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Theses of the Doctoral (PhD) dissertation

***The productivity enhancing role of auditing
and its improvement in the
Hungarian SME sector***

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1. Introduction

Smoothly run auditing acts as a mirror for the enterprise. It takes a snapshot and also authenticates the mechanism of enterprise management and its processes. Running a business takes place on risky markets and in the changing environment. A well-established requirement of the owners and managers is to continuously assess the activity of the enterprise to see the results. The managing ability of the managers of micro, small and medium sized enterprises (hereinafter referred to as **SMEs**) can differ to a great extent together with the ability of ensuring the transparency of the entire process.

Enterprises may create and maintain internal defence systems to ensure their original operation in line with the objectives of their establishment so the auditing function is achieved even by small enterprises. Protecting assets, requiring the transparency of processes, accounting effective and efficient management, curbing on mismanagement or uncovering them etc. are prevalent everywhere in different forms. These functions are the instruments of value creation in-company by auditing and checking all the ongoing processes.

It serves the interest of society if the management of the enterprises is reliable, authentic and value creating.

The timeliness of the topic

The main objective of my research was to create new pieces of information in the field of auditing while the focus was placed on the Hungarian SME sector and interpreting auditing methods that can enhance but not guarantee productivity.

When choosing my research topic, relevant literature was also studied and ideas were gained from previous researches to identify the niche that has not at all or not widely been covered.

Fraud and corruption also affect SMEs and the timeliness of the topic is suggested by lack of control, lack of evaluations and auditing, lack of knowledge on internal auditing system or other shortages.

The harmful impacts of these shortages should not be suffered; rather, they should be prevented by exercising suitable controls. We should consciously prepare for them or explore them by means of auditing in order to contribute to the adequacy of entrepreneurial processes, its high standard execution and consequently, the total efficiency and productivity of the enterprise.

I started my own research years ago but the primary data presented in the dissertation was collected in 2017 in order to obtain recent and updated information.

By means of my research results I can directly apply for the call of 18 October 2017 in which a project was announced on enhancing the effectiveness of micro, small and medium sized enterprises as well as creating a national financial and entrepreneurial mentor programme. When based on my results I concluded that SMEs require direct support and mentoring, due to one of my interviewees, Péter Eözlös I came across with the announcement that is in line with my conclusions and justified the special timeliness of my research topic. The novel feature of my research lies in the following points.

- I. Internal (in-company) auditing methods are not widely known in Hungary and are not characterised by standard definitions. As far as I know, internal auditing features with a focus on SMEs have not been studied so far; and a complex study on this issue is very rare that would analyse the Hungarian micro, small and medium-sized enterprises.
- II. Developments that ensure efficiency, flexibility and productivity that are available for the Hungarian micro, small and medium sized enterprises are necessary. When establishing the new trends in enterprise development a new direction is the conscious creation, improvement and development of internal auditing methods at enterprises.

Objectives and hypotheses

The following objectives of the research were formulated.

O1: My objective was to examine the auditing methods used by the Hungarian SMEs and their supporting effect on management.

O2: My objective was to examine the importance and the influence of auditing areas on productivity in the case of the Hungarian SMEs.

O3: My objective was to examine the correlation between the extent of auditing SMEs and its effect on productivity.

The hypotheses strongly related to the objectives were drafted after reviewing and synthesizing the literature. The hypotheses of my research are as follows.

H1. The size of the enterprise influences the applicable auditing methods.

H2. The use of the given auditing methods and their supporting impact on management are correlated.

H3. Judging the importance of auditing methods significantly differs at certain SMEs.

H4. There is a statistical correlation between the judgement of the importance of different auditing methods and the fact whether they serve the running and the productivity of the enterprise.

H5. The extent of auditing and the judgement of the productivity of auditing correlate at the examined SMEs.

In the Literature review the previous research results on the topic were critically analysed that would make it possible to present the theoretical environment of the research and put it into a wider context. In line with the title of the dissertation the following areas called for the literature review.

- theoretical frameworks applied
- controls and auditing in management sciences
- internal auditing system
- independent internal auditing
 - internal auditing and controlling
 - internal auditing and bookkeeping
 - analysis on the situation of internal auditing
- reviewing productivity
- assessing SMEs and the brief description of their situation

In the title of my dissertation the general term of auditing was used in a sense that value is created by auditing the adequacy of managerial and internal auditing procedures (or lack of control mechanisms) and recommends improvements in order to meet corporate targets. Auditing is interpreted only in a sense of internal audit as the productivity of the enterprises is an internal category and external auditing is not directly aimed at enhancing productivity; rather, to expect and force a behaviour pattern to follow legal regulations. It was not the scope of my dissertation to analyse the system, organisations, methods, procedures, actors and regulations of public auditing.

Each control in the defence line has an auditing function in their area and also in the judgement of elements in the defence line ahead.

Material and methods

Hypotheses need to be systematically examined to decide on rejecting or accepting them and also to draw well-established conclusions in order not to accept anything mistaken or not in accordance with our previous beliefs, convictions or routines.

Material

After the literature review **quantitative data collection** was carried out in the form of **questionnaires** preceded by **qualitative professional in-depth interviews**. Interviews helped form relevant and well-established questions. Due

to the possible defects of the questionnaire the questions cannot be repeated within the time limit of the research and in the limited scope of it. Data collection was carried out online, electronically.

The objective of recording data is asking for information from the respondents on the situation of their internal auditing, on the basis of which the statements of my hypotheses were tested and conclusions were drawn on the basis of the research results.

Enterprises included in the research, the theoretical population

Micro, small and medium sized enterprises are in the centre of my research so it was not a prerequisite for filling in a questionnaire that the organisation should have a separate internal audit division, an independent internal auditor or an outside expert with internal auditing tasks. The research had its scope on profit oriented national SMEs.

Credit institutions, financial enterprises, insurance companies, non-profit business associations, joint ventures, social cooperatives, school associations and the Hungarian subsidiaries of enterprises with foreign headquarters were not in the scope of the research. As there are different legal regulations for certain enterprises, those under special regulations are not included in the database, either. In addition to this restriction no other enterprise was included or excluded from the examination on the basis of the activity and profile but, of course, the responses were categorised as the characteristics of enterprises.

No data were asked for on the basis of which the enterprise could have been identifiable to guarantee sincere responses, evaluations and feedback from a very confidential area, i.e. the situation of auditing and replies could not be influenced by any fear or revulsion due to identification. Data on SME characteristics were required (such as average statistical staff, the net revenue from sales and total balance sheet) on the basis of which the enterprise could be categorised as a micro, small or medium sized enterprise. Unfortunately, after 30 respondents data measured were proved not to bear any SME characteristics as they were large companies so these questionnaires were removed from the database and disregarded.

A decisive part of enterprises working in Hungary belongs to the SMEs sector. Within the SME sector the manpower efficiency of enterprises of a higher employee number, i.e. medium sized enterprises, is the best while that of micro enterprises lags behind and they are less productive. The low productivity of micro enterprises has a powerful impact on the entire sector as the micro classification makes up most of the SMEs as reflected by Table 1.

Table 1 The performance indicators of ongoing¹ enterprises per staff category (for 2016)*

category, person	enterprise, number	employees*, person	net revenue of sales, million Ft	income per capita, thousand Ft/person
0	5 907	–	89 401	–
1	474 781	474 781	5 389 179	11 351
2–9	177 206	620 162	12 549 075	20 235
10–49	29 870	565 287	16 335 862	28 898
50–249	4 950	487 312	18 288 363	37 529
250 and more	948	844 310	37 196 176	44 055
Total	693 662	2 991 852	89 848 055	30 031

* **without the financial and public administration industry**

Source: Central Statistical Office Data (STADAT) – time series annual data: 3.2.5. Author's own editing based on tables on the performance indicators of ongoing enterprises per staff category (2013–), https://www.ksh.hu/docs/hun/xstadat/xstadat_eves/i_qta001.html

According to their geographical position none of the enterprises was excluded from my analysis and such focus was not provided so the regional special features of enterprises were not explored.

The methodology used for the sampling methodology of available subpopulation

The growing economic weight of SMEs is reflected by the fact that this sector amounts to 99.1 percent of the national enterprises similarly to the EU average. Due to lack of primary database the primary objective of this exploring research was data collection that was carried out by simple accidental sampling. It was necessary to set the item number of the sample with regard to the refusal of responses in this confidential area in issues on auditing enterprises. Sudman's recommendation (1976; 87.p.) on sample size is a great help as presented by Table 2.

¹ Data quality: The statistics on **registered business organisations** include every entity with a tax number so there is no profile, revenue or employee number threshold for being included. The enterprise demographic statistics on **ongoing enterprises** disclose data on joint ventures and entrepreneurs in the register. The survey does not include individuals with a tax number and the budgetary as well as nonprofit organisations.
https://www.ksh.hu/apps/meta.objektum?p_lang=HU&p_menu_id=110&p_almenu_id=105&p_of_id=100&p_obj_id=QVD&p_session_id=36531062

Table 2 Typical sample size in the examination of institutional populations

Number of subgroup analysis	INSTITUTION	
	NATIONAL	REGIONAL
none or few	200 – 500	50 – 200
average	500 – 1 000	200 – 500
many	1 000+	500+

Source: author's own editing based on Sudman, S. (1976; 87.p.)

Subgroups were not formed; Hungarian SMEs on a national level are analysed so a 200-500- item sample was targeted, which was met. Of the 272 questionnaires received 30 were not valid and after getting rid of enterprises with no SME features, **242** enterprises were identified in the end.

Data were collected online, electronically in the form of a questionnaire. Enterprises could fill in the research questionnaire voluntarily with the greatest level of anonymity. The following sponsors published the questionnaire via national channels.

- Vállalkozók és Munkáltatók Országos Szövetsége (VOSZ) (National Association of Entrepreneurs and Employers)
- Magyar Számviteli Szakemberek Egyesülete (Association of Hungarian Accounting Experts)
- Magyar Könyvvizsgáló Kamara Oktatási Központja (Educational Centre of the Chamber of Hungarian Auditing)
- Menedzsment és Controlling Egyesület (Management and Controlling Association)
- Budapesti Gazdasági Egyetem (Budapest Business University)
 - on Budapest Business School LinkedIn website
 - on Munkaerő-piaci Kapcsolatok (Labour Market Relations) Facebook page
 - Munkaerő-piaci Kapcsolatok Iroda (Labour Market Relations Office) news
 - Partner organisation newsletter
 - further training websites and addresses
- (My own LinkedIn site, my own social media site)

Representativity and reliability

As the final result, the hypotheses were tested on the basis of 242 questionnaires filled in by the enterprises. This low number of units in the sample still exceeds the units of the samples on internal auditing and compliance on a similar topic but not on similar companies between 2007 and 2017.

Methodology

The research was carried out in a way suggested by the specialist literature. Moreover, special attention was paid on using the most suitable statistical methods to assess the results. The applied instruments of research methodology were suited to my hypotheses and the data of the primary database from the questionnaires.

Qualitative research

Prior to the questionnaires several rounds of in-depth interviews were conducted as part of the qualitative research. No previous information at all or just slight information was available on the examined phenomenon, i.e. the internal auditing of the Hungarian SMEs. That is why unstructured, flexible, exploratory in-depth interviews with auditing specialists, experts and SME owners/managers were considered justified to get to know and obtain new information. Within a year twenty in-depth interviews were conducted with interviewees directly linked to my research topic, which broadened my point of view and my knowledge on internal auditing to a great extent.

In marketing literature (Malhotra, 2001) qualitative methods are counted as preliminary methods of quantitative research that mostly include focus group examination and in-depth interviews and which are not able to establish research results or conclusions on their own. In my opinion there are a lot of ways of scientific analysis: both qualitative and quantitative that collect data systematically and evaluate them critically.

In my interviews I intentionally selected my interviewees in contrast with accidental sampling technique to deeper understand the research topic by means of targeted or theoretic search.

In my qualitative interviews the guidelines of the talk were fixed and traced down so the new direction was taken by the interviewees. My questions from the research questionnaire were asked that were supplemented and the response to the closed questions were multiplied and made more accurate.

In-depth interviews took approximately 1-5 hours. After recording notes were taken, then finalised and used in my dissertation with the consent of the interviewees.

Quantitative research

In my research data were recorded basically by a questionnaire containing predominantly closed and some open questions with a total number of 28 questions. The full version of the questionnaire is presented in Appendix M4.

Responses were measured by ordinal (5-grade Likert scale) and ratio scales that define the mathematical and statistical operations allowed.

On 17 September 2017 collecting the questionnaires was stopped. This primary database serves as the basis for quantitative research. An Excel database was compiled from the answers of the questionnaire on the basis of which the graphic display of descriptive statistics was carried out. The data of the Microsoft Excel database were examined in SPSS programme package while searching for an answer to my question.

The applied methods for analysis include

- Pearson's Chi square (χ^2) test
- Cramer's association coefficient
- Factor analysis
- Cluster analysis

3. New and novel scientific results

The results of my exploratory research were formulated on the basis of the responses of 242 SMEs together with the findings of the in-depth interviews.

Typically, respondents of the questionnaire are owners while most information was revealed by the accountants. The reason for this can lie in the fact that the first thought was to involve accountants in the process when filling in the statistical data and the numerical characteristics of the enterprise in the first part of the questionnaire as they are regarded to be authentic from this aspect so filling in the questionnaire could be delegated by the owner.

Service providers and commercial units made up the greatest part of the respondents so it can be stated that my primary data mainly characterise service providers and commercial units. This is going to be of vital importance from the aspects of their instruments used for auditing and some auditing areas of high importance, which are analysed in the forthcoming subchapters. However, the analysis broken down in industries is not important considering the fact that my research is directed at Hungarian SMEs and the industrial breakdown was out of the scope of the dissertation.

It turns out from the descriptive statistics of the metric data that micro enterprises are the youngest of the enterprises analysed in the research and the establishment of medium sized enterprises stretches back to the earliest period of the examination. Due to checking on SME categorisation it was compulsory to answer about the average statistical number of employees. Although the average employee number is 30, microenterprises are decisive of the participants. The average amount of net revenue per capita is 378 103 thousand Ft per capita².

In my research I also wanted to find an answer to the question of **what actors are placed in the defence line of the enterprise by the responding SMEs**, so the question was asked in general for though provoking purposes and afterwards, by listing these actors decision had to be made how it is implemented in the practice of the enterprise. In my opinion all listed actors and functions are part of the defence line. In most of the cases more respondents were willing to answer questions on general knowledge while the willingness of responding was lower in the case of questions on implementation at their own enterprise. The reason of this could be that a question on the internal audit of SMEs is much more personal and has a higher content of sensitive information than general knowledge questions. A similar correlation can be detected regarding the fact that while in general a person or a function was listed as part of the defence line by the respondents, they were less willing in responding to questions on implementation or auditing in their practice that they actually make use of the defence line.

² The revenue of the 242 enterprises included in the examination was 2 782 834 620 thousand Ft, total number of employees 7360, so the per capita revenue amounts to 378 103 thousand Ft/capita.

The major actors of the defence line, according to the respondents, include managers (88%), internal auditors (86%), auditors (83%), owners (79%), controllers (77%), external auditors (77%) and bookkeepers (72%). In contrast, in their practice and auditing solutions perceived internal auditors (54%), bookkeepers (61%), controllers (48%) and external auditors (51%) are significantly underrepresented of these actors. I reckon in connection with the employment and commissioning of internal auditors that in general, respondents think they belong to the defence line but typically there are no legal regulations on creating a compulsory independent internal audit so they characterise very few responding enterprises, not even half of them. The situation is similar concerning the image and the real employment of auditors. In the case of legal regulations they make use of this defence line option by asking for independent auditing opinion and report.

Controlling is very popular with the public but the 48% participation of controllers in the defence line of the responding enterprises came as a great surprise. However, when assessing the results of the in-depth interviews this low proportion is not surprising as controlling reports, decision support and advisory as a function can be expected from many actors, such as the owners themselves, the managers, bookkeepers etc. Even if not exactly special controlling expertise is required, our first thought is controlling to raise the certainty level. Eighty four percent of the respondents think that controlling has at least mid-position in internal auditing so the 48% participation of controllers in the defence line highlights that controlling functions are performed by not only these specialists.

It can be stated that 70% of the responding SMEs think that controls strongly support the management by giving rather typical „4” and very typical „5” values. **All this justify the importance of defining the auditing functions and methods that support managerial functions to the greatest extent.**

Although it was not compulsory to answer, 97.5 % (n=236) of the enterprises accounted **whether there was a supervisory or official auditing sanction at the enterprise** and 24% gave an affirmative reply but only 28 enterprises were fined. The need for creating conscious, well-established and regular internal auditing often derives from a former negative official statement on an error or shortage and severe sanctions so that is why this question was of crucial importance.

In my research I also asked (n=242, Q23) which factor posed a challenge in the activity of their organisation that calls for a more intensive form of internal auditing. The necessity of internal auditing was mentioned as a somehow typical, rather typical and very typical reason by more than 50% of the respondents due to increasing owner and managerial expectations, which is an issue to consider and echoes the findings of the in-depth interviews. Due to the changing legal environment 60% of the respondents regard the more and more popular internal auditing typical.

At the end of the questionnaire I asked if **in general, they think that internal auditing has helped the operation of the enterprise**, improved the resource management of the enterprise and increased or decreased its efficiency. In this question the sample only included 82 enterprises, which is only one-third of the responding SMEs. However, in their replies their feedback reflected the obvious usefulness of internal auditing as supporting and providing services to the enterprises by serving as an assistant to their operation, managing their resources more successfully and operating them more effectively. More than 50 percent of their replies reported on its improving and highly improving function.

The examinations and evaluations at the end of my research helped emerge **several new and novel scientific results**.

In the following part the most important theses are presented in line with the hypotheses formulated in the introductory part of the dissertation (Table 3).

T (1) The auditing instructions typically applied by the SMEs due to their micro, small and medium size were identified by correlation analyses. I have proved a statistical correlation between the size of the enterprise and the auditing methods applied in the case of 17 of the 27 auditing instruments above.

The auditing methods gained as a result include

1. profitability control – how much minimum collateral is necessary for bidding
2. using document management systems
3. automated self-correcting procedures in IT systems
4. documentary controls
5. management meetings, workshops
6. customer care and client satisfaction inspections
7. evaluation and classification of customers and suppliers
8. temporary accounts (reports) on cost formation
9. underwriting rights, approval controls
10. quality control
11. commissioning consultants and experts to reach a higher certainty level
12. inventory (stocks), itemised counting, measuring
13. sampling
14. monitoring processes
15. business analyses, modelling, simulations, scenarios
16. checking IT access permissions
17. IT and physical protection of entrepreneurial data, reports, accounts and knowledge base.

T (2) By means of correlation analyses it was concluded that the use of the auditing methods concerned and the assessment of these controls to support the

management are related. There is a statistical correlation between the usefulness of controls, their assessment as management support instruments and whether they are used by the enterprise. Based on this, it can be stated that these methods support the management to the greatest extent. As a result of my examination I could identify the most important auditing methods, managerial controls that were regarded as supporting and useful by the enterprises.

The auditing methods gained as a result include

1. use of the document management system
2. performance appraisal of employees
3. temporary accounts (reports) on cost formation
4. underwriting right, approval controls
5. quality control
6. document based follow-up control
7. business analyses, modelling, simulations, scenarios

T (3) I have proved that assessing the importance of auditing methods significantly differs at the SMEs. On the basis of the results **two factors can methodically be differentiated** and they were termed on the basis of their main characteristics as follows.

1. The factor of the importance of the traditional auditing methods, including
 - the examination of production and inventory
 - the examination of the procurement process
 - the examination of cash flow and liquidity management
 - enterprise resource planning
 - the examination of fraud prevention
 - the examination of outsourced activities
 - the examination of accounting and taxation areas
2. The factor of the importance of IT checking areas, including
 - IT system control
 - cyber and IT safety control
 - the examination of information safety, data protection, data management
 - the examination of digital channels

Cluster analysis was carried out by using the centroid methodology based on the factors. The six-six groups gained by hierarchical cluster analysis were given fancy names and characterised based on their position in the matrix.

„**Control conscious**” were given this name as they stressed the importance of both auditing areas, i.e. the traditional and the IT areas.

„**Minimalists**” predominantly assess traditional methods as of less importance and operate these controls at a minimum level but they are not happy to see the more knowledge intensive, new auditing methods.

„**Without interest**” forms the group for whom none of the auditing methods is important and they are totally indifferent so they presumably do not apply any controls at all.

„**Conservatives**” are the group in which most SME representatives, i.e. 35.12% of the enterprises concerned state that the traditional auditing methods are of high importance while they do not prefer the IT based and more modern auditing methods to such a great extent.

„**Paper free**” refers to the fact that they are not at all interested in traditional auditing methods but they regard the IT and modern areas very important.

„**Indifferent**” are the second biggest group of entrepreneurs who would rather leave the traditional auditing methods and prefer the more modern IT auditing areas.

T (4) On the basis of the results of my third hypothesis test and a similar purpose (O2) I have added my fourth hypothesis but by examining important and relevant auditing areas even the correlations of their effects on productivity are demonstrated. Based on the χ^2 test there is a **significant relationship** between the usefulness of the groups and auditing and their impact on the total efficiency and productivity of the enterprise.

T (5) Regarding controls I have statistically proved that a statistical correlation exists between the extent of auditing and the assessment of the productivity of auditing at the examined SMEs.

Table 3 The new and novel scientific results of the research

OBJECTIVES	HIPOTHESIS	New and novel scientific results
O1: To examine the auditing methods used by the Hungarian SMEs and their supporting effect on management.	H1. The size of the enterprise influence the applicable auditing methods	T (1) There is a statistical correlation between the size of the enterprise and the auditing methods applied.
	H2. The use of the given auditing methods and their supporting impact on management are correlated	T (2) There is a statistical correlation between the usefulness of controls, their assessment as management support instruments and whether they are used by the enterprise. Based on this, it

		can be stated that these methods support the management to the greatest extent.
O2: To examine the importance and the influence of auditing areas on productivity in the case of the Hungarian SMEs.	H3. Judging the importance of auditing methods significantly differs at certain SMEs.	T (3) I have proved by factor and cluster analysis that assessing the importance of auditing methods significantly differs at the SMEs.
	H4. There is a statistical correlation between the judgement of the importance of different auditing methods and the fact whether they serve the running and the productivity of the enterprise.	T (4) Based on the χ^2 test there is a significant relationship between the usefulness of the groups and auditing and their impact on the total efficiency and productivity of the enterprise.
O3: To examine the correlation between the extent of auditing SMEs and its effect on productivity	H5. The extent of auditing and the judgement of the productivity of auditing correlate at the examined SMEs.	T (5) Regarding controls I have statistically proved that a statistical correlation exists between the extent of auditing and the assessment of the productivity of auditing at the examined SMEs.

Source: author's own editing

4. Conclusions and recommendations

The role of the SME sector is undoubtedly significant in enhancing Hungary's competitiveness, creating and maintaining jobs. In Hungary's economic structure SMEs dominate so without the development of these decisive economic players the development of the entire country would be impossible. The objective is to reach active, innovating, self-supporting and job creating attitudes.

My conclusion in parallel with the EU's intention is that the competitiveness of this dominant sector, i.e. that of SMEs has to be improved and one of the methods could be performance enhancement. An excellently governed, controlled SME that continuously supervises the existence and effectiveness of controls will be able to fulfil its mission of economic, employment and innovation boosting potential. Hungarian enterprises were forced to be established at the regime change and they could hardly stay alive or stopped existing and the business culture that is necessary for expansion has been naturalised only by few of them. This gap was meant to be filled in by the government call that makes available financial culture and sources for financing, development and economic boost through direct support and mentoring. For this purpose my paper is also recommended as I think that **financial auditing, internal auditing and representing the owners' and managers' interests also belong to the development of financial culture** so that the SME exposed should not be so vulnerable.

I assume the central economic political concept of working out development programmes to enhance the competitiveness of SMEs is of vital importance. The most typical of them is Entrepreneurial Mentor Programme, which is also the most relevant one for my dissertation. In this mentor programme available nationally and under standardised conditions built on the existing mentoring, development, training and counselling organisations in order to meet the development objectives, the successful enterprises, i.e. mentors, assist the micro, small and medium sized enterprises.

The criteria of being a mentor in terms of professional background is minimum 5 years of entrepreneurial experience, knowledge of operating micro and small enterprises and social capital as described by the Methodological Handbook of the Entrepreneurial Mentor Programme. The **task of auditing** appears among the thorough and concrete tasks of the mentor, but, at the same time, it only means harmonising joint work, checking activities, relationships etc.

The mentor's successful entrepreneurial experience of minimum five years in itself is not enough to guarantee familiarising the special auditing methods and instruments that have not probably been practised.

I recommend the inclusion of auditing experts in mentoring with the help of whom a auditing conscious way of thinking may be established together with the

need for cost efficient auditing mechanisms due to which entrepreneurs can request professional assistance in the future.

I wish to emphasise again that in my view auditing ability and needs for auditing are part of financial culture. Internal auditing serves immediate interests. The object of internal auditing depends on the intention of the supervisors which is more flexible and less restricted in this sense. The utilisation, i.e. the feedback of the results can also stay within the internal, entrepreneurial borders. The owner and/or manager can do anything not forbidden by law (Vígvári, 2002).

During my interview Péter Salamon, auditing expert put forward an idea similar to mine: „There are countries where internal auditors may be required from an organisation corresponding to IIA³ ...”

The chair of the Budgetary Council, Árpád Kovács (the former head of the State Audit Office of Hungary) stated at the annual conference of the Association of Hungarian Financial Business Auditors this year that the Hungarian state should pay more attention on developing **competitiveness** as a turning point here may result in a serious international breaking out opportunity for the economy (Lengyel, 2017).

On the basis of the qualitative and quantitative results the following recommendations are made.

1. Regarding document management system it is recommended to consider the fact that those who do not use it but satisfied may not use it because they are not familiar with this opportunity, auditing method and there was no one to show it to them (they need mentoring, direct assistance in using auditing methods and auditing culture) but only in the case of cost effectiveness. .
2. In connection with temporary accounts, reports, controls and checks on cost formation I recommend that a bit more than 20% of the responding enterprises that do not use it due to their size or lack of knowledge should be supported in getting acquainted with the useful control methods and their local application by personal mentoring while presenting their direct use.
3. Those applying quality control regularly think of controls as management support devices while being typically satisfied with them with a point of 4 on the scale. If it is true, then the enterprises are highly recommended to write down their processes and not to break down their flexibility and quick reactions, rather, by making them more controllable from a qualitative aspect. If this does not mean an excessive control, great profit can be expected after carrying out these processes at a high standard while meeting the requirements.
4. As a further development, it would be advisable to think over the reform of chartered accountant training. Controlling with IT support could be part of the compulsory material which would mean decreasing manual analytical

³ The Institute of Internal Auditors

processes. The students of the training would like to be acquainted with controlling software and, as a result, their accounting service provided for SMEs could be complemented by essential and regular reports. Furthermore, the training and personal mentoring of owners and managers is also a viable solution as they will be able to interpret controlling reports.

5. The continuous control of solvency, liquidity which does not by all means mean that liquidity is checked by an accountant but as has been said in the in-depth interviews SMEs would like to obtain a lot of decision supporting and updated information from accountants, which is not always possible especially in the case of outsourced activities where contacts are not kept on a daily basis.
6. In developing my research topic and continuing my research more qualitative research methods would be welcome, especially narrative technique and case studies. The auditing system and the internal auditing of SMEs cannot be described by one general characteristic so it would be worth including as many narratives and analysable and useful entrepreneurial cases as possible in the range of research methodology. The narrative approach makes it possible to see a problem closer together with its possible solution and result applicable in practice in the future. According to Reason (1981) the stories that move the human heart and soul in addition to mind are the best by providing a new opportunity for us to think over our problems. A challenge of sciences is whether they are capable of telling good stories.

Case studies are applicable when the researcher has little control over the events that he would like to understand in a real environment so the general questions are 'how' and 'why' to which answers are sought.

I feel both the narrative and case study methods appropriate so I would definitely like to use them in my future research to supplement the quantitative data and results with these qualitative techniques. I believe that these trends and research paradigms can exist side by side; rather, they can complement each other.

A possible direction of my future research is the introduction of some auditing methods or instruments and the detailed presentation of their operation by using case studies. In addition to expressing costs, expenses, additional contributions numerically, a narrative approach could be used with the SME owners to measure the subjective elements that express to what extent the development of their internal control system means intervention aimed at improving efficiency, real gains and assistance. The spearheading, innovative SMEs with excellent rate of development can become the growth engines of innovation by showing examples and assisting those who lag behind.

A multidisciplinary approach could also be useful in the examination for example, by including aspects of business psychology, business sociology, information technology and human sciences.

5. Summary

The main objective of my research was to create new pieces of information in the field of auditing while the focus was placed on the Hungarian SME sector and interpreting auditing methods that can enhance but not guarantee productivity.

The synonyms of productivity include enhanced performance, efficiency, productiveness, ability to perform, creativity, fruitfulness, re-productiveness, creative power.

While inserting the word productivity in the title of my dissertation I wanted to achieve that any, or at least, all the Hungarian equivalents of the term should come into the mind of the readers. I exactly think that there are countless beneficial effects of the internal audit of enterprises and their auditing methods on their operation and operational efficiency as well as future development, which are also reflected by the multitude of synonyms for productivity.

My research was started years ago and primary data were collected in 2017 to obtain timely and relevant information. I have been teaching business auditing and analysis in higher education and I also performed some advisory and accounting work to SMEs so in my opinion I can see their internal problems well. I have been searching for a niche that has not been revealed by others or which has not been searched before, or, at least, not from the aspect on the basis of which my dissertation has been completed.

The stages of my research were organised as expected by considering all the format and content criteria as well as methodological expectations. After the literature review the materials and methods of my own research are presented. Quantitative data were collected and also qualitative features were added in the form of in-depth interviews to make the process of my PhD research richer and more informative.

The new and novel features of my research lie in the fact that as far as I know the internal auditing methods with a focus on SMEs have not been studied so far; and a complex study on this issue is very rare that would analyse the Hungarian micro, small and medium-sized enterprises.

In the Literature review part attention is drawn to the government initiative that designates similar areas for development in the SME sector to my research objectives in order to enhance their efficiency by typically reaching the entrepreneurs directly and individually. Its topic is raising awareness of the financial culture of the SME sector by using the method of mentoring and creating continuously available and updated databases with relevant information. In my opinion financial auditing, corporate internal auditing, internal controls and the need for feedback are all part of financial culture, so there are a lot of things to be improved in terms of the internal auditing and auditing of SMEs, which has been proved by the chapters on my research results in the dissertation.

There is a need for measures aimed at flexibility, efficiency, availability and enhanced performance for the Hungarian micro, small and medium-sized enterprises. While shaping the trends in enterprise development a new idea is the conscious creation, improvement and development of internal auditing.

All of my hypotheses in connection with my research objectives can statistically be justified. My primary research is basically a snapshot of the current situation of the minor ones based on 242 items.

My conclusions and recommendations made me think again and I tried to establish recommendations for development that are really worth considering and implementing. After the synthesis I felt very satisfied to have made my dissertation on this topic.

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