating or finance and the approach to IFRS 16 on lessor accounting remains substantially unchanged from its predecessor, IAS 17."

The objective of this research is to determine whether leasing is a good financing alternative for small and medium-sized enterprises, given that the vast majority of these enterprises have limited resources. The paper will conclude with conclusions, limitations of the research and

future research on the elements that influence the choice of leasing over other forms of financing such as loans, capital markets, etc.

1. Literature review

Leasing aided by the true picture began to develop through the possibility of economic growth at the microeconomic and macroeconomic level thus becoming a necessary tool of financial development (Vakhitov Damir, R. and Zamaletdinov, A., 2015).

The emergence and development of technology has also led to the development of reporting as a result of pressure from society and management. This pressure has arisen from the desire of companies (shareholders) to attract new investors, either by listing or by developing the quality of reporting.

The advantages and limitations of sustainable development have an impact on the outcome and evolution of society. Under these circumstances, communicating sustainability is one of the most important steps in terms of raising interest as well as securing the target audience (Firoiu et al., 2019).

The trend towards globalization of companies has led to the IASB's development of new accounting standards in which professional judgement was the main strength (Albu and Albu, 2012).

Professional judgment has generated a lot of controversy, as large companies have tried to customize results, these results being searched by the persons who have their salaries according to the company performance indicators.

In this way, the responsible persons have managed to find a manner of financing so that they can get their performance bonuses as well as maintain the selling price of their products or services offered in comparison with the main competitors.

1.1. Development strategies for the use of leasing

Leasing as a way of financing has generated a lot of discussion about the form of financing, the leasing period and the company's own development strategy, so as to arouse real interest for users, both in the short and long term.

Wei-Ting Chen et al. (2018) bring into question the development strategy in airlines by deciding to develop

companies using leasing as a form of financing. Basically, we find ourselves in a situation where constraints are at every turn by maintaining a competitive price compared to other airlines, but also increasing the aircraft fleet.

The analysis made by Wei-Ting Chen et al. (2018) identified an increase in the number of aircraft used by leasing from 0.5% in 1970 to 40% in 2014, and the estimate for 2020 is more than 50%, which shows the imminent need for the use of leasing when setting development strategy.

According to a study by Sylvain Bourjade et al. (2017), airlines have experienced the lowest percentage growth from 1996 to 2011 compared to other industries. Despite this result, some airlines have recorded significant profits, but an interesting fact emerges from this finding is that these airlines have achieved similar profits regardless of the strategies used.

The use of lease financing strategies in both small and large companies has brought to light the fact that small companies will lease more than large companies because they (small companies) do not have large financing capacities and leasing is a quick form of financing. As for large companies, they prefer having lower and fixed loan rates compared to the aforementioned form of financing (Jane-Raung Lin et al., 2013).

The demand from customers to upgrade the products offered by companies is also found in the software sector, with two options for product offerings: sale and lease financing. The need for strategic business development is absolutely necessary, and in this area, leasing has a slight advantage in that the product purchased under a leasing contract also offers the possibility of updating and maintenance at an affordable price. Basically, leasing comes with a package of services that users can use when purchasing software products (Kunhao Jia et al., 2018).

The analysis of a company's performance also includes the existence of leasing contracts which can lead to more detailed assessments of whether or not the use of this form of financing has an impact on capital. The main objective of the managers is therefore to have a permanent capital that can produce future economic benefits in the day-to-day activities and in the shaping of a medium and long-term strategy.

In order to identify the importance of stakeholders, some researchers (Mitchell et al., 1997) have suggested stakeholder relevance theory. By stakeholder relevance

we mean the degree to which stakeholders are visible, vocal and important to a company, and is determined by stakeholder actions such as power, legitimacy and urgency. Over the last 25 years, stakeholder mapping has become a basic tool used to identify, assess and prioritise stakeholders, with important theoretical and managerial implications.

We can also mention the impact on the size of the company in terms of organization and management. Thus, a study conducted by (Kaiser Munir et al., 2017) highlighted the constraints that can occur when the CEO has influence over investors, by always trying to create opportunities regarding the increase of monthly remuneration, but also maintaining a stable job.

Power is defined as the ability of stakeholders to influence organizational decisions and the distribution of value (Lépineux, 2003). The use of power from a stakeholder perspective is also supported by neo-institutional theory, whereby coercive pressure has strong influences on management decision-making (Pedersen, 2011). Legitimacy is how a group's actions, given the context of the social system, are broadly perceived (Morsing et al., 2006). Legitimacy is often linked to power, as most managers will only pay attention to a powerful actor who is considered legitimate. Another issue brought into question is urgency and is the extent to which a stakeholder group considers its statements to be time sensitive or critical (Mitchel et al., 1997).

The application of policies sometimes also generates uncertainty in terms of understanding and applying leases by recognizing or not recognizing them in the financial statements and by customizing certain economic and financial indicators (liquidity, solvency). These indicators can also be customized using operating leases, through the way they are presented in the explanatory notes, a component part of the financial statements.

The use of accounting policies highlights professional judgement on how to use operating or finance leases. The findings of an article published by Su-Jane Hsieh and Yuli Su (2015) revealed that companies use operating lease because it is less costly compared to finance lease on how it can generate some higher expenses (depreciation, amortization), and at the end of the financial year the result to be higher, aiming to benefit from increased remuneration according to the company's performance.

Freeman (1984) is of the opinion that managers should identify all stakeholder groups, should determine the level

of importance specific to each group as well as the manner in which their requirements are currently being met by the entity and, based on the findings, should modify the entity's policies so as to remedy situations that have not been met by the company.

As of 2019 leasing has a new regulatory standard that will change the way leasing is analysed on how it is valued by the fact that leasing will also be presented in the balance sheet (automatically generating a much better record of indicators), and this will be done by analysing and classifying leasing into two main components, namely short-term leasing and long-term leasing.

In a study by Masaki Kusano (2017) on companies in Japan, the differentiation of leasing into finance and operating leases does not have an impact on credit risk assessment, as operating leases are highlighted in the notes to the financial statements and analysed when assessing the risk of loss.

This classification also indirectly generates a more elaborate analysis of each lease in the explanatory notes, so as to differentiate the old classification of leases (financial and operating).

1.2. Empirical study on the leasing approach in companies

Most operational losses attract a lot of public attention, even though these financial losses may be small. However, the negative reputational effect (e.g., loss of customers or employees) on a company can be even more sensitive than the effect of the loss itself (Sturm, 2013). Moreover, operational risk is pervasive, complex and constantly dynamic. Compared to market and credit risk, which is found in certain business areas, operational risk is inherent in all business processes. The diversity of operational losses generates an extensive process of defining operational risk as well as delineating it from other types of risk (Sturm, 2013). The Basel II Capital Accord describes operational risk as "the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. This definition includes legal risk but excludes strategic and reputational risk". This definition directly addresses external and internal events, as opposed to operational and market risk. Thus, the definition of operational risk might take a more complex form compared to other types of risks (Wahlström, 2006). However, the abstract definition generates both strengths with respect to the

variety of events covered by it and situations where this definition is imprecise, thus generating potential problems in practice.

2. Research methodology

To demonstrate the impact of leasing on the activities (performance) of companies, the authors conducted a pilot study to determine whether leasing is a factor of economic growth.

The objective of this research is to determine whether leasing is a good financing alternative for small and medium-sized enterprises in Romania, an emerging country, given that most of these enterprises have limited resources.

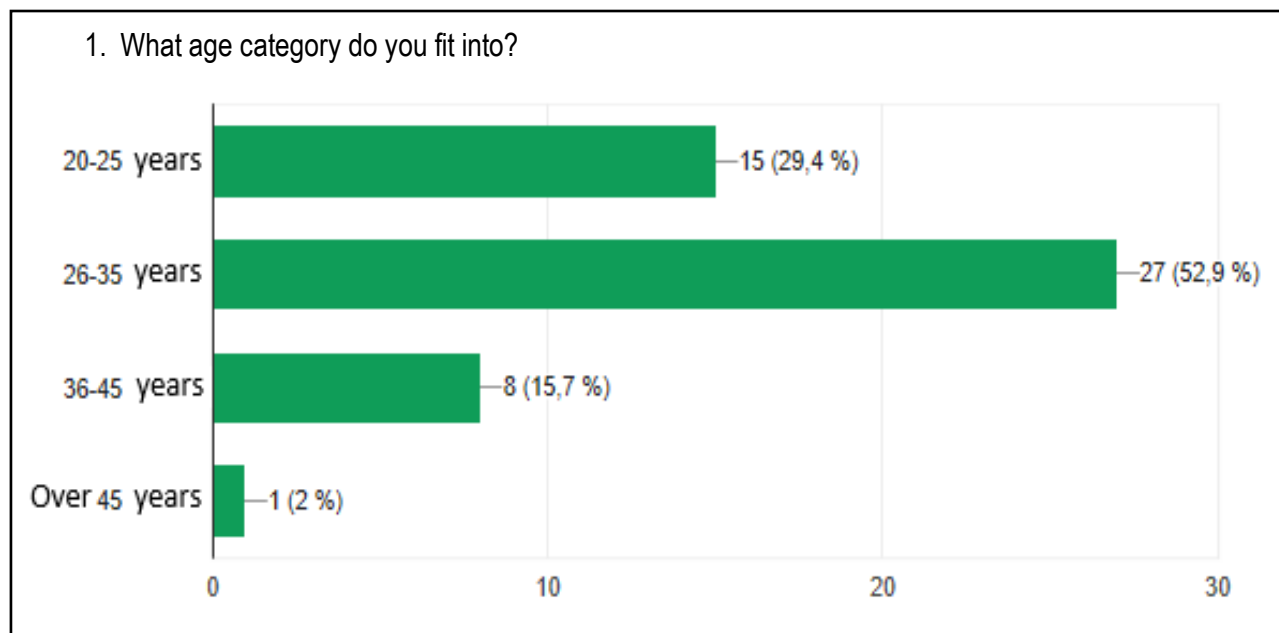
Furthermore, the selection criteria for ensuring the independence of the results were targeted at both people with limited experience in the economic domain (e.g. students or people with limited practical experience), so as not to provide results that could be influenced by the company where they work, and respondents with

experience in the economic domain (e.g. teachers, accountants, people who have or have had a management position in relevant organisations), so that the results obtained could benefit from a productive analysis by all the people involved in this study.

This study was developed in March 2021 on a sample of 70 people who were asked, subject to availability, to complete the research questionnaire. For safety reasons, due to the emergence and spread of the SARS-CoV-2 virus, this questionnaire was completed using Google Forms so that the research process could continue its natural course. From this sample, 51 answers were received, which helps us to be able to assess in an objective manner, based on the results obtained, that leasing is a form of financing in small and medium-sized enterprises, given that the vast majority of them have limited own financing resources.

The first question of the questionnaire identifies both the number of respondents and the share of the category by age segments (*Figure no. 1*).

Figure no. 1. Age category

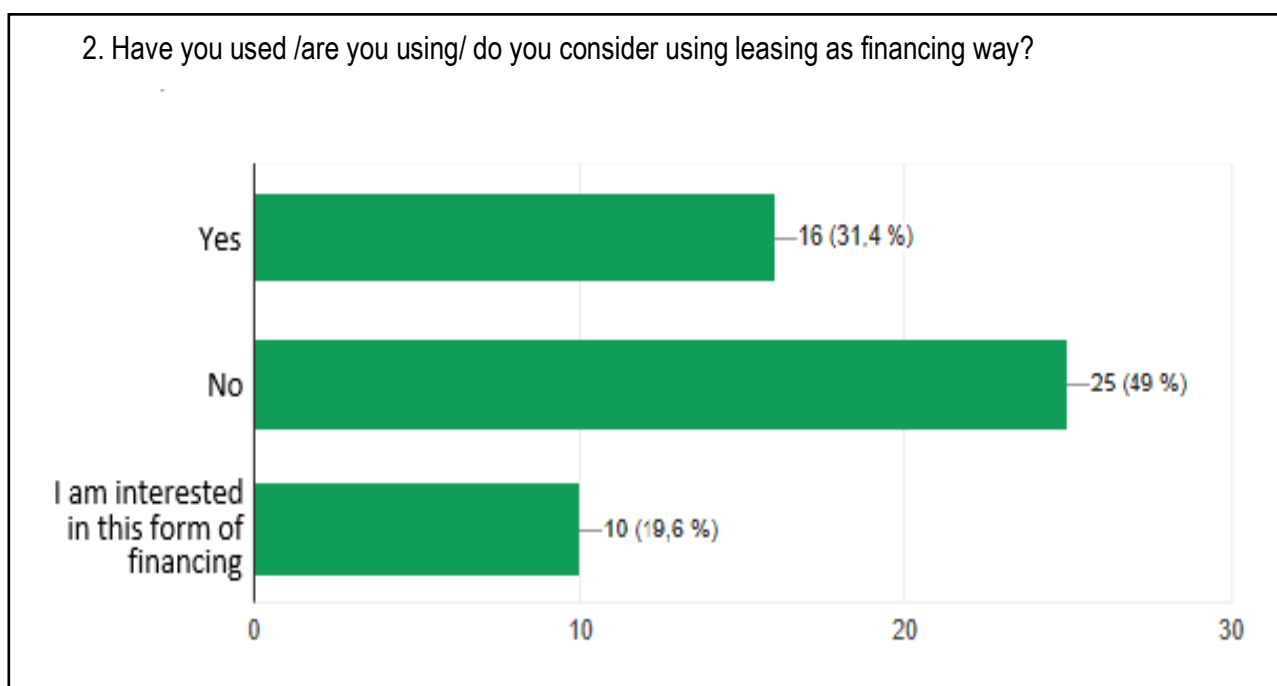


Source: Authors' processing, 2021

Following the completion of the questionnaire, we identified an overwhelming share for the age category 26-35 years (52.9%) which represents the period of professional growth as well as the ability to analyze and implement a greater risk, compared to people over 45 years (2%) who are not happy with this form of financing, generated by reasons such as lack of time, because the experience gained by them is channelled to other activities as well as the existence

of situations in which people avoided completing this questionnaire. Another segment analyzed is between 20-25 years old (29.4%), a segment that represents the period of study and sedimentation of the information acquired during the years of study and their translation into practice. The last category analyzed is between 36-45 years old (15.7%), which represents the period of orientation towards the development of a personal business, based on the experience gained.

Figure no. 2. Leasing use probability



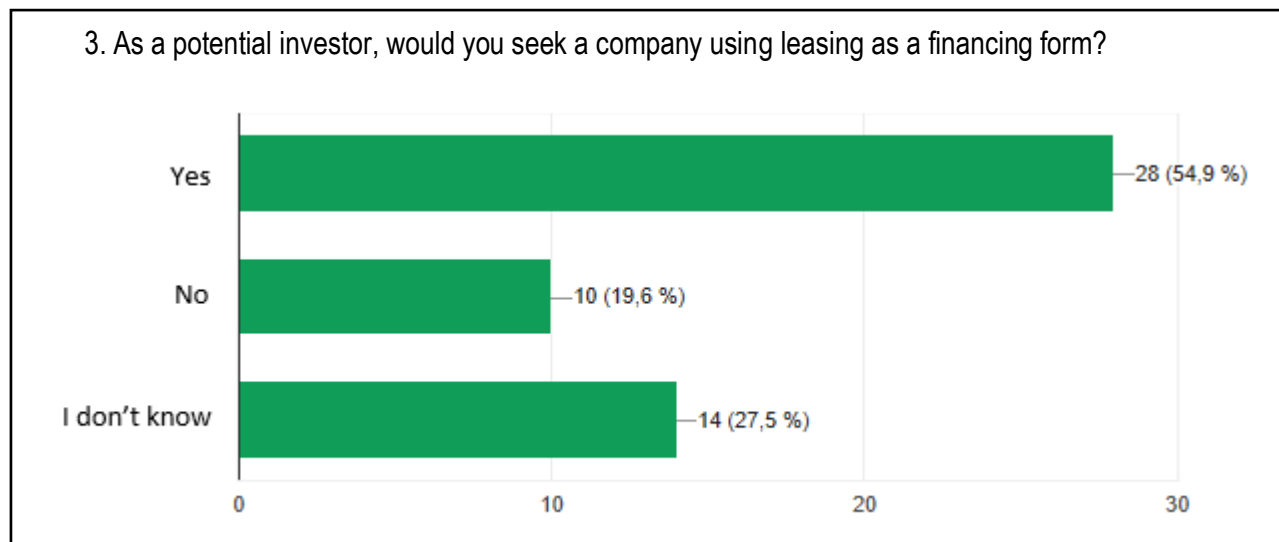
Source: Authors' processing, 2021

Figure no. 2 identifies how these respondents view the form of financing by dividing them into two broad categories: those who use or are interested in using leasing as a form of financing and those who do not want to use this form of financing. This situation, that there are different categories of interest, regarding the use of leasing as a form of financing was also

confirmed by the research conducted by Wei-Ting Chen et al. (2018).

Interpreting **Figure no. 2** by age segments, we identify young people, as well as those over 45 years old, who do not want to use this form of financing. Also, people aged 26-35 use or are interested in using leasing as a form of financing.

Figure no. 3. Using leasing decision

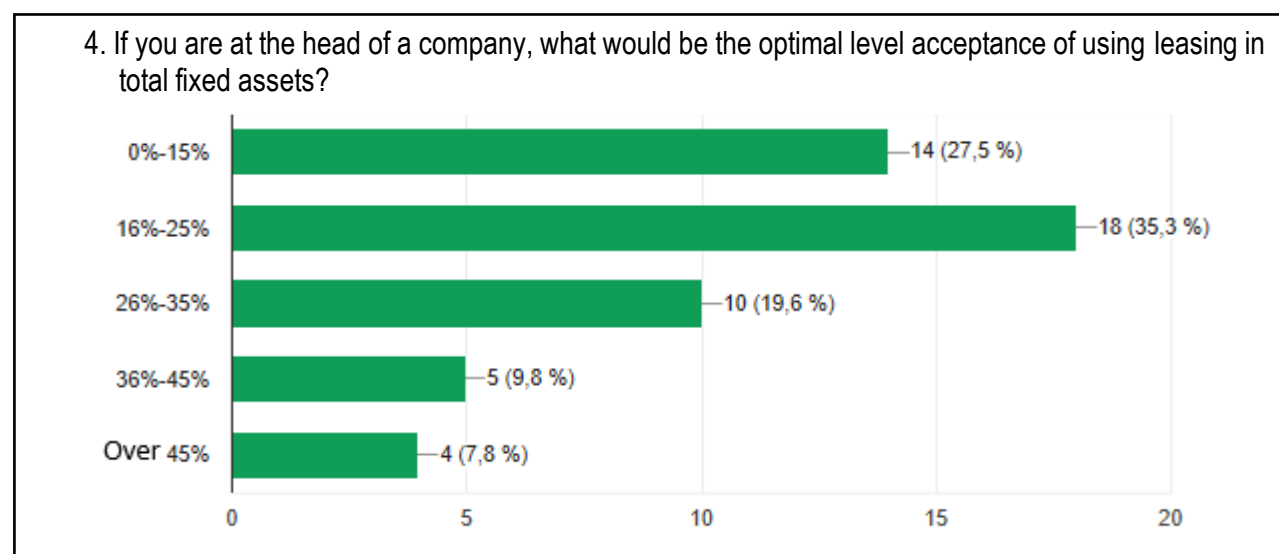


Source: Authors' processing, 2021

Figure no. 3 shows a higher share of use of leasing as a form of financing to the detriment of people aged 20-25 who are at the beginning of their career and a negation to the detriment of people over 36, where caution is a basic element in determining future financing directions. This is

confirmed by the study conducted by Wei-Ting Chen et al. (2018), following the identification of substantial growth in the number of jets from one period to the next. Moreover, the information presented above confirms the UN premise of 2015: "No one is left behind".

Figure no. 4. Level acceptance of leasing use

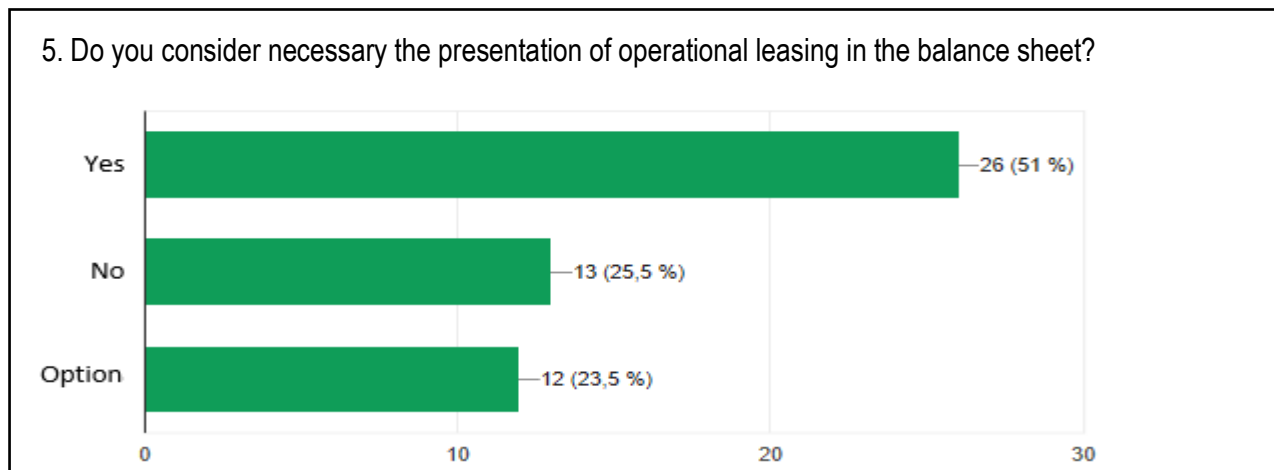


Source: Authors' processing, 2021

Figure no. 4 shows a little diversified situation, that leasing is part of the development strategy, and this influences each individual manager differently, depending on their risk appetite. People aged 20-25 and those over 45 use a lower percentage of

leasing as a form of financing. In the next segment we identify a large share with diversified strategies that are found in the following four percent. The 36-45-year-old identify a more weighted use of leasing (16-25%).

Figure no. 5. The need for balance sheet disclosure of operating leases

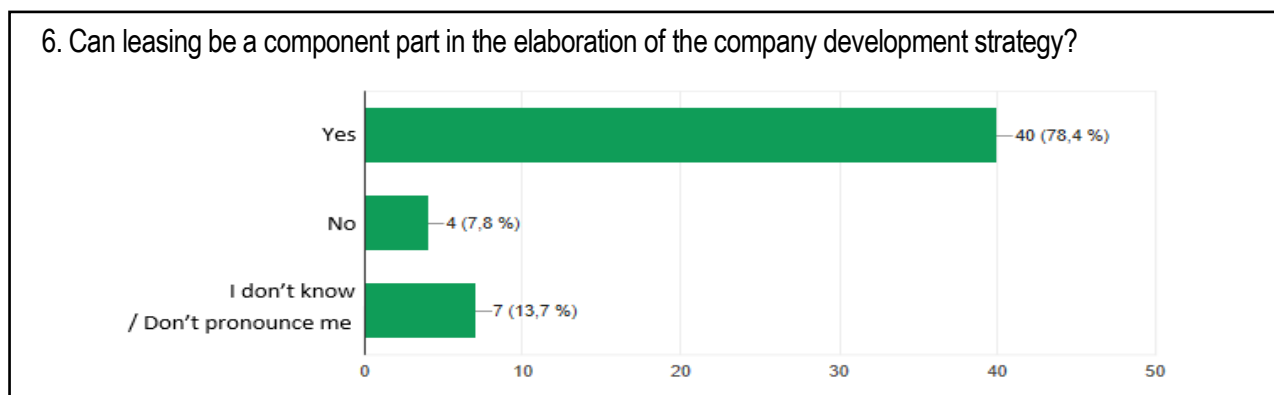


Source: Authors' processing, 2021

The lease development strategy also impacts the way the lease is presented in the financial statements (**Figure no. 5**). Of those who completed this questionnaire, just over half (51%) responded that operating leases should also be shown on the balance sheet. A significant proportion of respondents aged 20-25 (25.5%) answered that operating leases should not

be disclosed on the balance sheet, while those aged over 36 (23.5%) justified, based on their experience, that it is optional to disclose operating leases on the balance sheet. Thus, the study conducted by Masaki Kusano (2017) highlights that when determining the risk of loss, both forms of using leasing as a form of financing are considered.

Figure no. 6. Leasing as part of strategy development

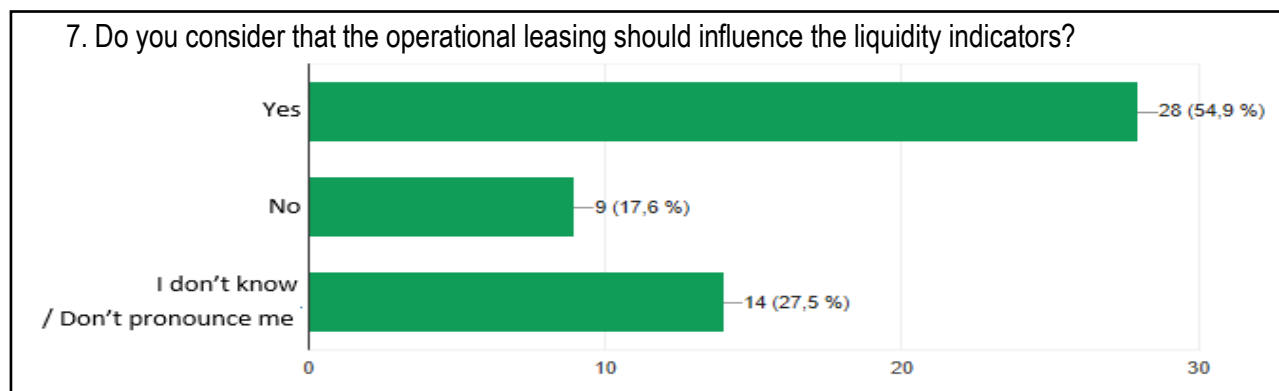


Source: Authors' processing, 2021

Regarding leasing as a company development strategy, in **Figure no. 6** we identify a very high percentage of respondents (78.4%) who specified that leasing is a company development tool and only four people (7.8%) responded that leasing is not a development option. Moreover, this situation is confirmed both by the research conducted by Vakhitov

Damir R. and Zamaletdinov Aidar (2015) on the position of using leasing as a form of financing, being a good tool for economic development, and by the research conducted by Firoiu et al. (2019). We also identified a part of these respondents (13.7%) who did not pronounce themselves on leasing as a component of company development.

Figure no. 7. Influence of operational leasing

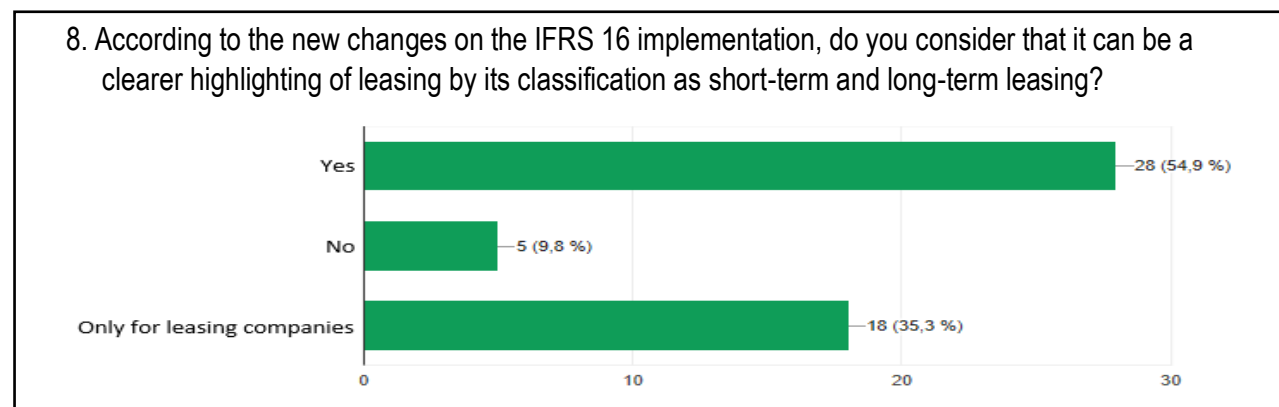


Source: Authors' processing, 2021

Figure no. 7 shows that operating leases should influence liquidity ratios as a result of the presentation of the lease on the balance sheet. Another part of the respondents also replied that they could not give an opinion, because they had not studied the economic and financial analysis in detail as well as the fact that they had not been directly interested in this aspect or were

still at university. We also have respondents who do not consider that the liquidity indicators should be affected, because the operating lease is an expense of the period. Feleagă and Feleagă (2007), by presenting the concept of true image, reinforces the information about how leasing as a form of financing is presented, so that the true image enjoys a high privilege.

Figure no. 8. Leasing classification

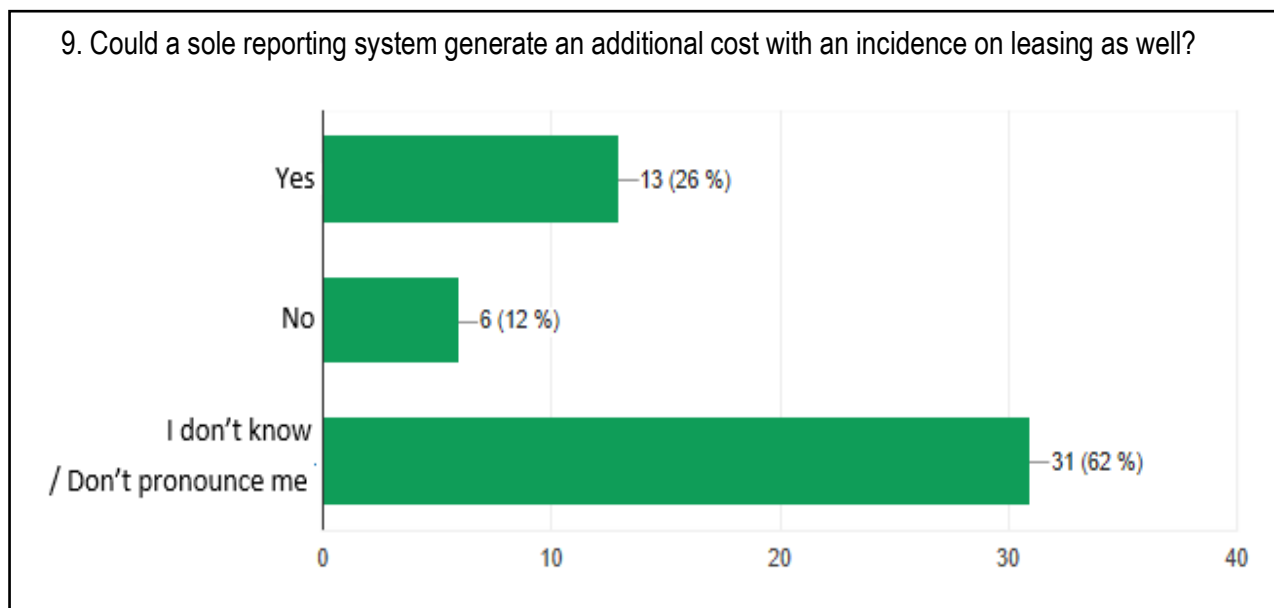


Source: Authors' processing, 2021

The change in the classification of leasing into short and long term has a percentage of 54.9%, which shows that in the development strategy of companies we also identify leasing as a form of financing. Moreover, we can consider that respondents want leasing to be presented in the balance sheet and developed in the explanatory notes for a more detailed understanding. 5.98% of them answered that it is not necessary to classify it by short

and long term, by analysing the liabilities in the balance sheet according to the repayment term. 35.3% of the respondents consider that this classification is necessary for companies whose business is the marketing of products or services by means of leasing, in order to highlight the leasing used according to daily activities, with the main objective of obtaining future economic benefits (*Figure no. 8*).

Figure no. 9. Cost incidence in reporting



Source: Authors' processing, 2021

In *Figure no. 9* are highlighted the answers to the question if a sole reporting system could generate an additional cost with an incidence on leasing as well. This question clearly shows that 62% of the respondents do not know/are not able to say whether an additional cost on leasing will arise. 26% of them believe that having only one reporting system will indirectly generate an additional cost due to the restatements that companies have to make. Moreover, after Romania's accession to the European Union, the development of an international reporting system was one of the basic conditions that Romania had to fulfil (Albu et al., 2014; Ionașcu et al., 2014). Only 12% of respondents believe that the cost of using

leasing as a form of financing will not increase as a result of using professional judgment.

Within this question we identify only 50 respondents, due to the fact that one person failed to provide an answer to this question.

Given the information presented above, the authors concluded, within the sample analyzed, that leasing is a factor of economic growth (Vakhitov Damir R. and Zamaletdinov Aidar, 2015) due to the fact that the vast majority of small and medium-sized enterprises have limited funding resources. Moreover, leasing as a manner of financing can be considered a starting point for developing the company's development strategy (Wei-Ting Chen et al., 2018), as well as risk appetite for shareholders (Albu and Albu, 2012).

Conclusions

Nowadays, a new stage in socio-economic development has begun. Globalization has had a major impact on the way of life as well as the functioning of countries, institutions, businesses and individuals (Pop and Valeriu, 2015; Lehtonen and Okkonen, 2016). The chase for wealth and power has fostered the emergence of a multitude of variants and movements that highlight the negative effects of globalisation.

Romania is one of the emerging countries in Central and Eastern Europe (CEE) which, after the fall of communism, has been part of numerous reforms in the field of accounting, with the main source of influence being the international environment (Albu et al., 2011). Romania's accession to the European Union as well as the desire to exhibit legislative efforts in the international area has favoured the national regulator to pursue the implementation of international standards and norms, such as accounting standards, auditing, corporate governance, reporting and regulation of the profession (Albu et al., 2014; Ionaşcu et al., 2014).

The company strives to achieve sustainability and efficiency at all levels. Governments, the private sector and the general public aim to operate in a sustainable and equitable society Wim Heijman (2016). The starting point in the evolution of society is the industrial revolution. Rapid technological development and the growth of GDP per capita have also fostered the emergence of a real challenge of modern history - globalisation.

Moreover, the trend towards globalisation has led the IASB to develop new accounting standards in which professional judgement was the main strength (Albu and Albu, 2012).

Among the variety of trends in the development of companies by increasing profits compared to previous periods, leasing is also mentioned as a form of financing. Leasing is based the company's strategy and policies by increasing revenues but also by decreasing costs compared to previous periods.

The use of leasing is necessary in the development of each sector of activity, as it does not require

blocking the sums of money needed to purchase products or services generating economic benefits and implementing new strategies for diversifying the supply of goods and services.

These strategies are also based on financial statements, and IFRS 16 comes to present leases on the balance sheet by classifying them into short-term leases and long-term leases.

The performance of a company can be analysed and evaluated, to some extent, based on how managers deal with stakeholders Wood (1991) and Clarkson (1995). Academic research has also focused on stakeholders, despite the fact that this concept becomes abstract when removed from the American cultural context (Damak-Ayadi et al., 2005).

According to Freeman (1984), stakeholders are "any group or person who can affect or is affected by the achievement of the organization's objectives".

Donaldson and Preston (1995) consider stakeholders as "individuals or groups with legitimate interests in procedural and/or substantive aspects of corporate activity". Also, Clarkson (1995) brings in discussion about groups or individuals who have "ownership, rights or interests" in a company. We believe that the definition offered by Bryson (1995) is much more developed, namely: 'an interested person is defined as any person, group or organisation that can place a claim on, or is affected by, the position, resources or outcome of an organisation. "

Analyzing the above information, we consider that leasing is a factor of economic growth, having as a starting point the company's development strategy, as well as the risk appetite of shareholders.

The limitations of the research concern the existence of a limited number of respondents used in the choice of the sample analyzed and their uneven distribution, according to the cardinal points, even if the respondents interviewed originate from different rural areas and their location is in the southern part of the country, mainly in Bucharest and the surrounding counties.

For future research studies, we propose an analysis of the elements that favour the use of leasing over other forms of financing such as bank loans, new capital contributions etc.

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