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English title: “Professional skepticism and judgment biases in auditing - issues related to the human factor”

Polish title: „Sceptycyzm zawodowy i błędy w osądach w audycie – zagadnienia związane z czynnikiem ludzkim”

**Master’s thesis**

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Poznań 2022

## Spis treści

Streszczenie .....	6
Wstęp .....	8
Rozdział 1 .....	10
1.1 Sceptycyzm w filozofii – pierwsi sceptycy .....	10
1.2 Etymologia sceptycyzmu .....	12
1.3 Poglądy Arystotelesa odnośnie sceptycyzmu .....	13
1.4 Sceptycyzm przedstawiony przez szkołę pyrhońską .....	15
1.5 Podsumowanie .....	19
Rozdział 2 .....	20
2.1 Sceptycyzm zawodowy – niejasna i niejednoznaczna definicja zawarta w przepisach i wypracowana w badaniach naukowych .....	20
2.2 Cechy zawodowego sceptycyzmu .....	29
2.2.1 Powątpiewanie .....	29
2.2.2 Wstrzymywanie osądu .....	30
2.2.3 Poszukiwanie wiedzy .....	31
2.2.4 Zrozumienie interpersonalne .....	31
2.2.5 Autonomia .....	32
2.2.6 Pewność siebie .....	33
2.3 Różnice między sceptycyzmem zawodowym, sceptycznym działaniem, a sceptycznym osądem .....	33
2.4 Znaczenie profesjonalnego sceptycyzmu .....	37
2.5 Konsekwencje braku zachowania zawodowego sceptycyzmu .....	37
Rozdział 3 .....	41
3.1 Prezentacja dotychczasowych badań nad sceptycyzmem zawodowym .....	41
3.2. Model zaprojektowany przez Kathy Hurtt w 2010 roku (HPSS) .....	42
3.2.1. Podstawowe informacje o Hurtt .....	42
3.2.2. Podstawowe założenia modelu Hurtt .....	42
3.2.3. Główne kroki w tworzeniu modelu Hurtt .....	43
3.2.4. Wyniki badań .....	44
3.3. Nelson prezentacja modelu inversed of the Rotter Interpersonal Trust scale – RIT .	45
3.3.1. Podstawowe informacje o Nelsonie .....	45

3.3.2. Sposób rozumienia przez Nelsona zawodowego sceptycyzmu .....	45
3.4. Neutralność kontra domniemana wątpliwość – porównanie modelu odwróconego RIT Nelsona i modelu HPSS Hurtta .....	50
Rozdział 4 .....	53
4.1. Wprowadzenie do badań .....	53
4.2. Instrument badawczy .....	55
4.3. Dane demograficzne i zawodowe badanych osób .....	61
4.3.1. Zróznicowanie płci badanych podmiotów .....	61
4.3.2. Struktura wiekowa badanych osób .....	62
4.3.3. Struktura doświadczenia zawodowego badanych osób .....	63
4.3.4. Zróznicowanie badanych podmiotów pod względem wielkości firmy, w których pracują .....	64
4.3.5. Roczna liczba audytów przeprowadzonych wśród badanych podmiotów .....	65
4.4. Wyniki i wnioski z ankiety .....	66
4.4.1 Płeć .....	66
4.4.2 Wiek .....	67
4.4.3. Doświadczenie zawodowe w audycie .....	69
4.4.4. Wielkość firmy pod względem wielkości zatrudnienia .....	71
4.4.5. Roczna liczba przeprowadzanych badań sprawozdań finansowych .....	73
4.5 Wnioski.....	75
4.6 Ograniczenia i zalecenia .....	76
Załącznik 1 .....	78
Bibliografia .....	93
Wykaz rysunków .....	98
Wykaz tabel .....	100
Wykaz załączników .....	101

## Table of contents:

Streszczenie.....	6
Introduction .....	8
Chapter 1.....	10
1.1. Skepticism in philosophy – first skeptics .....	10
1.2. Etymology of skepticism.....	12
1.3. Aristotle’s beliefs .....	13
1.4. Skepticism presented by Pyrrhonian school .....	15
1.5. Summary .....	19
Chapter 2.....	20
2.1. Professional Skepticism – unclear and ambiguous definition included in regulations and worked out in academic research.....	20
2.2. Characteristics of Professional Skepticism .....	29
2.2.1. Questioning mind .....	29
2.2.2. Suspension of Judgement.....	30
2.2.3. Searching for knowledge .....	31
2.2.4. Interpersonal Understanding.....	31
2.2.5. Autonomy .....	32
2.2.6. Self – esteem.....	33
2.3. Difference between Professional Skepticism, Skeptical Action, and Skeptical Judgement ...	33
2.4. The importance of Professional Skepticism .....	37
2.5. Consequences of failure to apply the professional skepticism.....	37
Chapter 3.....	41
3.1. The presentation of existing research on professional skepticism.....	41
3.2. Model designed by Kathy Hurtt in 2010 (HPSS) .....	42
3.2.1. The basic information about Hurtt .....	42
3.2.2. Basic assumptions of the Hurtt model.....	42
3.2.3. Major steps in creating a Hurtt’s model .....	43
3.2.4. The results of the research.....	44
3.3. Nelson the inversed of the Rotter Interpersonal Trust scale – RIT.....	45
3.3.1. The basic information about Nelson.....	45
3.3.2. Nelson’s understanding of Professional Skepticism description .....	45

<b>3.4. Neutrality versus Presumptive doubt - the comparison of Nelson’s inversed-RIT model and Hurtt’s HPSS model.....</b>	<b>50</b>
<b>Chapter 4.....</b>	<b>53</b>
<b>4.1. Introduction to the research .....</b>	<b>53</b>
<b>4.2. The research instrument. ....</b>	<b>55</b>
<b>4.3. Demographic and professional data of researched subjects .....</b>	<b>61</b>
<b>4.3.1. The gender diversity of researched subjects .....</b>	<b>61</b>
<b>4.3.2. The age structure of the researched subjects .....</b>	<b>62</b>
<b>4.3.3. Experience structure of the researched subjects .....</b>	<b>63</b>
<b>4.3.4. The diversification of researched subjects in terms of the size of the company in which they work for. ....</b>	<b>64</b>
<b>4.3.5. The annual number of audits carried out among researched subjects .....</b>	<b>65</b>
<b>4.4. The results and conclusions of the questionnaire.....</b>	<b>66</b>
<b>4.4.1. Gender.....</b>	<b>66</b>
<b>4.4.2. Age .....</b>	<b>67</b>
<b>4.4.3. Experience in auditing .....</b>	<b>69</b>
<b>4.4.4. The size of the company in which you are working in terms of the size of employment</b>	<b>71</b>
<b>4.4.5. The annual number of audits that participants conduct .....</b>	<b>73</b>
<b>4.5. Conclusions .....</b>	<b>75</b>
<b>4.6. Limitations and Recommendations .....</b>	<b>76</b>
<b>Attachment I .....</b>	<b>78</b>
<b>References: .....</b>	<b>93</b>
<b>List of Figures: .....</b>	<b>98</b>
<b>List of Tables: .....</b>	<b>100</b>
<b>List of Attachments:.....</b>	<b>101</b>

## Streszczenie

Sceptycyzm zawodowy, jako wymagana cecha biegłych rewidentów, jest wymieniany w regulacjach prawnych i standardach kontroli. Zarówno ustawodawcy, jak i naukowcy są zgodni, że wszyscy biegli rewidenci powinni wykazywać wysoki poziom tej cechy. Ale czym właściwie jest zawodowy sceptycyzm? Skąd audytor może mieć pewność, że jego zawodowy sceptycyzm jest na akceptowalnym poziomie? Jak zmierzyć zawodowy sceptycyzm?

Celem pracy jest zaprezentowanie i przetestowanie samodzielnie zaprojektowanego modelu do pomiaru poziomu sceptycyzmu zawodowego rozumianego zarówno jako cecha, jak i stan. W tym celu dokonałem przeglądu literatury dotyczącej rozważań filozoficznych na temat tego, czym jest sceptycyzm, który przedstawiam w rozdziale pierwszym. Pozwoliło mi to lepiej zrozumieć znaczenie tego terminu poprzez powrót do jego pierwotnej wersji. W kolejnym rozdziale przedstawiłem dotychczasowe znaczenie sceptycyzmu zawodowego w ustawach i publikacjach naukowych. W tej części wyjaśniłem również różnicę między neutralnością a domniemanym zwątpieniem. Przeprowadziłam również wywiady z praktykami (biegłymi rewidentami), aby zobaczyć, jak oni rozumieją zawodowy sceptycyzm. Rozdział trzeci poświęcony jest opisowi dotychczas przeprowadzonych badań. Obejmuje on prezentację sposobu rozumienia zawodowego sceptycyzmu przez Kathy Hurtt oraz jej modelu opracowanego do pomiaru zawodowego sceptycyzmu rozumianego jako neutralność (model HPSS), poprzez badanie cech charakteru audytora. Następnie przedstawiłem badania Nelsona: odwrócony model RIT i sposób, w jaki rozumie on zawodowy sceptycyzm. Ostatnia część trzeciego rozdziału to porównanie modelu odwróconego RIT Nelsona z modelem HPSS Hurtt na podstawie badań Quadackers, Groot i Wright z 2012 roku. W tej części można znaleźć wyjaśnienie, który model (Hurtt czy Nelsona) jest bardziej rzetelny. W czwartym rozdziale przedstawiłem własny model, za pomocą którego można zmierzyć zawodowy sceptycyzm. W przeciwieństwie do modeli opracowanych przez Hurtt i Nelsona, mój model umożliwia pomiar sceptycyzmu zawodowego nie tylko przez pryzmat cech audytora, ale zwraca także uwagę na jego stan emocjonalny i nastrój, jakie towarzyszą biegłemu rewidentowi podczas badania

sprawozdania finansowego. Rozdział ten zawiera również wyniki przeprowadzonej przeze mnie ankiety oraz wnioski z niej wyciągnięte. Podsumowaniem rozdziału czwartego, jak również podsumowaniem całej pracy magisterskiej, są rekomendacje do dalszych badań i wskazanie ograniczeń, z którymi się zetknąłem.

Niniejsza praca magisterska dotyczy tematu nie tylko aktualnego, ale również bardzo ważnego z punktu widzenia badania sprawozdań finansowych. Ze względu na to, że zachowanie odpowiedniego poziomu sceptycyzmu zawodowego podczas audytu jest niezbędne w pracy biegłego rewidenta, praca ta powinna być pomocna dla audytorów i firm audytorskich zarówno w Polsce, jak i na świecie. Opracowany przeze mnie model pozwala zmierzyć poziom sceptycyzmu zawodowego rozumianego zarówno jako cecha, jak i stan biegłego rewidenta. W konsekwencji może przyczynić się do poprawy jakości przeprowadzanych rewizji i wzrostu zaufania do rynku finansowego.

## Introduction

Professional skepticism, as a required auditors' trait, has been mentioned in all legal regulations, and auditing standards. Both legislators and academics agree that all statutory auditors should demonstrate a high level of professional skepticism. But what exactly the professional skepticism is? How can the auditor be sure that his professional skepticism is at an acceptable level? How to measure professional skepticism? These questions remain unanswered.

The purpose of this work is to develop and test a model to measure the level of professional skepticism understand both as a trait and as a state. To do this, I have reviewed the literature on ancient philosophical deliberations on what skepticism is that has been presented in chapter one. It allowed me to better understand the meaning of the term by going back to the roots. In the next chapter I have presented the existing meaning of professional skepticism according to legal acts and scientists. In this part, I also explained the difference between neutrality and presumptive doubt. I also interviewed practitioners (statutory auditors) to see how they understand professional skepticism. The third chapter is devoted to the description of the research carried out so far. It includes presentation of Kathy Hurtt's way of understanding professional skepticism and her model developed to measure trait professional skepticism understand as a neutrality (HPSS model). Afterward, I presented Nelson's research: inversed RIT model, and the way how he understands professional skepticism. The last part of the third chapter is a comparison of Nelson's inversed-RIT model and Hurtt's HPSS model based on Quadackers, Groot, and Wright's research from 2012. In this part can be found an explanation which model (Hurtt's or Nelson's) is more helpful to examine an auditor's professional skepticism. In the fourth chapter, I presented an own – developed model whereby professional skepticism can be measured. In contrast to models developed by Hurtt and Nelson, my model focus on both professional skepticism understand as a trait and as a state. As a consequence, to define the level of auditor's professional skepticism my model takes into consideration not only auditor's traits but also auditor's state and mood during conducted audit. This chapter also includes the results of the questionnaire I conducted and



the conclusions drawn from it. The summary of chapter four, as well as the summary of the entire master's thesis, are recommendations for further research and limitations that I encountered.

This master thesis deals with the topic not only current, but also very important from the point of view of auditing financial statements. Due to the fact that maintaining an appropriate level of professional skepticism in the audit of financial statements is essential in the work of the auditor, the work should be helpful for statutory auditors and audit firms both in Poland and all over the world. The model I developed allows to measure the level of professional skepticism understood both as a trait and as a state. As a consequence, it may contribute to the improvement of the quality of the conducted audits and increase of confidence in the financial market

## Chapter 1

### 1.1. Skepticism in philosophy – first skeptics

Humans since the dawn of time have seen the importance of doubting attitude and skepticism even if they could not define it. First mentions and tries to understand what skepticism exactly is and how crucial it is, can be found in ancient Greek philosophy. Hellenistic thinkers developed two main conclusions:

- 1) there is no such thing as certainty in human cognition and reasoning, hence no knowledge was possible;
- 2) there is no evidence sufficient and adequate to conclude any knowledge with certainty, hence definitive judgments must be suspended.

Both of these conclusions presented above have become the background to develop two main ancient skeptical views: Academic and Pyrrhonian (Popkin, 2003). Academic skepticism is strongly related to the Platonic Academy where it was formed. As the beginning of this school can be found the most famous Socratic conclusion: “All I know is that I know nothing” in the third century B.C. In the opposite of Stoic, who found that they know some truth about the nature of things, academics believed that nothing that people know can be confirmed for sure. In their opinion conclusions based on information processed by our senses are unreliable, we do not always act reasonably and people do not possess have a universal criterion to distinguish true from false. Some of the Academics with the strongest attitude, Arcesilas (c. 315–241 b.c.) and Carneades (c. 213–129 b.c.), whose views were the most identified with Academics in the third-century b.c., stated that everything, even proposition or argument requires some knowledge. So that people cannot fully trust empirical facts. The formulated proposition needs to be confirmed with facts that cannot be ensured by empirical reports but even these facts require our initial knowledge. As a consequence, we need to be sure that there is no chance that our initial knowledge is false. Whether it cannot be assured, our initial knowledge is only an opinion and cannot be considered as something sure - as knowledge. It can never be assumed that any non-empirical or empirical proposition is true for sure so that

Academics started to question any knowledge. This negative form of skepticism leads to nowhere and makes it impossible to obtain any knowledge. Different to Academics, thinker Pyrrho of Elis (c. 360–275 b.c.) was a practitioner of skepticism – he abstained from any definite judgment. His work was focused on ethics and morality mainly. According to his views, life in which we follow false reality is morally and ethically inappropriate and people, phenomena, actions and objects do not have to be valued because there is a risk that it can be incorrect. Pyrrho believed that by avoiding the acceptance of “value theories” which are to any degree doubtful, we can avoid unhappiness. Aenesidemus (c. 100–40 b.c.), who is known as an author of the theoretical formulator of Pyrrhonian skepticism, synthesized his work in *Pyrrhonist Discourses* (Purrôneioi Logoi) (Bett 1997). He mentioned that both Dogmatists and the Academics presented an intransigence point of view. Dogmatists believe that they know something just by be convinced (the Greek word “dogma” (δόγμα) means literally "that which one thinks is true"), Academics on the other hand claims that nothing can be known. On the opposite of them, Pyrrhonists suggested withholding judgment on any question of whether conflicting evidence exists (Popkin, 2003). Different from Academics for whom skepticism was a philosophical view, for Pyrrhonists skepticism was an attitude or an ability. As practitioners, they designed and use opposing evidence which allowed them to confirm or disconfirm positions on the given question which lead them to suspend judgment on any matter. This practice allows them to achieve a state of undisturbedness (*ataraxia*) when skeptics do not have to matters beyond appearances they could become “free from all dogma” (Long and Sedley, 1987). Skepticism presented by followers of Pyrrho was a remedy for dogmatism and the destructive aspect of skepticism presented by Academics.

## 1.2. Etymology of skepticism

The etymology of the term “skepticism” should be searching at the same time and the same place where we were looking for the birth of skepticism and first skeptics. Ancient Hellens, as ancient Greeks used to name themselves, used the noun “sképsis” which can be translated as an examination, observation, consideration, investigation (Groarke, 2009) and the verb “skeptomai”, which meant to reflect, to search, to look carefully (Mastin, 2009). According to the above, when Hellens called their skeptics “skeptomai”, that meant someone who is looking for, who is taking an investigation or, following Aenesidemus, “ephektikoi” which can be translated as “those who suspend” judgment (Alcala, 2003). Beliefs of ancient greeks about skepticism can be summarized as a conviction that nothing is sure and we should not assume anything or put any statements or theorems on the nature of things. They did not neglect the possibility of finding knowledge but in their opinion, it is more a concept of belief than knowledge itself. This is an important difference between past and present skeptics. Nowadays we identify skepticism as concerning knowledge and certainty or justified belief instead of addressing questions like Hellens (Fine 2000). If “nothing is known” and “nothing is certain” the most crucial seems to be the way in which Hellenistics made their decisions. According to Barnes (1992) their decisions are guided by the plausibility, the convincing, or by appearances. They avoided full-fledged belief about how things are, instead of this they used to adapt their statements to be sufficient enough to cause and guide actions. But not in every case we can evaluate something as only possible. There are some examples which have to be confirmed for sure. Did the ancient Greeks have any criteria which allowed them to judge whether something was true or false? The Epicureans believed so. According to their beliefs, the impressions learned by feelings and senses are always true although judgments based on them can be not (Vogt 2016). They claimed that cognitive impressions show things as they are and that makes them true. Similar point of view had stoics, who claimed, that we should form our beliefs relying on our perceptions and senses. Both Academicians and Phyrionists did not agree with the above theory. They claimed that we cannot assume any impression as true, instead of this they advised us to suspend judgment because discrepancies among impressions make them impossible to settle. But the term of doubt understand by ancient

skeptics differs from the present understanding. When they used the term “doubt” they meant “calling things into question”. They took into consideration the possibility of appearance some relevant answers. They saw themselves as investigators, which can be understood that their main aim was looking for answers. But it is not in humans' nature to living without any beliefs. People, as herd animals, would have fallen into nihilism and feeling of nothingness. So that even skeptics had to live according to some belief and social norm, even if they do not assume they are true. Because of this uncertainty, they focused on searching for answers on beliefs by examining conflicting arguments, experiences, practices, evidence even if it finally leads to suspension of judgment (Cooper 2012).

### **1.3. Aristotle’s beliefs**

Aristotle (384 – 322 b.c.) is one of the most famous ancient Hellenic philosophers. Except philosophy, astronomy, biology and physics he was engaged in the development of logic what became a foundation of skepticism. He indicated that nothing can be true and false at the same time. In his Law of noncontradiction, he points out that every contradictory sentence is a false sentence. So that law of noncontradiction as a negation of contradictory sentence is a true sentence (Priest, 2007). The above claim is considered to be the background of skepticism. As the beginning and the only way to begin an investigation Aristotle points out a well-formulated question. He believed that it is impossible to progress in extending the existing knowledge on the nature of things without it. In the future, this statement was subject to criticism from radical skeptics who proclaimed that it is impossible to possess any knowledge because according to their belief it is impossible even to formulate a question and as a result begin an investigation. In this way, Aristotle’s philosophy contributed to questioning skeptics’ attitudes indicating that it does not lead anywhere and can cause stopping the development of researches. Not every academic agreed with this opinion. For example, Vogt (2012) indicated that suspension of judgment by skeptics caused improving an object’s cognitive condition despite the lack of reaching a definitive answer to a given problem.

Another example of Aristotle's input in developing in present skepticism is drawing attention that the whole process of learning is based on what we already know and knowledge achieved in the past (Groarke, 2009). According to Aristotle's view the advancement in knowledge is a string of syllogisms in which every premise is either indemonstrable first principle or is simply self-proven by definition but he claims that these conclusions are in accordance with this thesis only when the premises are true, the argument is valid and the proof proceeds from indemonstrable principles. He denies once again that every knowledge must be proven, and in his opinion some very basic principles can be considered as true without any proves. He also indicates on lack of education in people who cannot recognize which facts do not need to be proven. Aristotle encourages us to solve puzzles about the nature of things basing on definitions and suppositions which in his opinion lead to gain some knowledge. He does not approve of suspending the judgment attitude presented by skeptics recognizing it as leading to nowhere and finally harmful in the process of gaining knowledge. Aristotle claims that solving puzzles about the nature of things can be useful in structuring an inquiry and can help thinkers with making better judge of truth. He considers examining puzzles as crucial in an investigation, believing that it makes clear a goal or destination for philosophical inquiry. Thesis presented by Aristotle helped later thinkers to defend against destructive skepticism which can lead to cognitive paralysis and as a result stopping extending knowledge that already exists.

#### **1.4. Skepticism presented by Pyrrhonian school**

Even if Pyrrho was not the first in ancient Greece who explored the multidimensional character of skepticism, he was a significant thinker who had important input in the development of skepticism. His thesis were different from thesis presented by Academics who believed that “nothing can be known, not even this” as it was said by the funder of Academics school, Arcesilaus (315 – 240 B.C.). The main goal of a conventional most spread view of the Pyrrhonian school was finding different arguments on every topic and confronting them with arguments presented before. Then they tried to discover if both arguments have the same strength. Arguments presented on both sides incline them to accept the nature of things in an equal, so they could not choose the stronger one. As a result, the follower of the Pyrrhonian thesis ought to suspend his judgment about the nature of the discussed thing. This approach conduct to “epoche” - a general suspension of judgment and not taking any position. It is said that in this way skeptics can experience ataraxia - "freedom from worry" which was the main goal of most ancient philosophy (Bett 1997). But this is the conventional explanation of Pyrrhonian skepticism presented in Outlines of Pyrrhonism by Sextus Empiricus. Experts in this field who explore Pyrrho's philosophy take into consideration this belief. They indicated that the picture of skepticism presented by Sextus is not the pure sense of Pyrrho's views. Probably it involves also Aenesidemus' views (who is known as the person who spread the tradition of Pyrrhonian school) and the author's own interpretation of some features related to skepticism. To understand the meaning of the original Pyrrho's believes, Bett (1997) made an attempt to answer three questions:

- 1) What were Pyrrho's original ideas?
- 2) What is Pyrrhonian skepticism and what are its features?
- 3) What Pyrrhonian skepticism can offer us in the context of a practical and constructive approach to the concept of skepticism?

Some clues which can help answer the first question can be found in Peri Philosophies of the Peripatetic Aristocles of Messene, preserved in quotation Praeparatio Evangélica by Eusebius (Long and Sedley, 1987) where Pyrrho is presented as a man who tries to respond to three connected questions (Bett 1994):

- 1) what are things like by nature?
- 2) what should our attitude be towards them?
- 3) what will the effect be on those who adopt this attitude?

Bett in his essay from 1997 indicated that according to Pyrrhos "either designating properties possessed by things in themselves are of equal strength or the cognitive relations in which we stand towards things are of equal strength so that we can conclude that in Pyrrho's view neither our sensations nor our opinions are true or false and that we should not investigate the external world from the perspective of truth." (Ciołek, unpublished working paper). But even if we are not able to indicate for certain if something is true or false using our senses, it does not mean that we are not able to formulate some thesis. In this aspect Pyrrho's and Aristotle's' beliefs are similar. They both agreed that we are not able to settle what is true and what is not but even if we cannot be sure that, we should do some investigation which extends our knowledge on the nature of things. Bett's answer to the second question is even more ambiguous. According to his believes, the attitude which should be presented is "saying about each single thing that it no more is than is not or both is and is not or neither is nor is not" (Bett, 1997). It can be understood in two ways:

Way A:

- 1) that it no more is than is not, 2) that it both is and is not, 3) that it neither is nor is not (Long and Sedley 1987 p. 15, Caizzi 1981 p. 104).

Way B:

that it no more 1) is than it 2) is not 3) both is and is not 4) neither is nor is not (Bett 1997).

Because things cannot be and not be orange at the same time, translation B, presented by Bett, seems to be more logical. If we feel that a thing is orange, our feeling that is orange is true, not true, or not true. The important thing to notice is that the four possibilities presented above do not mean to suspend the judgment during the choice.



Question three asked by Bett (1997) “*What Pyrrhonian skepticism can offer us in the context of a practical and constructive approach to the concept of skepticism?*” and question three on which Pyrrho was seeking an answer: “what will the effect be on those who adopt this attitude?” are equal and will be considered together. Unfortunately, there is not much evidence that can explain what Pyrrho’s *ataraxia* exactly is. As an answer to the third question, Pyrrho promises those, who will follow his beliefs, “ataraxia”, a “freedom from worry” but the way how it should be understood is a mystery. The only one clue which Diogenes gives as is that Pyrrho “said that nothing was either fine or ignoble, just or unjust; and that similarly in all cases nothing was so in reality, but that people do everything by convention or habit; for each thing is no more this than that” (Hicks 1972). In his above sentence Pyrrho describes his followers the way they should proceed, he claims that in case they are not able to define features of nature, “convention” and “habit” can form the basis for skeptics’ decisions. To answer the second question “What is Pyrrhonian skepticism and what are its features?” we should explain how all this way of thinking began. Even if the primal reason which could be the background of the skeptical quest is still unknown there are some clues that can get closer first skeptic’s motivation. According to Sextus, the first skeptics became philosophers as a resolute of not be able to understand and explain observed anomalies that disturbed them. As a solution to eliminate the disturbance caused by not be able to understand some phenomenons they indicated to take an investigation to set what is unknown and incomprehensible and to discover its original nature. However, despite the investigation, they were not able to describe what is true and what is false, so that in the end they suspended their judgment (Grgic, 2006, Machuca, 2006, Moller, 2004, Ribeiro, 2002; Thorsrud, 2003). Other researchers indicate that the seeking of truth expressed by skeptics is a result of the holding contrasting beliefs (Grgic 2006; Machuca 2006; Perin 2006). Some of them believe that both these reasons are not in contradiction and can be combined into one coherent synthetic cause. Machuca (2009) on the other hand does not support Brennan’s (1999) point of view. He believes that the sources of proto-Skeptic disturbances are connected in a straight way with their system of values and the way in which they see the world around them. According to him, proto-Skeptic tries to examine the unclear things, believing that every

unresolved anomaly is something bad by the nature of things. When we try to describe Pyrrhonian skepticism one of the most important things, which is indicated in Sextus' words, is to remember that Pyrrho does not suspend judgment universally. Although this is an inherent feature of skepticism, even if his quest for truth leads to nowhere and he is to suspend his judgment, he does not do it forever. He lives to investigate. He stays open-minded, believing that one day new arguments and data may appear which will allow him to resume the investigation. He is sure that the truth exists and one day it will be found but he does not exclude the possibility that even a person who questions the knowability of truth, however, does not exclude its existence can undertake the investigation and be a skeptic. Such a person in this situation will be led by passion, curiosity, enjoys the activity of investigation and stays open for new hypotheses and his inquiry. Even if he will eventually not find the truth, during his investigation he will eliminate many hypotheses that turned out wrong. This will put him or his successors in a much better position than he was before the investigation and may allow the discovery of the truth. This way of thinking seems to be more practical than the Academic position and succor the development and new invitations. It suggests the famous quotation of Thomas Edison, *"I have not failed. I've just found 10,000 ways that won't work."* . Even if he had not discovered the bulb eventually, because of his investigation and seek of truth his successors who would continue his work will be put in a much better position than he was at first. His failures would allow them to avoid his mistakes.

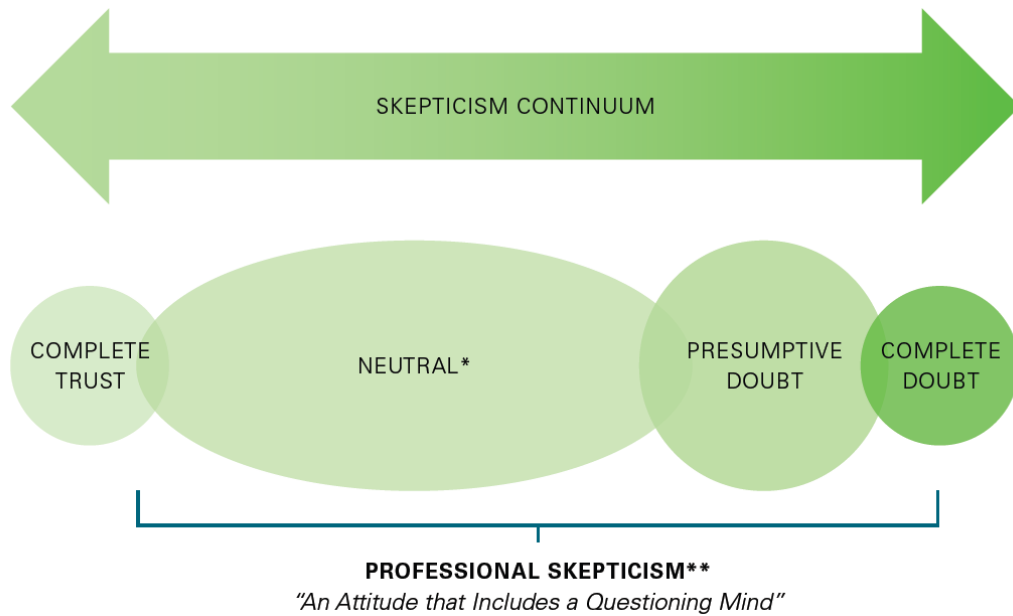
## 1.5. Summary

Ancient Greece, which was the cradle of skepticism, had a significant influence on the formation and future meaning and shapes of this term. One of the most important schools of skepticism, the Platonic Academy, represented for example by Aristotle (384 – 322 b.c.) stated that the whole process of learning is based on what we already know and knowledge achieved in the past so that people should base on the knowledge accumulated before. Aristotle denied that every knowledge must be proven, in his opinion some very basic principles can be considered as true without any proves. His point of view is very different from such radical skeptics like Arcesilas (c. 315–241 b.c.) and Carneades (c. 213–129 b.c.) who are also representants of the Academic trend. They stated that everything, even a proposition or an argument requires some knowledge so that people cannot fully trust empirical facts. According to them, it can never be assumed that any non-empirical or empirical proposition is true for sure so that Academics started to question any knowledge. This negative form of skepticism is unpractical, leads to nowhere and can cause stopping the development of researches. On the opposite of them, Pyrrhonists suggested withholding definitive judgment on any question of whether conflicting evidence exists. In this aspect Pyrrho's and Aristotle's beliefs are similar. They both agreed that we are not able to settle what is true and what is not but even if we cannot be sure that, we should do some investigation which extends our knowledge on the nature of things. They proclaimed the open-minded position and advised to resume suspended investigation when new arguments and data appears. The main goal of a conventional Pyrrhonian school was finding different arguments on every topic and confronting them with arguments presented before. For Pyrrhonists skepticism was an attitude or an ability, they were focused on ethics and morality mainly. In contrast to Academics, Pyrrhonian presented a more practical attitude to skepticism. Skepticism presented by followers of Pyrrho was a remedy for dogmatism and the destructive aspect of skepticism presented by Academics.

## **Chapter 2**

### **2.1. Professional Skepticism – unclear and ambiguous definition included in regulations and worked out in academic research.**

The term “Professional Skepticism” is recognized in all legal acts and standards related to accounting and auditing including polish act on Statutory Auditors, Audit Firms and Public Oversight, Polish Financial Reporting Standards, Statement on Auditing Standards (SAS), International Financial Reporting Standards (IFRS), Public Company Accounting Oversight Board (PCAOB), International Auditing and Assurance Standards Board (IAASB) and American Generally Accepted Accounting Principles (US GAAP). All of them indicate that Professional Skepticism is crucial in the profession of an auditor but the definitions they contain are ambiguous and do not give auditors any leads on how to proceed. There is no commonly accepted definition of skepticism and two perspectives have arisen both in current literature and auditing standards: neutrality and presumptive doubt [Quadackers 2012]. It is very important to understand that Professional Skepticism is neither complete trust nor complete doubt. The auditor must look beyond the obvious but also should suspend his judgment before satisfied evidence is not obtained. Figure 1 shows the difference between Professional Skepticism, complete trust, and complete doubt.



\* Neutral—neither assuming management dishonesty nor unquestioned honesty.

\*\* Professional Skepticism does not include the area of the continuum depicted by complete trust; in the area depicted as complete doubt, the auditor will move to a forensic mindset.

**Figure 1: The difference between Professional Skepticism, complete trust, and complete doubt, IAASB presentation Enhancing Auditor Professional Skepticism Professors Steven M. Glover and Douglas F. Prawitt, Brigham Young University.**

Most simply Professional Skepticism can be defined as increased vigilance which should be kept during recognizing and reacting to circumstances that can indicate that Financial Statement was distorted. But what “increased vigilance” exactly means and how to proceed is still unknown [rachunkowosc.com.pl]. Another definition of Professional Skepticism which can be found in literature is “an attitude that includes a questioning mind and critical assessment of audit evidence” which “is required in every aspect of every audit by every auditor working on the audit” and is “essential to the performance of effective audit” [Baumann 2012]. This definition shows the relevance of Professional Skepticism as it “is required in every aspect of every audit by every auditor”.

During research on Professional Skepticism, two major questions still have not been answered: “what exactly comprises Professional Skepticism and how to measure it” [Ciołek 2017]. Attempts to measure Professional Skepticism caused that many scientists indicated to measure Professional Skepticism by measuring attributes such as independence [Shaub 1996; Kadous 2000], trust [Choo, Tan 2000], suspicious [Shaub, Lawrence 1996], conservatism bias in audit judgment [McMillan, White 1993] and presumptive doubt [Nelson 2009]. The issue which arose in the results of these studies is ambiguity whether they measure trait or state and if they focus on the problem of recognition or action in front of the recognized problem.

Of course, the most important source of information for every auditor is standards of auditing. Also, there can be observed interweaving of two views – neutrality and presumptive doubt.

Some attempts to define Professional Skepticism can be found in SAS no. 1 which presents an approach of neutrality: “Professional Skepticism is an attitude that includes a questioning mind and a critical assessment of audit evidence. The auditor uses the knowledge, skill, and ability called for by the profession of public accounting to diligently perform, in good faith and with integrity, the gathering and objective evaluation of evidence.” SAS no. 1 also gives a guideline, that: “The auditor neither assumes that management is dishonest nor assumes unquestioned honesty. In exercising Professional Skepticism, the auditor should not be satisfied with less than persuasive evidence because of a belief that management is honest.” [SAS No. 82]. According to SAS no. 1, it can be assumed that auditors should have primarily a neutral view. The auditor must not believe that management is honest as well as assumes dishonestly. All auditor’s judgments should be based only on persuasive evidence but the first attitude should be neutral.

A different point of view of Professional Skepticism presents International Standards on Auditing (ISA) which defines it as “An attitude that includes a questioning mind, being alert to conditions which may indicate possible misstatement due to error or fraud, and a critical assessment of audit evidence” (ISA 200) and “the auditor shall maintain

Professional Skepticism throughout the audit, recognizing the possibility that a material misstatement due to fraud could exist, notwithstanding the auditor's experience of the honesty and integrity of the entity's management and those charged with governance" (ISA 240) [IAASB 2010c]. However, In this definition can be observed conviction about overriding the importance of presumptive doubt when compared to neutrality. The auditor should assume that entity's management has sensible cause to tamper with evidence and financial statement. He or she should be watchful and do not exclude the possibility of fraud before convincing evidence is presented. This approach assumes that the auditor should be critical not only relative to management but also to presented evidence. Also, previous experience with the audited company and auditor's private feelings should not affect auditor's judgment. It can be read in ISA 315, "the auditor cannot be expected to fully disregard past experience with the entity about the honesty and integrity of management and those charged with governance, the maintenance of an attitude of professional skepticism is important because there may have been changes in circumstances" [ISA 315]. The above standard also shows why Professional Skepticism is so important when conducting the audit.

Polish Act on Statutory Auditors, Audit Firms and Public Oversight in art. 68 defines Professional Skepticism as: "an attitude consisting of a critical attitude of the statutory auditor or the audit firm, alertness towards conditions that may indicate a possible distortion caused by an error or a fraud, and critical assessment of the evidence." which auditor is obligated to keep. The auditor "shall keep the Professional Skepticism during the audit, including in the course of its planning, assuming that there may be circumstances, including an error or a fraud, resulting in an important distortion of financial statements subjected to the audit concerning honesty and reliability of the management of the audited entity and persons responsible for managing the audited entity, including its corporate governance, regardless of previous experience of the statutory auditor or the audit firm" [art. 69 uobr]. Assumptions contained in polish uobr art. 69 are similar to both international acts: SAS and ISA. Similarity to SAS no. 82 can be seen in ignoring the auditor's past experience of the honesty and integrity of the entity's management and

those charged with governance, which is the most characteristic feature of ISA. On the other hand, that both Polish UOB and ISA 240 share are keeping questioning mind and a critical assessment or not to assume unquestioned honesty. The auditor should remember that the given financial statement can be distorted (but opposite from ISA, should not take into consideration the auditor's past experience with the company). Only after presenting convincing evidence and based on it, the auditor can issue the judgment. Although it has some traits similar to both SAS and ISA, it can be assumed that Polish UOB presents presumptive doubt approach more than neutrality what can be seen by assumption that assume that the financial statements can be distorted.

Not only legislators but also academics who focused their research on auditing undertook attempts to define what "Professional Skepticism" exactly is. Similar to legislators, after extensive analysis, they propose either neutral or presumptive doubt position. Hurtt [2010] who worked on Professional Skepticism found that an auditor should suspend judgment until persuasive evidence is obtained to reach a conclusion that indicates her as a neutrality follower [Ciołek 2017]. She defined Professional Skepticism as: "a multi-dimensional construct that characterizes the propensity of an individual to defer concluding until the evidence provides sufficient support for one alternative/explanation over others" [Hurtt 2010]. During her study, she developed a Hurtt Professional Skepticism Scale (HPSS), which is a research instrument that allows to measure Neutrality. A similar point of view had Cushing, who states that auditors should be unbiased in forming beliefs [Cushing 2000]. Moreover, she believed that "information is received and evaluated during the course of an audit" what was the foundation for the belief-adjustment model [Koch 2016].

In contrast to Hurtt, Nelson defined Professional Skepticism as a presumptive doubt position where the auditor needs relatively more substantial evidence to agree that assertion is correct relative to the norm [Ciołek 2017]. He denied that trusting is the main focus of current auditing standards. According to his research auditors should seek and evaluate evidence not only to confirm management's assertion but also to rule out



alternative explanations and find out potential fraud [Quadackers 2012]. Other representants of presumptive doubt position are Bell et al. [2005], McMillan and White [1993], Smith and Kida [1991] who advise focusing more on error-related evidence than on non-errors [Quadackers 2012]. Due to the benefits that management can achieve, they advise focusing on seeking other explanations for the evidence obtained. Followers of their point of view should be distrustful and should keep cautious when accepting the manager's explanations.

To better understand the essence of professional skepticism, I interviewed practitioners, statutory auditors with many years of experience. The interview was conducted in Polish but for the purposes of the following work was translated into English. Due to the fact that they supplemented their answers, I decided anonymize them, and instead write their common answers as a consistent text.

**1. Is professional skepticism important in your opinion?**

Professional skepticism is something we as auditors must demonstrate in an audit. It indicates a certain group of behaviors that we must follow during an audit to be sure that the obtained evidence is sufficient to give a specific type of opinion. Without professional skepticism, there is no skeptical judgment which is crucial in our work. A manifestation of the use of professional skepticism is, for example, our collection of independent confirmations from the bank.

**2. As a statutory auditor, you certainly know the definition of professional skepticism, but what is it for you? How do you understand it?**

Professional skepticism means that as a statutory auditor I have to be skeptical about every document, and information received. I cannot blindly believe everything the client says, I have to verify it. An example of not being skeptical may be receiving a PK document (which is an internal document) and verifying it with the records. We must obtain an additional document, preferably external confirmation and source documents for each operation under examination.

**3. How do you know that the level of professional skepticism you apply is sufficient?**

To be sure, we collect source documents, thanks to which I confirm the legitimacy of recognizing given economic events in a specific way in the accounting books. In the examples above mentioned independent confirmations from banks, original invoices, bank statements, or appropriate calculations to the financial plans provided by the entity's management. In this way, I can be sure that I did everything I could to do my job properly.

**4. In the literature, professional skepticism is understood as neutrality/presumptive doubt, what do you think about it? In your opinion, what attitude should be adopted by the statutory auditor at the beginning of the audit?**

In my opinion, the correct approach is between neutrality and presumptive doubt. Do not go to extremes and assume that everyone is trying to cheat us. We should have at the back of our heads that what the client declares to us may not be consistent with the actual state, but I do not assume that he is trying to deceive me.

**5. What do you think is the future of professional skepticism? Will there be attempts to create an unambiguous definition of this term? Will it still remain an enigmatic and unexplained concept in laws and standards?**

In my opinion, the concept of skepticism will not change. It is not understandable, I do not understand, for example, what is the skepticism of an audit firm. If we assume that this concept means the level of professional skepticism that a given unit applies and that is proclaimed by its management, in believe, it is still the professional skepticism of statutory auditors - of those who occupy a higher position in the structure of the unit, but it is still skepticism of the auditor and not of the company because the company does not possess the awareness. In my opinion, however, the legislator will not try to define the exact meaning of the professional skepticism of the audit firm.

**6. Prof. Hurtt created the HPSS model, which tests the level of neutrality in the statutory auditor. Do you think that it is possible to create a tool that would allow an easy and objective way to measure the level of professional skepticism in the conducted survey?**

In my opinion, now it is impossible to measure professional skepticism. It is a non-quantifiable concept that cannot be described in more detail. But maybe someday someone will present any tool which will enable it.

**7. So how can someone who does not be professionally skeptical be punished?**

In my opinion, there is no way to punish someone for not being skeptical. Judgment, like professional skepticism, is not auditable because it cannot be measured nowadays. A possible inspection may only complain that after collecting the documents that indicated errors in the financial statements, I did nothing about it. But the fact that I made this and no other decision, that I believed was good, is not punishable. If, on the other hand, the inspection proves that I received a document but I did not take it into account, it is no longer skepticism, but a falsification in which I participated myself. It's hard to prove that someone has not kept enough professional skepticism because it is too soft a process.

**8. Is it possible to create a tool that will help measure professional skepticism?**

In my opinion, this is a factor that cannot be measured and therefore such a tool will not be precise. If a tool were to be created, the only way I think is a questionnaire. However, with them, there is such a problem that if we know what it is researching, it is possible to achieve the result that we want to achieve. The questionnaire is so soft that it is easy to manipulate it.

**9. What do you think are the consequences of not having sufficient professional skepticism?**

An auditor who does not apply sufficient skepticism may give an incorrect opinion. It is a fundamental issue related to the audit of financial statements.

**10. In your opinion, is there a situation where the auditor's level of skepticism is too high? What happens then?**

Applying too much professional skepticism would result in collecting too much evidence, customer dissatisfaction, and too many hours spent on a project. The remuneration for the audit is supposed to reflect the labor intensity, so with too much skepticism and too much detailed research, the remuneration would have to be disproportionately high.

**11. What advice would you have on determining the appropriate level of professional skepticism for someone starting as an auditor?**

In my opinion, the feeling when a sufficient level of skepticism has been maintained comes with experience when participating in research. It is so soft that it cannot be advised in isolation from a specific project. There is no golden rule here. Each research requires an individual approach.

**12. How does pressure affect professional skepticism? In your opinion, do the auditors decrease the level of professional skepticism with excess work?**

Pressure negatively affects professional skepticism. However, how the auditor responds to an attempt to create pressure is a matter of the auditor individually. Not always rushing an auditor will result in resigning from explaining individual issues. It may happen that a person who is being rushed will try to extend the examination by collecting more documents and explanations. This situation may arise, in particular, when the client attempts to urge the auditor.

## **2.2. Characteristics of Professional Skepticism**

When discussing the Professional Skepticism six traits of an auditor can be detailed as the most required during conducting a professional audit: search for knowledge, suspension of judgment, autonomy, interpersonal understanding, self-esteem, and questioning mind. Three of them (questioning mind, suspension of judgment, and search for knowledge) are related to the way an auditor examines the evidence. The fourth trait – interpersonal understanding – indicates the need of understanding the human aspect of an audit. The last two traits auditor needs to present – self-esteem, and autonomy show the ability of an individual to act on the information obtained. Better understanding their importance and meaning may contribute to the growth of Professional Skepticism presented by auditors.

### **2.2.1. Questioning mind**

The importance of questioning mind is indicated not only in literature and theory of audit but also in statutes like SAS No. 82 (AICPA 1997a) or SAS No. 99 (AICPA 2002). It can be read there that “Professional Skepticism requires an ongoing questioning of whether the information and evidence obtained suggests that material misstatement due to fraud has occurred” [AICPA 2002]. Not less important are researches on questioning and skepticism with advertising which were conducted by Obermiller and Spangeberg (1998) who designed a scale to measure consumer skepticism of advertising. It indicated that obtaining information from a known source like family or close friends increases questioning about information that was obtained from an unknown source such as media. The questioning mind and doubting is not only a lack of beliefs. As Kurtz wrote, “doubt initiates inquiry and leads to formation of beliefs” [Kurtz 1992, 66], and because of that questioning mind is a crucial aspect of skepticism supported from accounting standards, and researched not only in the economic sciences but in many other disciplines [Hurtt 2010].

### **2.2.2. Suspension of Judgement**

The second important characteristic of Professional Skepticism is withholding judgment until there is an appropriate level of evidence had been gathered. However, delving into research on Professional Skepticism can be observed that there is a significant difference between auditors' initial attitude included in European and American accounting standards. American standards No. 1 [AICPA 1997b] recommends waiting for persuasive evidence before making a conclusive judgment. A similar state is exposed by AU 230.9, which convinces that "auditor should not be satisfied with less than persuasive evidence". A different point of view presents European ISA 200 which states that "The auditor shall plan and perform an audit with Professional Skepticism recognizing that circumstances may exist that cause the financial statements to be materially misstated" and ISA 240 which informs that "the auditor shall maintain Professional Skepticism throughout the audit, recognizing the possibility that a material misstatement due to fraud could exist". Although European and American standards define assumptions that an auditor should perform differently, they both support the concept that final judgment ought to be suspended as long as sufficient evidence is obtained. Suspension of judgment as a characteristic of skepticism is present not only in accounting but also in different fields of research such as philosophy. It is defined as a desire for a definite answer on some topic [Kruglanski 1989, p. 14] or as a suspension of judgment as an attribute of a skeptical attitude. Bunge [1991, p. 131] states that "skeptics do not accept naively the first things they perceive or think, they (...) are critical; they want to see evidence before believing. Others, as Mc Ginn [1989, p. 6] claim that "the skeptic takes up a reflective stance compared to our ordinary practice of making and accepting knowledge". Researches in different fields show clearly that a skeptic is willing to form a judgment but always in a critical matter and slow pace [Ciołek 2017].

### **2.2.3. Searching for knowledge**

The last trait-dependent characteristic which defines the way how auditors examine evidence is searching for knowledge. By searching for knowledge, different to questioning mind which includes some sense of disbelief or doubt, skeptics ought to understand broadening their knowledge in general and not to be interested in searching simple answers during verifying conclusions. In philosophy searching for knowledge is equated with looking for knowledge for knowledge's sake [Johnson 1978, p. 14], encouraging a desire to investigate [Bunge, 1991, p. 131], urgency and scrutiny, looking deep into and beyond the obvious [Popkin and Stroll, 2002, p. 36], seeking to investigate and evaluate in relation to any questions [Naess, 1969, p. 5]. Psychologists for over a century try to find what stimulates an individual to search for more information. They usually indicate that this desire can be caused by individual curiosity which stimulates one's interest, drive exploration and discovery [Litman and Silvia 2006, p. 319].

### **2.2.4. Interpersonal Understanding**

This characteristic is related to understanding the motivation and integrity of evidence providers. Because individuals have many incentives and opportunities to commit fraud, the auditor should remember that interviewing clients' employees may be less than truthful. Psychologists indicate that auditors' social competencies have a significant influence on their Professional Skepticism in the interpersonal aspect [Helmreich, Stapp 1974]. Also, researches on consumers' behavior are helpful to understand the point of interpersonal understanding. They noticed that consumers have advertising skepticism which appears in questioning the motives of advertisers [Obermiller, Spangeberg 1998, p. 60]. Philosophers identify skeptical attitudes with understanding people's motivations and behaviors. They agree that to recognize and understand different perceptions of the same object or evidence by different individuals one has to understand people [Hurtt 2010].

### **2.2.5. Autonomy**

The fifth characteristic of Professional Skepticism, autonomy, equated with independence, is a foundation of well-organized auditing standards. Mentions about this can be found in ISA 200 which indicate that “the auditor shall comply with relevant ethical requirements, including those pertaining to independence, relating to financial statement audit engagements”. Another auditing standard, ISA 700.33, indicates the importance of autonomous evaluating evidence and making a decision when sufficient evidence has been collected. Also polish Act on Statutory Auditors, Audit Firms, and Public Oversight in article 69 indicates some situations when the auditor cannot conduct the audit. It is forbidden to conduct an audit when there is a risk that the auditor or members of his family can take advantage of the results of the conducted audit. In the above article, it is also mentioned that the risk of self-control should be eliminated. By self-control should be understood the situation when the auditor is connected with the audited company, for example, is a member of the management, an employee, or provide any different service except the audit. A similar position is expressed by auditing researchers, like Mautz and Sharaf [1961, p. 136], who indicated that Professional Skepticism must not be influenced by the beliefs and persuasion attempts of others. In philosophy can be found a statement that skeptic should not easily accept the claims of others [McGinn 1989, p. 6], should identify contradictions and fallacies in the claims of others [Kurtz 1992, p. 22], and should undertake additional evidence and investigation until is satisfied [Bunge 1991].



### **2.2.6. Self – esteem**

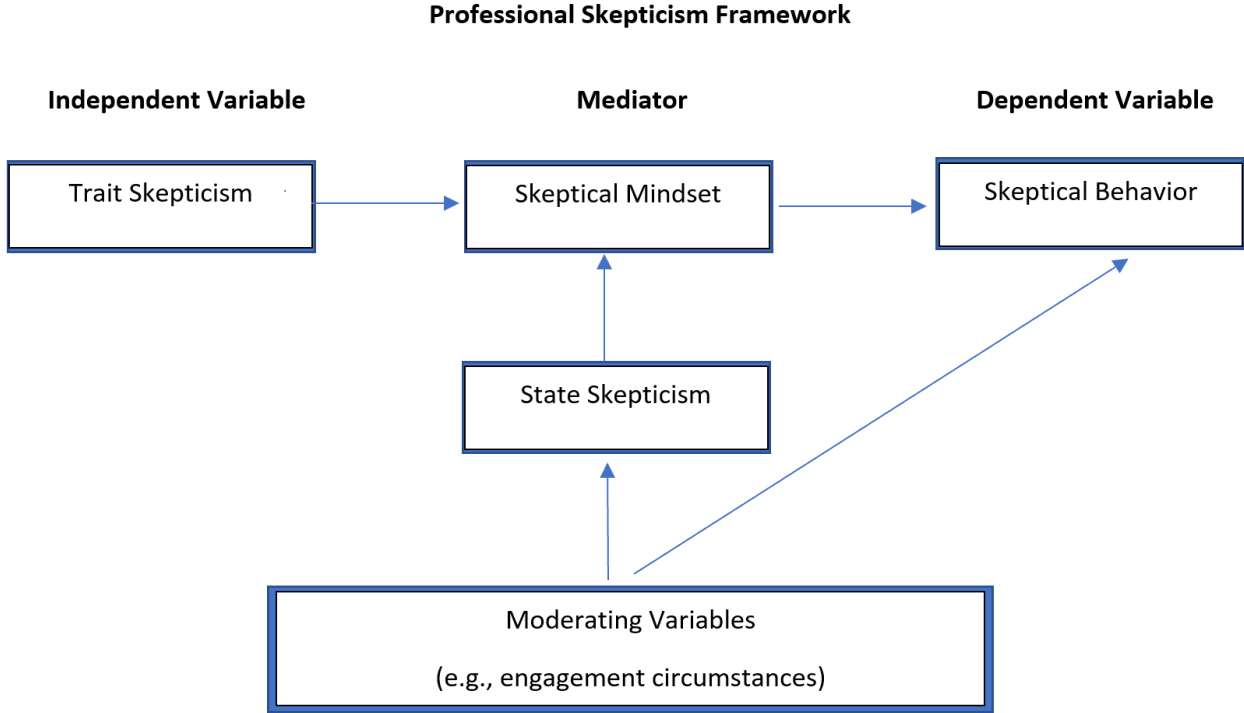
A sufficient level of self-esteem is the last attribute of Professional Skepticism. It is required from the auditor to resist persuasion and challenge with evidence provider's opinion. Self-esteem allows the auditor to remain autonomous while performing audit, identify and acknowledge different explanations than given which is articulated by Linn et al [1982]. Lom [2001, p. 32] identifies this attribute with inner calmness and lack of disturbance that is crucial in processing evidence [Ciołek 2017]. In psychology self-esteem is understood as feelings of self-worth and belief in one's abilities. Those who have lack of this attribute present lack of confidence to rely on their own judgments [Boush et al. 1994, p. 167].

### **2.3. Difference between Professional Skepticism, Skeptical Action, and Skeptical Judgement**

Both standards and researchers are compliant that individual auditor's skepticism is essential in auditing profession but during academic research on Professional Skepticism researchers extract some more concepts to introduce the way how Skeptical Judgement is forming by the auditor.

The first thing is to remember that Professional Skepticism is "a multi-dimensional construct that characterizes the propensity of an individual to defer concluding until the evidence provides sufficient support for one alternative/explanation over others" [Hurt 2010]. It should be noticed that both skeptical action and skeptical judgment are a part of Professional Skepticism. The multi-dimensional concept, which is mentioned by many scientists who research professional skepticism comprises skepticism understood both as a trait (a relatively stable and enduring aspect of an individual, is independent which means that cannot be changed because it is the individual trait of the auditor) and a state (temporary and situational variables which can be changed during the conducted audit). Moreover, influence on auditors' skepticism and as a result on Professional Skepticism has also many moderating variables such as engagement circumstances.

Figure 2 shows the impact that an individual’s trait skepticism and situational variables which arouse state skepticism have on auditors’ mindset and in consequence on auditors’ Skeptical Behavior [Hurtt 2010].



**Figure 2: Professional Skepticism Framework, Hurtt R.K., 2010, Development of scale to measure professional skepticism, Auditing: A Journal of Practice & Theory p. 150.**

Different terms connected with Professional Skepticism are Skeptical Judgement and Skeptical Action. Hurtt [2013] claims that “skeptical judgment occurs when an auditor recognizes that a potential issue may exist and that more work or effort is necessary. Skeptical action occurs when an auditor changes his/her behavior based on the skeptical judgment.” She points out essential relevance which in Professional Skepticism implies skeptical judgment and skeptical action. Hurtt noticed that in the process of forming skeptical action and skeptical judgment is a background. Even if an auditor has the knowledge, experience, and trait needed

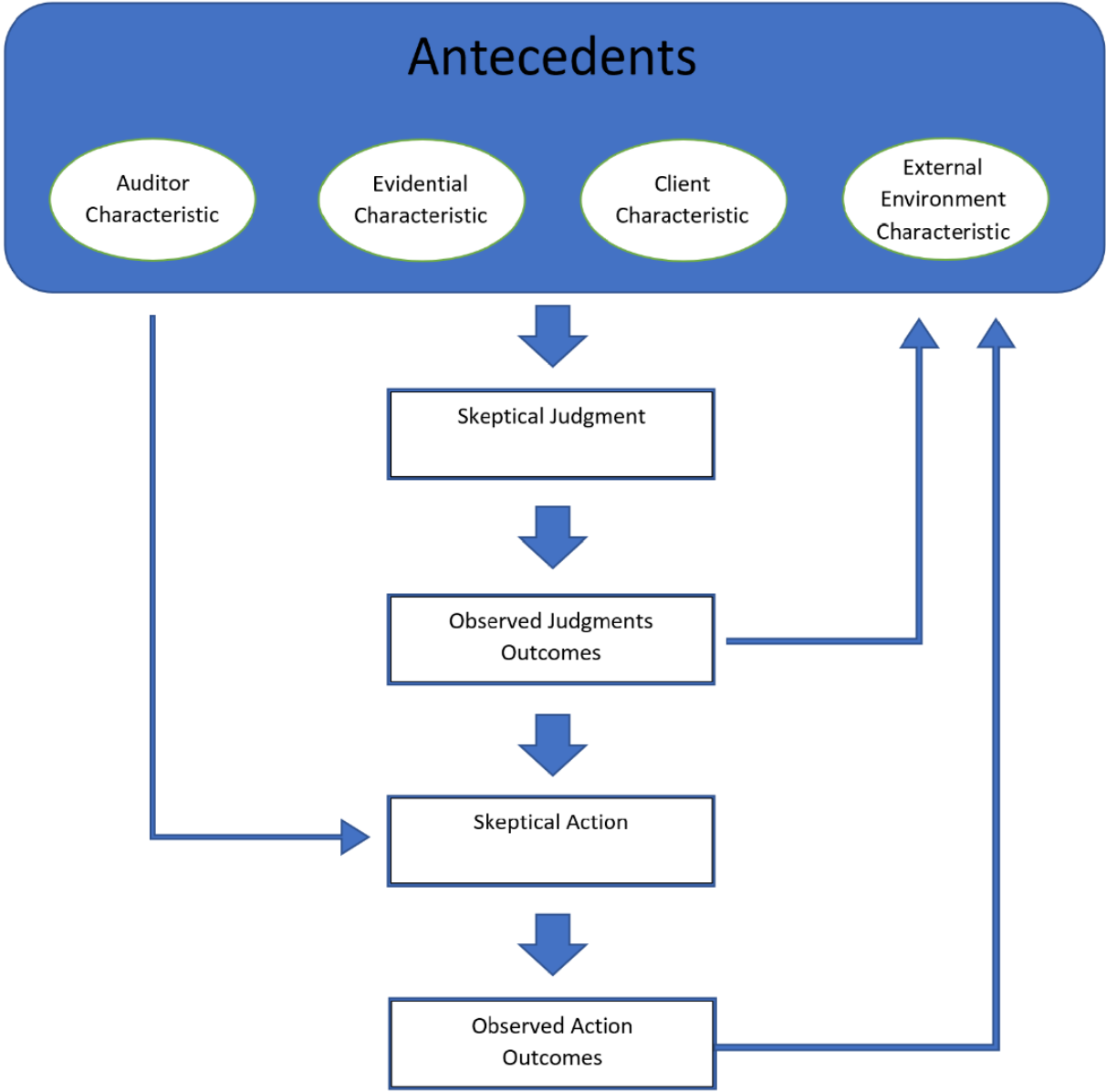
to recognize an issue and is able to make a skeptical judgment, there is a danger that the auditor will be under various pressure during the audit and choose not to do anything based on that judgment. A different situation that can be observed is when the auditor is in an uncomfortable environment where he or she ought to act skeptically – when the audited firm is untrustworthy but the auditor does not act skeptically because of a lack of traits or knowledge needed to recognize the issue. In both cases, it is probable that the auditor will fail to exercise sufficient skepticism but the probability of occurring Professional Skepticism is high.

There are four groups of incentives which antecedent the skeptical action:

- Auditor characteristic (the auditor's traits, experience training, motivation, moral reasoning and affect),
- Evidential characteristic (it should be remembered that not all evidence should be weighted equally – some are more important than others),
- Client characteristic (some clients may try to bring auditor into favor by flattering or trying to please his or her),
- External environment characteristic (for example audit firm rotation but also regulations and standards).

All of the above may impact distortions while forming an opinion issued by an auditor because in a straight way they have an influence on the auditor when he or she forms skeptical judgment. Wherefore, judgment should be reviewed and reconsidered taking into consideration the influence of external environment characteristics. After that, depending on the auditor's characteristic, he or she forms skeptical action and observes its outcomes which has an influence on external environment characteristics. The whole process (starting from forming skeptical judgment to performing skeptical action) is a part of Professional Skepticism in auditing referred to in standards and academic research. To summarize, both Skeptical Judgement and Skeptical Action are small components of Professional Skepticism which is a broader, multi-dimensional term [Hurt 2013].

The framework which is presented below illustrates the impact which antecedents to and impact from having on skeptical judgments and skeptical actions of Professional Skepticism.



**Figure 3: The impact which antecedents to and impact from having on skeptical judgments and skeptical actions of Professional Skepticism, Hurtt R.K. 2013, Research on Auditor Professional Skepticism: Literature Synthesis and Opportunities for Future Research p. 50.**

## **2.4. The importance of Professional Skepticism**

“Without professional skepticism, the audit cannot serve that essential function” it can be read in alert no. 10 published by PCAOB in 2012. As Baumann said, “while professional skepticism is important in all aspects of the audit, it is particularly important in areas that include significant management judgment, particularly in areas with great measurement uncertainty”. What is more, skepticism is especially important in transactions outside the regular course of business, like:

- One-off transactions
- Financing activities.
- Related-party transactions that might be motivated solely or in large measure by an expected or desired accounting outcome.

“Audits are performed to provide investors assurance on the fair presentation of the financial statement prepared by management,” Baumann said. “If the audit is conducted without professional skepticism, the value of the audit to investors and others is seriously impaired.” [Journal of Accountancy, Ken Tysiac 2012].

## **2.5. Consequences of failure to apply the professional skepticism**

People tried to falsify financial statements since the principle of double write was written. A. Pietra in the 1586 year published an essay “Double-entry bookkeeping” based on Pacioli’s job. He wrote about “the possibility of any changes in the determination of the value of movable and immovable property [...] in a positive or negative light, but by no means true” (Dutlinger 1912: 5). Detecting accounting frauds is important because accounting frauds have an influence not only on the owners of the deceptive company but sometimes on all financial markets. As an example can be quoted South Sea Bubble from the 1711 year, which is the first detected crisis on the financial market caused by the improperly prepared financial statement.

But not only the early capitalism was threatened by a crisis caused by the improperly prepared financial statement. Also in the XXI century existed companies that collapsed due to the falsification of financial statements sometimes causing confusion on global financial markets. One of the most known and the first was the Enron affair.

Enron used to specialize in the energy industry, firstly it was a gas distributor then the company started energy distribution and the trade of it. The global chain of Euron's companies consists of 33 subsidiaries. But the more innovative products they offered, the more money the group required. As a result of the impossibility of gathering enough funds the company's management decided to distort the financial statements [Holda A. 2020]. Hiding the operating losses held by special purpose entities (SPE) which hid costs by using financial instruments. The SPEs were selling Euron's assets in order to obtain bank warranty. Credits obtained with the use of the questionable accounting procedures were not transferred to Euron's financial statement and all losses were shown in Euron's subsidiaries' financial statements. Euron's loans were treated as prepayments on account of energy selling. Moreover, Arthur Andersen Llp., as the firm responsible for Euron's audit did not require the consolidated financial statement. As a result, Arthur Andersen Llp. was accused of an unfair proceeding and helping in a fraud commission [Kutera 2016: 72].

Another example of the importance of a high-quality audit (that contains well-formed professional judgment) can be Parmalat, an Italian company set up in 1961, focused on the dairy market and derived products. In 2001 the company started its activity in some exotic countries, bought a football club (AC Parma), and set up a chain of international companies, where the debt was transferred to. When the fraudulent financial reporting used by the company came out into the open in 2003 it contained:

- Hiding 12 billion euro debt,
- overstatement of profits on 500 billion euro,
- facilitate a letter from The Bank of America which confirmed that Parmalat has 4 billion euro on its accounts,

- changing the debt on the capital by using convertible bonds which buyer was a subsidiary,
- increase the value of the trademark by activating costs of AC Parma football players transfers and classifying them as intangible assets.

When the Bank of America in 2003 reveals that the 4 billion euro deposit does not exist and that the document which Parmalat presents is a forgery, the price of Parmalat's stock fell by 74% which resulted in the suspension of trading in them. The auditor company, which audited Parmalat, the Grant Thornton, must have known about the illegal conduction of their customer but for some reason, their opinions were always clear. In my opinion, the auditor shew the lack of self-esteem and autonomy, was manipulated or did not allow the possibility of losing such a big contractor. As a consequence of the auditor's lack of professional skepticism can be pointed:

- For auditor - the auditor's legal issues, probably losing the right to auditing financial statements.
- For the Grant Thornton - losing the good name of the company and possibly lawsuits for failure to fulfill obligations.
- For society – losing confidence in financial institutions.

Fraudulent financial reporting is a problem not only for the management, the company owners, or its customers but sometimes has a much bigger range and covers the whole country (like it had a place in example of SKOK Wołomin in Poland when the Banking Indemnity Fund had to withdraw 2,2 billion PLN to the victims) or even the whole world and can cause a global crisis like it had a place in example of the bankruptcy of Lehman Brothers Holding Inc. that caused the global crisis in the 2008 year.

And one of the ways of preventing an economic crisis is the right auditor's judgment. "When auditors do not appropriately apply professional skepticism, they may not obtain sufficient appropriate evidence to support their opinions or may not identify or address situations in which the financial statements are materially misstated" is written in the alert no. 10 published by PCAOB in 2012. Unfortunately even choosing companies from BIG 4 does

not give a guarantee to obtain sufficient level in professional skepticism in audit. As an example it can be mentioned the KPMG, which was punished by The Financial Reporting Council (FRC) with a £700,000 fine on 02 April 2020. Also the senior partner, Nicola Quayle, who was responsible for conducted audit was punished with a fine of £45,000 [[www.frc.org.uk](http://www.frc.org.uk)].

But it was not the only one breach caused by Nicola Quayle. On 19 January 2022 the KPMG was punished a financial sanction of £4,300,000 by FRC. The shortcomings concerned Conviviality which was listed on the Alternative Investment Market of the London Stock Exchange. In 2017 the Company reported significant increases in the key financial reporting areas of revenue, profit and net assets [[www.frc.org.uk](http://www.frc.org.uk)]. As a consequence, Nicola Quayle was punished of £110,000. In statement presented by the FRC it can be read that “the requirement to obtain sufficient appropriate audit evidence, apply sufficient professional skepticism, and prepare proper audit documentation. The sanctions reflect the seriousness of the failings. The sanctions also reflect the poor regulatory track record of each of the Respondents and are intended to enhance the quality and reliability of future audits.” [[www.frc.org.uk](http://www.frc.org.uk)]. As it can be read on [accountingweb.co.uk](http://accountingweb.co.uk), “KPMG has a long list of recent examples of poor disciplinary history. In recent years the Big Four firm has been hit with a £5m fine for its audit of the Co-op bank, a £3m fine for the audit of Ted Baker, and a £6m fine for the audits of Lloyd’s Syndicate.” [[accountingweb.co.uk](http://accountingweb.co.uk)].



## Chapter 3

### 3.1. The presentation of existing research on professional skepticism

Similar to the ancient thinkers, also modern scientists have different views on what skepticism is. During years of research, academics developed different ways to understand and measure Professional Skepticism. Each of them has a different idea on how to measure Professional Skepticism understood as an auditors' trait but since now no one has focused on auditors' state and examined the influence which auditors' state has on Professional Skepticism and the skeptical decision and judgment presented by auditors. On the other hand for all of them, it is clear that the state in which the auditor is has an important influence on professional skepticism. This relationship has been scientifically confirmed. In his book Daniel Kahneman [2012] indicated that in one psychological research it turned out that judges' sentences in court were stricter when they were before lunch than when they were after it. This phenomenon inspired me to conduct my research in this matter.

Below are presented the existing researches instruments which allow measure of Professional Skepticism (points a and b) and their comparison (point c):

- a) Model Hurtt Professional Skepticism Scale - HPSS [Hurtt 2010] which allows measuring auditors' neutrality,
- b) The inverse of the Rotter Interpersonal Trust scale - RIT [Nelson 2009] which describes Professional Skepticism understood as Presumptive Doubt and the factors that influence it,
- c) Neutrality versus Presumptive doubt - the comparison of Nelson's inversed-RIT model and Hurtt's HPSS model based on Quadackers' research.

## **3.2. Model designed by Kathy Hurtt in 2010 (HPSS)**

### **3.2.1. The basic information about Hurtt**

In Hurtt's article [2010] can be read that she „developed a scale designed to ex-ante measure an individual's level of trait professional skepticism based on characteristics derived from audit standards, psychology, philosophy, and consumer behavior research". What is more, those same pieces of literature also suggest a possible set of behaviors that are indicative of professional skepticism". This model has been presented in chapter 2, Figure 2. It shows the impact, that an individual's skepticism (understood as a trait) and situational variable has on an auditor's mindset and as a result, his skeptical judgment and skeptical behavior. The additional factor which has an influence on auditors' professional skepticism is the attitude to risk. Auditors who are risk tolerant may make less skeptical decisions [Hurtt 2010].

Hurtt is known as a neutrality follower instead of presumptive doubt, and so the scale she designed does not measure the Professional Skepticism in a strict sense, but the level of neutrality presented by the auditor. Moreover, she does not take into consideration Professional Skepticism understood as a state.

Hurtt based her research on Churchill's [1979] directions and as such she developed her scale (HPSS). She tried to measure auditors' professional skepticism by asking them questions that describe their personalities and as a consequence – trait professional skepticism.

### **3.2.2. Basic assumptions of the Hurtt model**

At first, Hurtt defined the concept of professional skepticism. By deduction, she came to a conclusion that someone who is skeptical has to exhibit features such as:

- a) **Questioning mind** – which is understood as an „ongoing questioning of whether the information and evidence obtained suggests that material misstatement due to fraud has occurred" (AICPA 2002).
- b) **Suspension of Judgement** – understood as withholding judgment until an appropriate level of evidence had been gathered.

- c) **Searching for knowledge** – should be understood as broadening auditors’ knowledge in general and not being interested in searching for simple answers during verifying conclusions.
- d) **Interpersonal Understanding** - this characteristic is related to understanding the motivation and integrity of evidence providers. Because individuals have many incentives and opportunities to commit fraud, the auditor should remember that interviewing clients’ employees may be less than truthful.
- e) **Autonomy** – means that „the auditor shall comply with relevant ethical requirements, including those pertaining to independence, relating to financial statement audit engagements” [ISA 200].
- f) **Self – esteem** - it is required from the auditor to resist persuasion and challenge with evidence provider’s opinion. Self–esteem allows the auditor to remain autonomous while performing audit, identify and acknowledge different explanations than given which is articulated by Linn et al [1982].

All the above features have been described in more detail in chapter 2. After defining the concept of professional skepticism, Hurtt set about developing a model that would be able to test its value among auditors.

### **3.2.3. Major steps in creating a Hurtt’s model**

Hurtt developed a list of 220 potential questions and give a Six-point Lickert scale to answer (from „strongly agree” to „strongly disagree”). Next, she tested the questions on students to see if they translated back to the original constructs. After that, Hurtt eliminated questions that did not show a correlation with the original concept. To find out if Hurtt understood professional skepticism in the same way as other accountants, she asked specialists to answer open-ended questions about what are the manifestations of professional skepticism and what are the manifestations of its lack. She compared the answers with her concept [Hurtt 2010].

In the next step of her research, Hurtt consulted her questions with professors in accounting and auditing and eliminated questions that were irrelevant according to experts' opinions. The list of 49 questions developed in the way presented above, Hurtt pretested on a group of 89 graduate and undergraduate business students. All answers received were tested again to define the correlation and remain 23 items from the 49 questions list. Next, Hurtt prepared a list of new questions for the constructs where previous items had been confusing to the subjects and wrote additional items to obtain an equal number of five questions for each of the six factors (the six factors have been presented in the above subsection). There were no signs that any single aspect of skepticism is more important than another so all of them had equal weights. After that Hurtt's model was ready to be tested on professional auditors [Hurtt 2010].

#### **3.2.4. The results of the research**

The scale has reached the level of Cronbach's Alfa 0,95, which means that it measures professional skepticism in a fair way (the minimum level for the test to be considered reliable is 0,6). Analysis of the data revealed no significant differences in skepticism scores related to any demographic information such as gender, GPA, class standing, class where the instrument was administered, native English speaker, or age.

What is more, the test shows no relationship between professional skepticism and experience. As it can be read in the article [Hurtt 2010], „the student subjects had a mean score of 132.7 with a standard deviation of 15.9, and scores ranged from 77 to 175” and „the professional auditors' mean score on the scale was 138.6, with a range from 111 to 173 (of 180 points possible) and a standard deviation of 12.6.”

Because the correlation matrix indicated that many of the items were significantly correlated, Hurtt decided to use oblique rotation in the factor analysis of the responses.

To verify the reliability of the test, Hurtt used a test-retest method – she emailed the subjects again and asked them to complete an unrelated task, answer a few questions, and then retake the professional skepticism scale. Answers from 88 subjects were gained and the mean score on the second test was 135.4, with a range of 105 to 177 and a standard deviation of 14.7. As

it can be read in Hurtt's paper [Hurtt 2010], „These results provide preliminary evidence that the skepticism scale is a valid instrument with appropriate inter-item and temporal stability. As such, it provides accounting firms and researchers with the first instrument theoretically designed to measure professional skepticism”.

### **3.3. Nelson the inversed of the Rotter Interpersonal Trust scale – RIT**

#### **3.3.1. The basic information about Nelson**

In contrast to Hurtt, Nelson is a presumptive doubt follower and he believes that a satisfactory level of professional skepticism is obtained by this approach instead of neutrality, which is recommended by Hurtt. In his opinion, the auditor during the conducted audit should be aware that the client may want to deceive him or hide something from him. For Nelson, it is unacceptable to have a neutral position because managers may take too much advantage of financial statements fraud.

On the other hand, he also believes that “Depending on how an auditor's decisions are evaluated, it is possible under this definition for an auditor to exhibit too much Professional Skepticism, in that they could design overly inefficient and expensive audits” [Nelson 2009]. His theoretical and practical experience enabled him to develop the inversed of the Rotter Interpersonal Trust scale – RIT (inversed RIT) which is a revised version of the Rotter Interpersonal Trust scale designed by Rotter in 1967. Below I present Nelson's way of understanding the professional skepticism.

#### **3.3.2. Nelson's understanding of Professional Skepticism description**

Nelson stood out five factors that interact with Professional Skepticism:

**a) Knowledge** – which can have both positive and negative implication Profesional Skepticism. On one hand, when the auditor is more experienced and has a high-knowledge he can detect an error more effectively because he knows when something is suspected and because of his experience, he can detect which parts of the financial statement are the most at risk of fraud. On the other hand, because of the routine and repetitive aspect of the job, the auditor can

assume that the presented explanations are correct and what is more, he can also assume that the missing evidence is corresponding with these explanations.

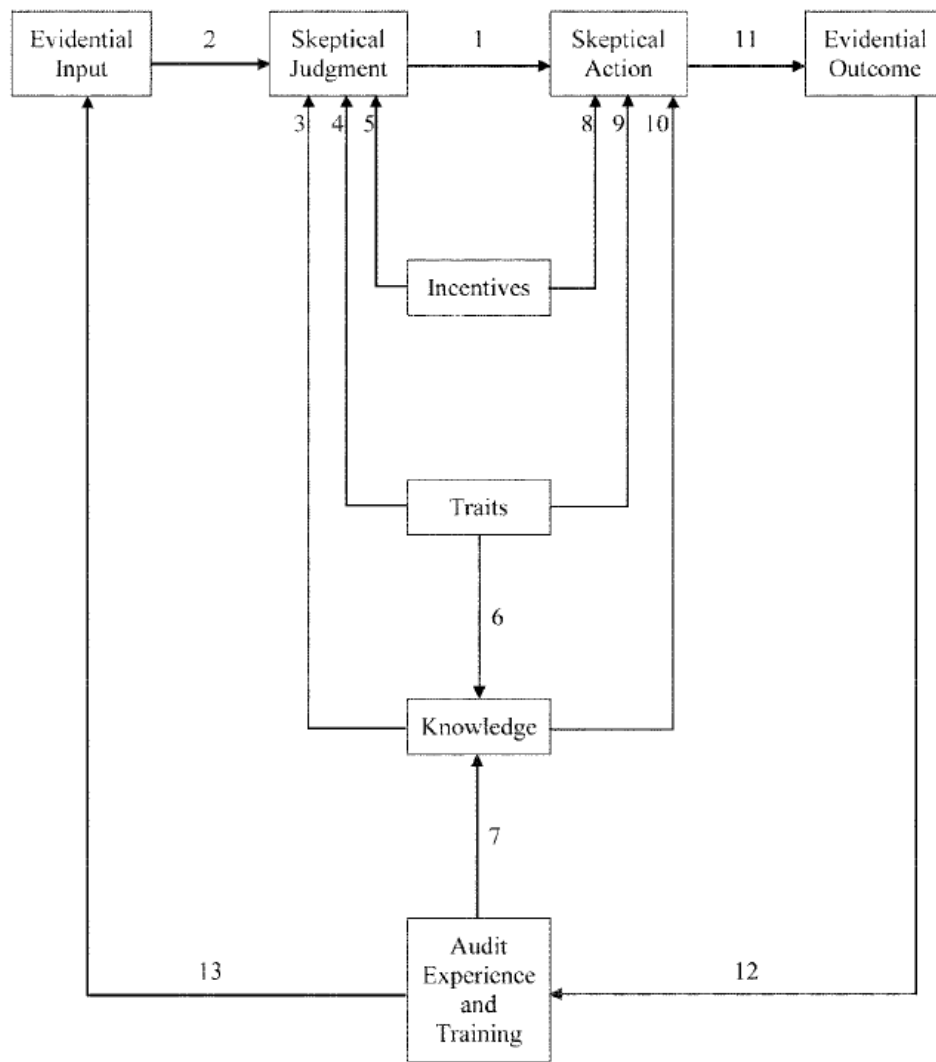
**b) Traits** – traits that should be presented by the auditor include the ability to problem-solving, ethical predisposition but also (similar to the statement presented by Hurtt [2010]) self-confidence, and the tendency to doubt. Another situation when the auditor's traits have a significant meaning is when he is encouraged by the company or the client.

**c) Incentives** – this factor is connected with the previous one. One of the most important issues of an error during the audit are incentives. On one hand, the company can try to motivate the auditor to harder work and can create time pressure which can have a negative influence on the auditor's Professional Skepticism. But also there can be a situation when the client can try to manipulate the auditor or even bribe him.

**d) Judgment** – is strongly connected with cognitive limitations. The judgment presented by the auditor should be free of cognitive biases and the auditor must know how to detect and exclude them.

**e) Action** – has an influence on audit quality. This part consists of the planning the audit and dealing with proposed audit adjustments [Nelson 2009].

In contrast to Hurtt [2010], Nelson presented a theoretical model, which describes the impact of factors on skeptical judgment and skeptical action. Same as Hurtt [2010] Nelson also find that there is a difference between skeptical judgment and skeptical action, which he included in his model.



**Figure 4: Determinants of Professional Skepticism in Audit, Nelson, M. W. 2009. "A model and literature review of professional skepticism in auditing." Auditing: A Journal of Practice & Theory 28 2 : 1–34.**

According to Nelson’s model, there are two main knowledge-based inputs on which skeptical judgment is established. The first is the evidential input understood as all evidence gathered during the conducted audit (link 2). Obtained evidence is analyzed and verified by the auditor using the auditor’s knowledge (link 3) which, according to Libby and Luft (1993) should be viewed as a combination of auditor’s traits (link 6) and prior experience and training (link 7). Non-knowledge attributes referred to by Nelson are auditor’s traits like intelligence,

a tendency to doubt, and self-confidence (link 4). Judgment issued by the auditor can also be interrupted by incentives (link 5).

The professional judgment needs the auditor's incentives (link 8), traits (link 9), and knowledge (link 10) before it is sufficient to promote a professional action "and whether an auditor actually appears to have exercised PS <sup>1</sup> is also influenced by aspects of knowledge (e.g., knowledge of constraints provided by accounting and auditing standards), traits (e.g., self-confidence), and incentives (e.g., whether pressures to stay within, time-budget or avoid displeasing the client discourage the auditor from taking particular actions, holding constant the PS reflected in their judgment)" [Nelson 2009].

When the firstly inputted evidence is issued and analyzed due to auditors' traits, knowledge, and incentives that occurred during the audit, it becomes a part of the auditors' experience (link 12) and the evidence becomes the future input to the process (link 13).

The significance of individual components participating with the skeptical judgment and the skeptical action are:

**1) Knowledge** – to enable using of professional skepticism, auditors have to understand the implications of the evidence for audit risk. Moreover, they must be able to apply their knowledge and evaluate if the given set of evidence is high risk or not. So that, according to Nelson (2009), factors related to knowledge can be detailed:

- a) knowledge of relations between evidence and audit risks,
- b) specialization,
- c) knowledge of the frequency of errors and non-errors situations,
- d) the patterns of evidence that suggests a heightened risk of misstatement.

**2) Traits** – the non-knowledge attributes which have an impact on an auditor's professional skepticism. According to Nelson, there are two categories of auditor's attributes that are related to professional skepticism and have an influence on professional judgment:

- a) Problem-Solving Ability,
- b) Ethics and Moral motivation,

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<sup>1</sup> Professional Skepticism



**3) Incentives** - constitute the most complex group of factors influencing Professional Skepticism. There can be identified incentives at the firm level (which have an influence on the company's reputation) or on the auditor's level (this group includes factors that directly apply to the auditor's motivation).

**a) At the firm level** – incentives favoring professional skepticism at the company level are regulatory bodies. If a company does not provide a sufficient level of professional skepticism can have legal consequences and in a consequence, will lose its reputation which will result in lower prices of services that can be agreed upon with customers. These factors may endanger the very existence of the company.

**b) At the auditor's level** – may adversely affect the auditor's individual reputation. as a consequence, they may make it difficult to sign a favorable contract with an auditing company or find a job in a different field of finance. Companies can influence their employees (auditors) through evaluation of the results based on the basis of which promotions, remuneration package, and bonuses are determined.

The above incentives have a positive influence on the professional skepticism level presented by the auditors. However, it should be remembered that offsetting incentives to reduce professional skepticism also exist. For example, clients can make a pressure on auditors to reduce the costs of an audit, and as a consequence, the audit firm may not allocate sufficient resources to maintain an appropriate level of professional skepticism (for example, the number of people involved in the study will be insufficient, which will not allow for an audit with an appropriate level of professional skepticism) [Nelson 2009].

Moreover, another problem that may have a negative impact on the level of professional skepticism is the willingness of the auditor to assume a managerial position (like a financial director or CEO) in the audited company in the future. As a consequence, the auditor will not want to destroy the relationship with the client [Bazerman et al. 2006].

### 3.4. Neutrality versus Presumptive doubt - the comparison of Nelson's inversed-RIT model and Hurtt's HPSS model.

Professional Skepticism is a crucial part of financial statement auditing which is confirmed both by professional auditing standards and academic research. While the universally accepted definition of Professional Skepticism does not exist and two different perspectives have been evaluated, this part contains the presentation of differences and similarities in auditors' approach (the neutrality measured by Hurtt's HPSS or the presumptive doubt perspective presented by Nelson in inversed-RIT). The knowledge about the advantages and disadvantages, and about the relationships between neutrality and presumptive doubt is important for considering which one would be better in addressing client risks [Quadackers 2012].

The dependence between auditors' skeptical perspective (neutrality or presumptive doubt) and professional judgment was presented by Luc Quadackers, Tom Groot, and Arnold Wright in their paper "Auditors' Professional Skepticism: Neutrality versus Presumptive Doubt" in 2012. Based on past research they examined six proxies for auditors' skeptical judgments and in consequence decisions. They assumed that "higher auditor skeptical disposition will lead to greater skeptical behavior, particularly in a higher-risk setting" [Quadackers 2012].

For auditors creating different explanations is a useful ability, which testify his skepticism. In their research [Quadackers 2012] Luc Quadackers, Tom Groot, and Arnold Wright made the assumption that the more professional skepticism is exhibited, when:

- a) the more alternative explanations are generated by the auditor,
- b) the more error explanations the auditor can quote,
- c) higher the likelihood of the error explanations.

Professional auditors ought to consider all gained evidence because there are premises that the management can commit fraud. Auditors should be circumspect especially when they perceive a possible fraud motive (for example the management's salary is dependent on the company's financial results). Researchers assumed that there is more than 85% chance that the management explanation is right.

The last dependent variable is the number of budgeted hours that are needed for the audit. They assumed that the more budgeted hours testifies to more professional skepticism shown by the auditor.

The main difference between inversed RIT scale and HPSS is the nature of the question. For Nelson, the basic level of trust is lower than for Hurtt. According to inversed RIT scale skeptical person is someone who is distrusted with contact with strangers as long as they do not prove their honesty. This person believes that most people are more interested in their own welfare than in others. On the other hand in HPSS skeptical person is someone who neither trusts nor distrusts. His opinion (positive or negative) is formed based on obtained evidence. This person likes to understand other's people behavior and does not judge until he is familiar with the whole situation.

Both on inversed RIT scale and HPSS the higher scores mean higher professional skepticism. To investigate the correlation between inversed RIT scale and HPSS Luc Quadackers, Tom Groot, and Arnold Wright defined and then asked 32 knowledgeable individuals to assess which question presents a neutral attitude and which presumptive doubt giving them a score on a scale from 1 (neutrality) to 6 (presumptive doubt). Then research that was carried out (t-test and p-value) confirmed that inversed RIT scale measures presumptive doubt more than HPSS which confirms the hypothesis.

It had been shared in two parts:

- 1) the case description and the tasks,
- 2) demographic questions and the scales to measure skeptical characteristics.

In the research took part 96 participants in the experiment: 25 partners, 41 managers, and 27 seniors (3 participants did not provide staff-level information) from Big 4 firms. They had on average 15.36 years of general auditing experience and 14.75 years of experience with conducting analytical procedures so the participants had required task knowledge. In the next step, they were split in two groups, the higher control environment risk condition (47 participants) and the lower control environment risk condition (49 participants). After that, all of them were asked to complete the two skeptical characteristics measurement scales which were randomly ordered.

The researchers examined the Pearson correlation, which was not meaningful, which means that these models measure different skeptical attitudes.

The mean score for inversed RIT scale was 73.95 with a standard deviation of 8.22. This score is close to the theoretical midpoint for this model, which is 75. For the HPSS model, the mean score was 133.09 with a standard deviation of 10.84. The result has significantly deviated from the theoretical model where the Theoretical midpoint is 105.

Results in the low-risk environment show that both inversed RIT and HPSS are predictive of auditor skeptical behavior. In the correlations between inversed RIT and the dependent variables, only two of them are important: the likelihood that the management explanation is right and the likelihood of fraud.

In the case of correlation between HPSS and the dependent variables, was significant only for three of them: the likelihood of fraud, the number of budgeted hours, and the number of total error explanations.

A significant difference between inversed-RIT and HPSS scales occurred in the higher-risk setting with a weaker control environment. While all correlations between inversed RIT and the dependent variables were significant, in the case of the HPSS scale only one correlation was marginally notable (the number of budgeted hours). The presented results confirmed the hypothesis put forward by the researchers that the presumptive doubt has a higher influence on auditors' skeptical judgments when client risks are higher. As a consequence auditors who present a presumptive doubt approach shows better skeptical judgments and decisions in working with higher-risk clients.

## Chapter 4

### 4.1. Introduction to the research

As it was mentioned in chapter 2, Professional Skepticism can be understood both as a trait and as a state. So far all researchers were focused on auditors' natural traits and presented models which were designed to measure auditors' traits.

Using my questionnaire, I present a solution to measure auditors' Professional Skepticism understood both as a trait (in this process I will try to use existing models developed by Hurtt and Nelson) and as a state. Hurtt Professional Skepticism Scale (HPSS) is divided into six parts: Searching for Knowledge, Suspension of Judgment, Self-Determining, Interpersonal Understanding, Self-Confidence, and Questioning Mind. To measure Professional Skepticism as a state I propose a model, which was developed the following way: At first I sent a question to professionals who deal with an audit at their work „What factors influence their professional skepticism, and thus the evaluation of the presented evidence?“ that enable me to compare my understanding of professional skepticism by professionals. I asked them to list the factors which in their opinion have the strongest influence on the auditors' professional skepticism. Subjects who replied were either auditors, or were in the process of passing tests for statutory auditors, or worked in the audit for a minimum of one year. That way, I gained a broader view of professional skepticism and how it is understood by practitioners. The answers obtained allowed me not only to design the model to measure professional skepticism presented by auditors but also indicate factors, which may suggest a necessity to apply a higher level of professional skepticism.

Below I present factors related to the auditing process listed by my respondents, which may indicate the need to apply a higher level of skepticism:

1. If it is the first audit of this company.
2. Who conducted the previous audits (if it was an auditor inexperienced or negligent the risk is higher).
3. The experience of the head accountant – the more extensive it is, the chances of errors are lower.
4. The head accountant's knowledge - if numerous errors are found, particular care should be taken for the entire financial statements.
5. Changes in the management of the company – if there were many changes in a short time, the risk of distortions of the financial statement is higher.
6. The auditor's experience – in this factor my respondents were not compatible. Some of them were sure that the more experienced auditor, the higher skepticism is presented. Others believed that with the growth of auditors' experience, the auditors' accuracy decrease and as a result also the professional skepticism. A different result was obtained by Hurtt [2010]. It showed that there is no relation between the auditors' experience or age and the level of Professional Skepticism presented.
7. Poor preparation to audit by the company.
8. The attitude of the company's management to the audit – when they treat the audit as an annoying duty.
9. Providing incomplete or incorrect data.
10. Obstructing access to information about the company.
11. Dependence of the management's salary on the company's financial results.
12. Lack of or malfunctioning internal control system.

The next step was to create a questionnaire based on research instrument presented by Hurtt (2010), a classical philosophy that allowed me to understand the concept of professional skepticism, legal acts, psychological research and the results of research by other scientists

who have dealt with professional skepticism. After that I sent the questionnaire to the new group of respondents in order to test it.

The level of professional skepticism is closely related to the auditor's judgment. The higher the level of skepticism, the more accurate the auditor's judgment is, and should generally be more accurate. In my survey, I tried to focus mainly on the judgment-making process, not the result. There is no possibility to measure whether the auditor's judgment is correct, but it can be determined whether he exercised due care that led him or her to formulate it.

#### **4.2. The research instrument.**

To test the level of professional skepticism (both understood as a trait and as a state professional skepticism), I used a developed questionnaire. The questionnaire was created in Polish due to the fact that the test was conducted on Polish audit employees. The original version of the questionnaire has been included in attachment 1. The questionnaire was provided online using Google Forms, and it was divided into four sections for easier navigation.

**The first section** contained demographic and professional data. In this part of questionnaire subjects were asked about their gender, age, experience in auditing, employee number, and the annual number of conducted audits. These questions made it possible to measure the level of skepticism among the various criteria of the groups of participants.

**Section two**, except for the first question, concerns the **trait professional skepticism**. The possible answers in this section were definitely yes, rather yes, hard to say, rather not, and definitely not. All results were graded Using 5-point Lickert scale. Depending on whether a given factor contributed positively to professional skepticism or negatively, the answer „definitely yes” was sometimes 5 and sometimes 1. Below are presented all questions with an explanation of their punctuation and a description of why in my opinion this aspect has an important influence on professional skepticism.

**Table 1: Questions from section II of the questionnaire**

<b>SECTION II</b>			
Number of question	Question	Punctuation	Resone why in my opinion this aspect has an important influence on
1	During the examination, I had no doubts about any of the presented evidence, everything was clear and consistent for me.	definitely yes = 5, rather yes = 4, hard to say = 3, rather no = 2, definitely not = 1	Question added based on factors identified by Hurtt (Questioning mind, Searching for knowledge and Suspension of Judgement).
2	During the research, I pay attention to who has conducted an audit before me.	definitely yes = 5, rather yes = 4, hard to say = 3, rather no = 2, definitely not = 1	Consultants who professionally deal with auditing indicate this feature as very important. Moreover, it is example of Searching for knowledge postulated by Hurtt.
3	If I believe that the auditor who has audited the entity before me did it incorrectly (the audit was not conducted fairly), then I audit it even more thoroughly.	definitely yes = 5, rather yes = 4, hard to say = 3, rather no = 2, definitely not = 1	Question added based on factors identified by Hurtt (Questioning mind and Searching for knowledge). Questioning mind was also mentioned in AICPA 1997a and AICPA 2002. This factor was also indicated by consultants as very important.
4	In the case in which the chief accountant is a person with many years of experience, I allow myself to conduct a less detailed audit.	definitely yes = 1, rather yes = 2, hard to say = 3, rather no = 4, definitely not = 5	Question added based on factors identified by Hurtt (Questioning mind, Suspension of Judgement and Searching for knowledge). Questioning mind was also mentioned in AICPA 1997a and AICPA 2002. This factor was also indicated by consultants as very important.
5	I am often under time pressure when auditing financial statements.	definitely yes = 1, rather yes = 2, hard to say = 3, rather no = 4, definitely not = 5	Question added based on factors identified by Hurtt (Self - esteem). Psychological research shows that people working under time pressure are more likely to make mistakes.
6	Working under time pressure is an obstacle for me, it prevents me from carrying out a thorough research.	definitely yes = 1, rather yes = 2, hard to say = 3, rather no = 4, definitely not = 5	Question added based on factors identified by Hurtt (Self - esteem). Psychological research shows that people working under time pressure are more likely to make mistakes.
7	I like to work under time pressure, it motivates me to think and act faster.	definitely yes = 5, rather yes = 4, hard to say = 3, rather no = 2, definitely not = 1	Question added based on factors identified by Hurtt (Self - esteem). Psychological research shows that people working under time pressure are more likely to make mistakes.
8	The client's satisfaction with the audit is very important to me.	definitely yes = 1, rather yes = 2, hard to say = 3, rather no = 4, definitely not = 5	Question added based on factors identified by Hurtt (Interpersonal Understanding, Autonomy, Self - esteem). The autonomy was also described in ISA 200.
9	Often, during the audit, I re-estimate the level of risk after deeper analysis.	definitely yes = 5, rather yes = 4, hard to say = 3, rather no = 2, definitely not = 1	Question added based on factors identified by Hurtt (Searching for knowledge, Questioning mind, Interpersonal Understanding). Questioning mind was also mentioned in AICPA 1997a and AICPA 2002.



**Section three** also concerns the **trait professional skepticism**. In this part, the answers take different forms. There are also non-pointed questions (question 4 and 13), which have a different purpose. Question 4 was intended to compare the Professional Skepticism between those who manage other people's work and those who do not do that. Question 13 was intended to check which approach is more popular among auditors - neutrality or presumptive doubt. Most of the respondents indicated a neutral approach when starting the study (39 subjects). The presumptive doubt approach was indicated by 9 subjects. Two respondents have different approach at the beginning of audit.

Below I present all questions with an explanation of their marking and a description of the reason why this aspect has an important influence on professional skepticism.

**Table 2: Presentation of questions from section III**

<b>SECTION III</b>			
<b>Number of question</b>	<b>Question</b>	<b>Punctuation</b>	<b>Resone why in my opinion this aspect has an important influence on professional skepticism</b>
1	Frequent changes in the management of the entity	make me check particular areas more carefully during the examination - 5, do not affect the study - 3, result in a reduction in	Question added based on factors identified by Hurtt (Searching for knowledge, Questioning mind, Interpersonal Understanding, Suspension of Judgement). Questioning mind was also mentioned in AICPA 1997a and AICPA 2002.
2	If a more in-depth analysis of any of the studied areas is necessary	I increase the number of hours needed for the examination by staying longer at work - 5, I take a closer look at the area that made me suspect, spending less time elsewhere. - 3, I do not devote any	According to art. 80 Act on Statutory Auditors, Audit Firms and Public Oversight "The remuneration for carrying out the audit reflects the labor intensity and the degree of complexity of the work and the qualifications required", so that therefore, it is unjustified to reduce the hours devoted to the study of other areas.
3	Do you consider the possibility of cooperating with the client in the future in a form other than an audit of the financial statements? For example, being employed as a chief accountant?	definitely yes = 1, rather yes = 2, hard to say = 3, rather no = 4, definitely not = 5	Person who is considering engaging with a client may display less professional skepticism as it will be more important for them to leave a positive impression than to thoroughly audit the financial statements. Restrictions on the cooperation of persons involved in the audit of financial statements with a former client are also imposed by art. 76 Act on Statutory Auditors, Audit Firms and Public Oversight.
4	Do you manage the work of at least one other person?	non-pointed question	This question was intended to compare the Professional Skepticism between those who manage other people's work and those who do not do that.
5	Do you frequently verify the work of your employees?	definitely yes = 5, rather yes = 4, hard to say = 3, rather no = 2, definitely not = 1, I do not manage other people's work - in this case I	Verification of employees' work is an example of Questioning mind and Searching for knowledge postulated by Hurtt.
6	What is your approach to a client who did not submit documents for examination in accordance with the agreed deadline?	nothing changes, I am not disturbed by minor changes in the test schedule - 3, I spend more time analyzing the documents I received. I believe that since he did not prepare them on time, it may indicate that he is trying to hide uncomfortable issues - 5, because of that due to the client's	Question added based on factors identified by Hurtt (Questioning mind, Suspension of Judgement and Searching for knowledge). Questioning mind was also mentioned in AICPA 1997a and AICPA 2002.
7	When you receive a complete set of documents for audit and all the necessary information about the unit is in perfect condition (everything is correct)	I check areas even more closely for other procedures - 5, I research all areas as usual and do not change procedures - 3, I check the areas less thoroughly because	Question added based on factors identified by Hurtt (Questioning mind, Suspension of Judgement and Searching for knowledge). Questioning mind was also mentioned in AICPA 1997a and AICPA 2002.
8	Do you adapt individual procedures to clients whose risk is higher?	definitely yes = 5, rather yes = 4, hard to say = 3, rather no = 2, definitely not = 1	This question is connected with searching for knowledge and questioning mind postulated by Hurtt. Questioning mind was also mentioned in AICPA 1997a and AICPA 2002.
9	In case of doubts as to the evidence presented by the client, do you increase the number of procedures performed in a given area?	no, each entity is audited according to the same procedures - 1, yes, in particularly important areas, when standard procedures did not allow me to be confident	Question added based on factors identified by Hurtt (Questioning mind, Suspension of Judgement and Searching for knowledge). Questioning mind was also mentioned in AICPA 1997a and AICPA 2002.
10	Do the conditions in which you work (e.g. cramped room, lack of air conditioning) affect your well-being?	definitely yes = 1, rather yes = 2, hard to say = 3, rather no = 4, definitely not = 5	A person who feels unwell is disturbed and the risk of being overlooked is increased. The risk of being overlooked was mentioned in National Auditing Standard number 200 as worded in International Auditing Standard 200.
11	Does your salary depend on the number of tests performed?	Yes - 1, No - 5	Linking the amount of remuneration to the number of audits performed may cause rush and reduce of accuracy.
12	How many hours a day on average per month do you work	160 or less - 5, 161 - 180 - 4, 181 - 210 - 3, 211 - 230 - 2, 231 or more -	Numerous studies by psychologists have shown a reduction in concentration and accuracy in overworked people.
13	When I begin the audit	non-pointed question	This question was intended to check which approach is more popular among auditors - neutrality or presumptive doubt.

**In the fourth and last section**, questions examining the level of **state professional skepticism**.

In this part, similar to the third section, the answers take different forms. Questions 12, 16 and 17 are non-pointed which have a different purpose.

Below I present all questions with an explanation of their marking and a description of why in my opinion this aspect has an important influence on professional skepticism.

**Table 3: Presentation of questions from section IV**

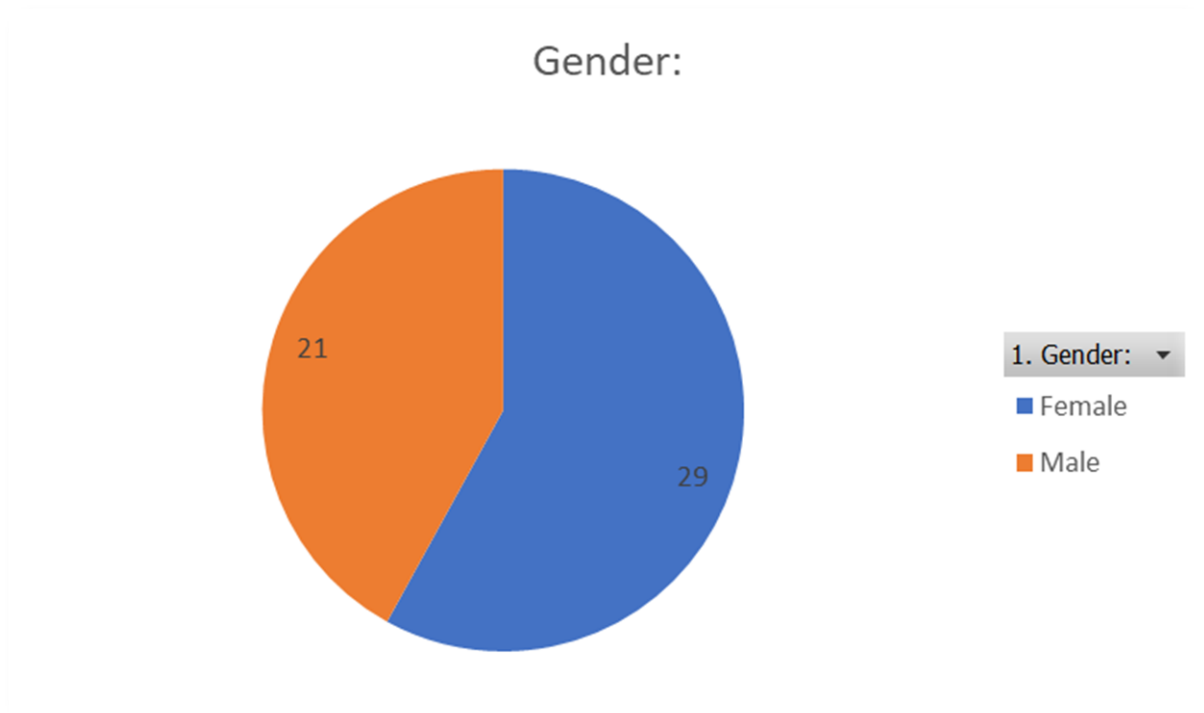
<b>SECTION IV</b>			
Number of question	Question	Punctuation	Resone why in my opinion this aspect has an important influence on professional skepticism
1	Were the working conditions appropriate and comfortable during the work for the last client?	definitely yes = 5, rather yes = 4, hard to say = 3, rather no = 2, definitely not = 1	A person who feels unwell is disturbed and the risk of being overlooked is increased. The risk of being overlooked was mentioned in National Auditing Standard number 200 as worded in International Auditing Standard 200.
2	During the last examination, did you feel good?	definitely yes = 5, rather yes = 4, hard to say = 3, rather no = 2, definitely not = 1	A person who feels unwell is disturbed and the risk of being overlooked is increased. The risk of being overlooked was mentioned in National Auditing Standard number 200 as worded in International Auditing Standard 200.
3	Do you currently feel overwhelmed by the amount of	definitely yes = 1, rather yes = 2, hard to say = 3, rather no = 4,	Research by psychologists shows that overworked people are less accurate and pay less attention to details.
4	Did you have enough time during work to eat a meal?	definitely yes = 5, rather yes = 4, hard to say = 3, rather no = 2, definitely not = 1	The question was to examine the auditor's fatigue. Due to fatigue, the risk of being overlooked increases. The risk of being overlooked was mentioned in National Auditing Standard number 200 as worded in International Auditing Standard 200.
5	Does the industry in which the audited entity operated violate your beliefs? (e.g. a process is	definitely yes = 1, rather yes = 2, hard to say = 3, rather no = 4, definitely not = 5	If the audited company violate auditor's beliefs there is a risk that the auditor will not be neutral (as it was postulated by Hurtt).
6	Did the research reveal any violations of employee discrimination?	definitely yes = 1, rather yes = 2, hard to say = 3, rather no = 4, definitely not = 5	If the audited company violate auditor's beliefs there is a risk that the auditor will not be neutral (as it was postulated by Hurtt).
7	Was the examination of an audited unit positive and did it generate an excessive amount of problems or stress?	definitely yes = 5, rather yes = 4, hard to say = 3, rather no = 2, definitely not = 1	A person who feels unwell is disturbed and the risk of being overlooked is increased. The risk of being overlooked was mentioned in National Auditing Standard number 200 as worded in International Auditing Standard 200.
8	Has a person holding a manager position in the audited entity ever worked in an audit company?	yes - 1, no - 5, I have no information on this - in this case I did not take into account this	For those who have worked in the audit before, there is a risk that they may know the audit procedures and hide the misstatements so that they will be undetectable.
9	Do you experience burnout syndrome?	definitely yes = 1, rather yes = 2, hard to say = 3, rather no = 4, definitely not = 5	Burnout causes a decrease in motivation to work, which may be related to the manifestation of a lack searching for knowledge and questioning mind, that are trait of Professional Skepticism mentioned by Hurtt and by AICPA 2002.
10	Did you feel pressure from your superiors to finish the study within a certain time?	definitely yes = 1, rather yes = 2, hard to say = 3, rather no = 4, definitely not = 5	The employee cares about achieving good results at work and the satisfaction of superiors, which may generate rush and lack of accuracy. Haste and lack of precision run counter to Hurtt's searching for knowledge and questioning mind. The accuracy is required also by all legal acts related to financial reporting.
11	Did you check the opinion of the surveyed entity on the Internet (press review, websites containing	Yes - 5, No - 1	Checking the information about the unit on the Internet will be a manifestation of searching for knowledge mentioned by Hurtt.
12	Did you go on a business trip in connection with the research?	non-pointed question	challenge questions
13	Was the distance between your company and the client large?	yes - 1, no - 5, The audit was remote and did not require travel - in this case I did not take into account this question.	The question was to examine the auditor's fatigue. Due to fatigue, the risk of being overlooked increases. The risk of being overlooked was mentioned in National Auditing Standard number 200 as worded in International Auditing Standard 200.
14	Did you feel tired during the examination?	definitely yes = 1, rather yes = 2, hard to say = 3, rather no = 4, definitely not = 5	The question was to examine the auditor's fatigue. Due to fatigue, the risk of being overlooked increases. The risk of being overlooked was mentioned in National Auditing Standard number 200 as worded in International Auditing Standard 200.
15	During your work with the client, did you work 8 hours?	I worked more than 10 hours a day - 1, I worked between 8 and 10 hours a day - 2, I worked 8 hours a day - 4, I worked less than	The question was to examine the auditor's fatigue. Due to fatigue, the risk of being overlooked increases. The risk of being overlooked was mentioned in National Auditing Standard number 200 as worded in International Auditing Standard 200.
16	Has the audited entity apply all the proposed adjustments?	non-pointed question	review question
17	What was the type of opinion	non-pointed question	review question

### 4.3. Demographic and professional data of researched subjects

This subsection presents the structure of the respondents in terms of sex, age, experience, size of the company they work for and the number of audits carried out annually.

#### 4.3.1. The gender diversity of researched subjects

The diversification of the researched subjects according to gender is presented below.

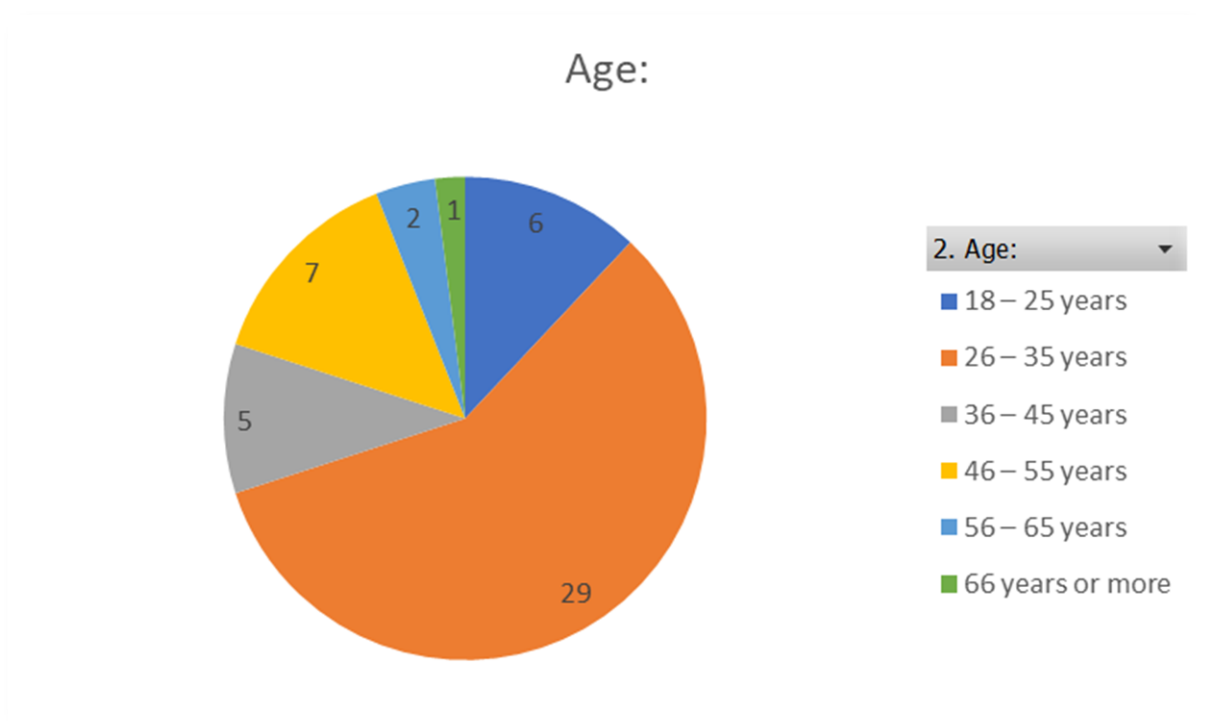


**Figure 5: The gender diversification of researched subjects, self-reported data based on carried out questionnaire.**

50 subjects took part in the inquiry, 21 men (42%) and 29 women (58%).

### 4.3.2. The age structure of the researched subjects

The diversification of the researched subjects according to age is presented below.

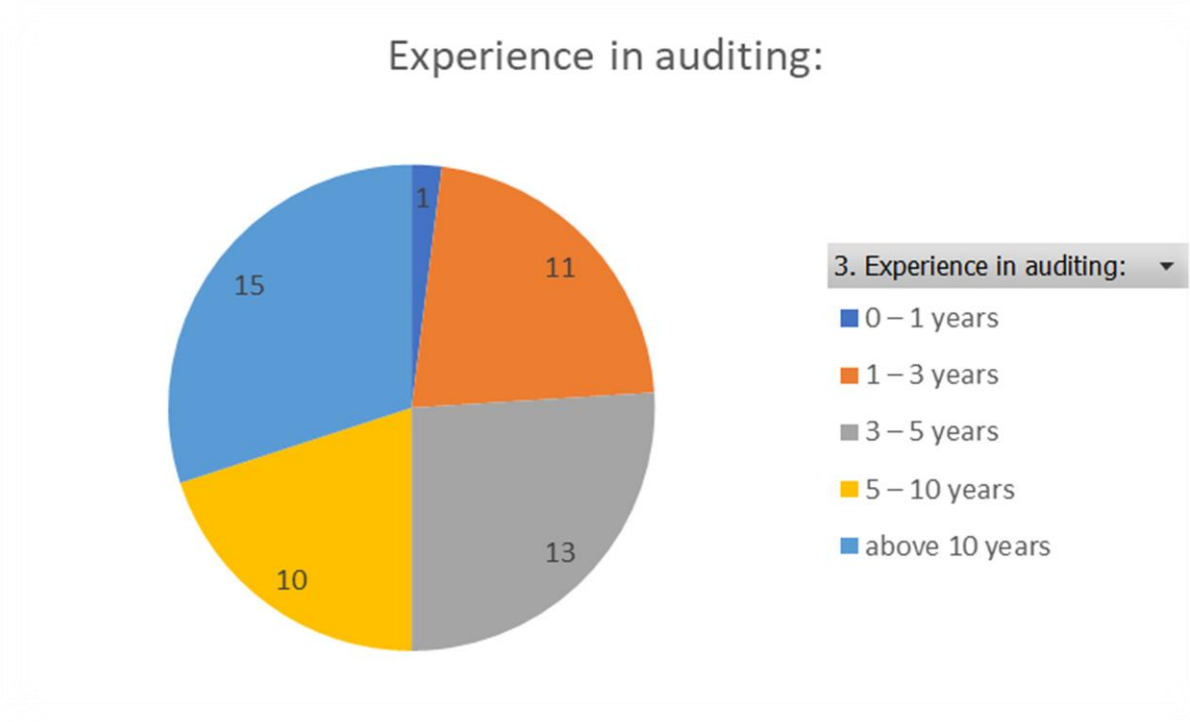


**Figure 6: The age diversification of researched subjects, self-reported data based on carried out questionnaire.**

I also asked researched subjects about their age, and the results are presented above. Due to the fact that the last compartment constituted less than 5% of the entire population, it allowed me to close it to calculate the arithmetic average. The average age of the examined subjects was 35 years.

**4.3.3. Experience structure of the researched subjects**

Below is presented the experience structure of researched subjects in Auditing.

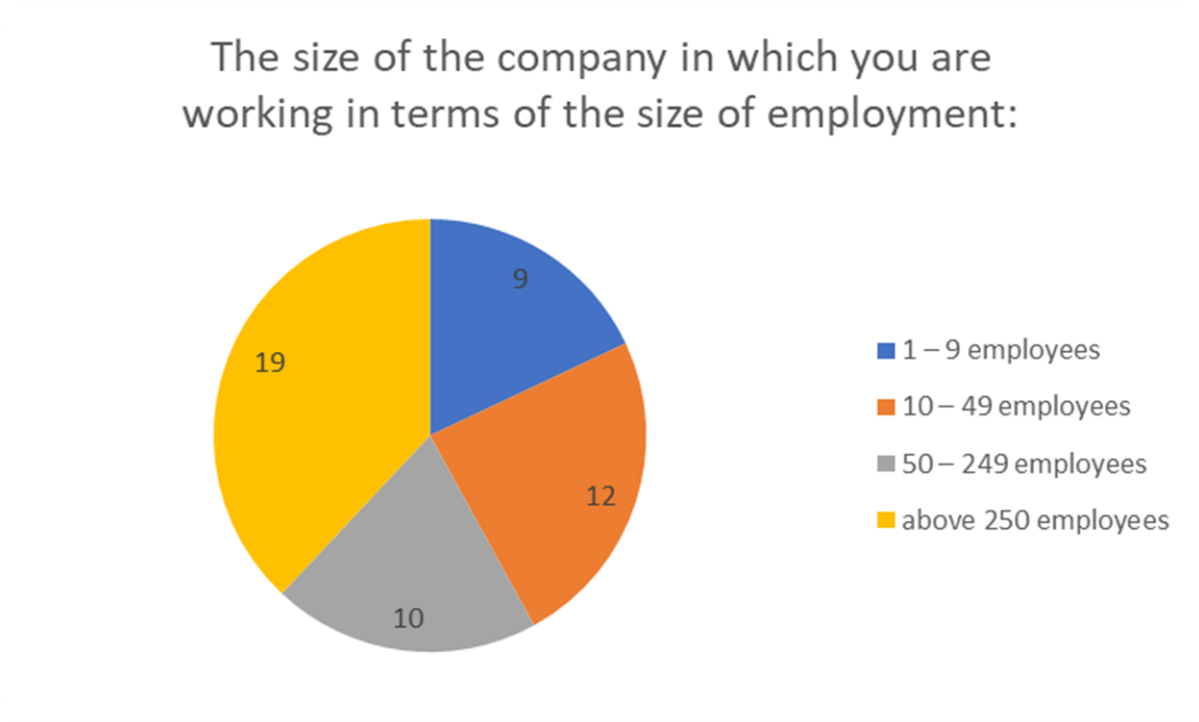


**Figure 7: Researched subjects’ experience in Auditing, self-reported data based on carried out questionnaire.**

Due to the fact that the range of 10 or more is an open range and represents more than 5% of the population, I could not close it to calculate the arithmetic mean. As a consequence, instead of the arithmetic mean, I decided to calculate the median. The median experience in auditing for the presented population is 5 years.

**4.3.4. The diversification of researched subjects in terms of the size of the company in which they work for.**

The chart below shows the employment structure of the companies in which researched subjects work for.



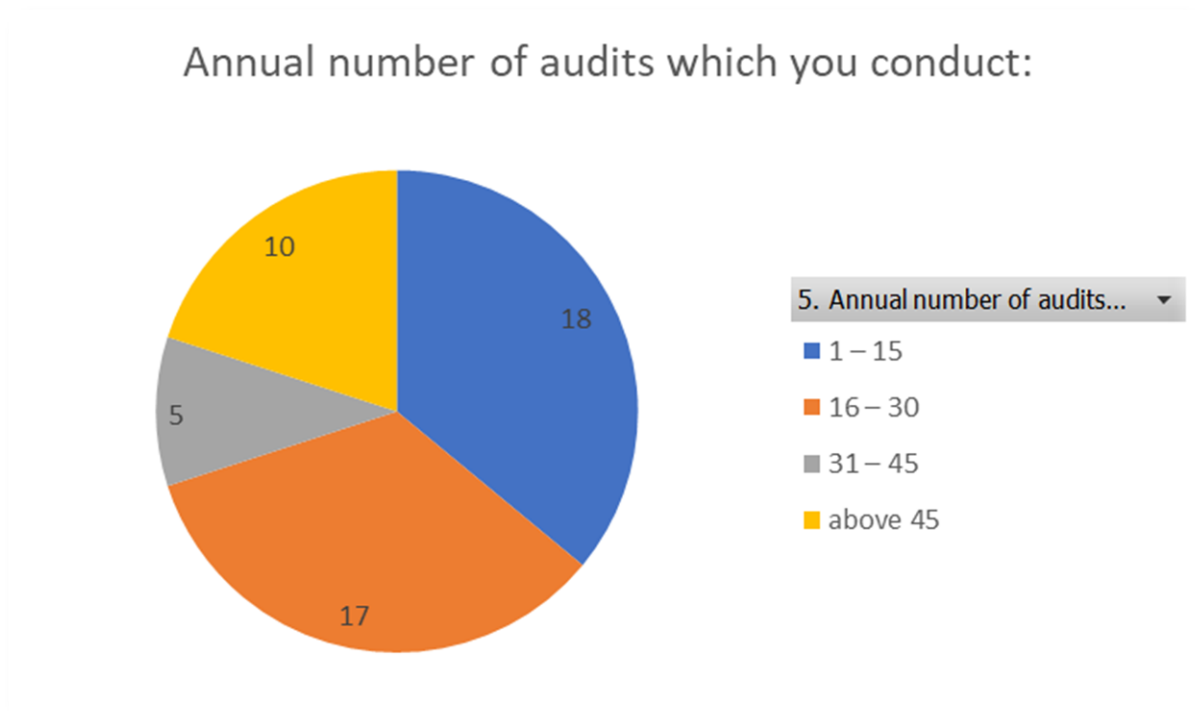
**Figure 8: The size of the company in which researched subjects work for, self-reported data based on carried out questionnaire.**

In the population of researched subjects, there is a large diversity in the size of the companies in which the participants work for. The largest group are subjects working in corporations (companies that employ more than 250 people). This result complies with the employment structure in auditing in Poland. According to the ranking of audit companies presented by Rzeczpospolita newspaper in 2022, there were 15.500 people employed in auditing in the 2021, and companies from BIG4 declared that they employed 2912 staff during audit activities. It means that 4 of the biggest companies employed 18,78% of all audit employees in Poland [Rzeczpospolita, 2022].



#### 4.3.5. The annual number of audits carried out among researched subjects

Figure 9 presents the number of audits which are conducted by researched subjects.



**Figure 9: Annual number of audits which are conducted by researched subjects, self-reported data based on carried out questionnaire.**

Similar to the average experience due to the inability to close the last interval to calculate the arithmetic average, I decided to use the median. The median annual number of audits conducted by researched subjects was 22.

#### 4.4. The results and conclusions of the questionnaire

All results are presented as percentage of obtained points, because depending on the answer it was possible to get a different number of points from each part of the questionnaire. The conversion to the percentage of points obtained allowed to compare the results.

##### 4.4.1. Gender

The fourth table presents statistical data on trait, state and in total professional skepticism presented in a gender distinction.

**Table 4: statistical data showing the participants' results presented in a gender distinction, self-reported data based on carried out questionnaire.**

Row Labels	Average of % Trait	Average of % State	Average of % In total	Standard Deviation from Trait (in %)	Standard Deviation from State (in %)	Standard Deviation from Total (in %)
Female	73%	71%	72%	6%	10%	7%
Male	70%	70%	70%	4%	9%	4%
<b>Grand Total</b>	<b>72%</b>	<b>70%</b>	<b>71%</b>	<b>5%</b>	<b>10%</b>	<b>6%</b>

	Trait		State		In Total	
	Min	Max	Min	Max	Min	Max
<b>Female</b>	60%	82%	47%	87%	56%	81%
<b>Male</b>	63%	77%	48%	85%	64%	78%

There was no relationship between gender and professional skepticism. Male subjects scored two percentage points less than female subjects. The standard deviation among women was

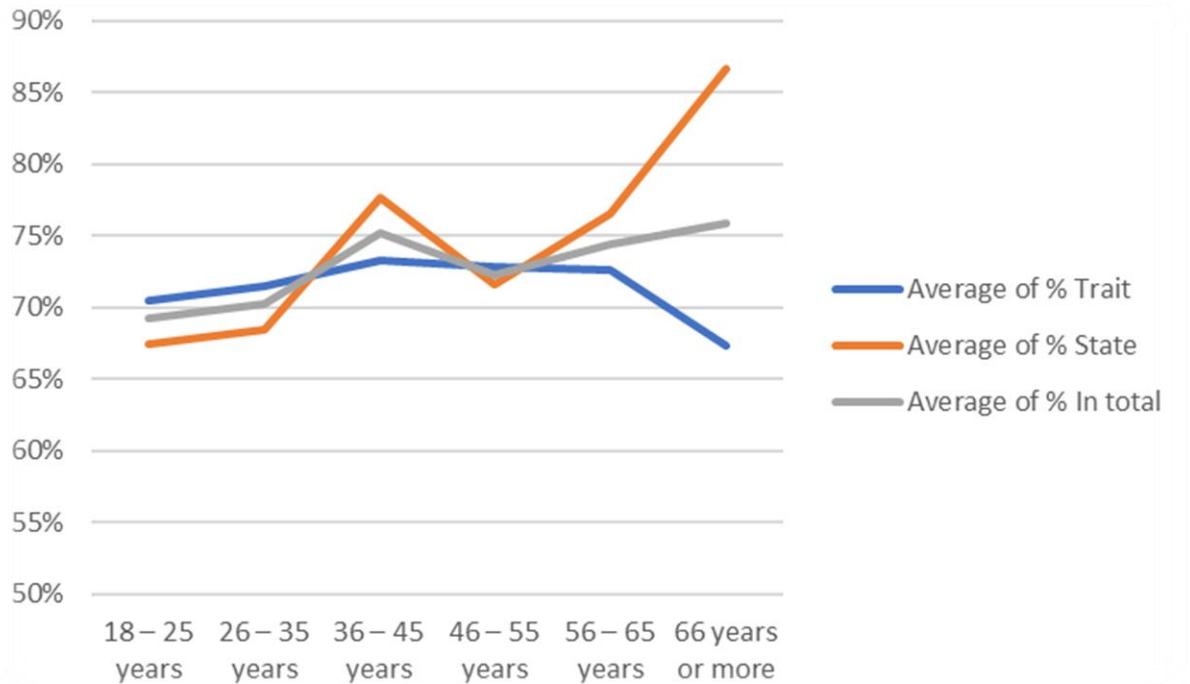
#### 4.4.2. Age

The table below presents statistical data on trait, state and in total professional skepticism presented with respect to age ranges.

**Table 5: The statistical data showing the participants' results presented for different age groups, self-reported data based on carried out questionnaire.**

Row Labels	Average of % Trait	Average of % State	Average of % In total	Standard Deviation from Trait (in %)	Standard Deviation from State (in %)	Standard Deviation from Total (in %)
18 – 25 years	70%	67%	69%	5%	4%	3%
26 – 35 years	71%	68%	70%	6%	10%	6%
36 – 45 years	73%	78%	75%	2%	8%	3%
46 – 55 years	73%	72%	72%	7%	11%	7%
56 – 65 years	73%	77%	74%	10%	1%	6%
<b>Grand Total</b>	<b>72%</b>	<b>70%</b>	<b>71%</b>	<b>5%</b>	<b>10%</b>	<b>6%</b>

	Trait		State		In Total	
	Min	Max	Min	Max	Min	Max
<b>18 – 25 years</b>	65%	80%	63%	73%	66%	75%
<b>26 – 35 years</b>	60%	82%	48%	85%	56%	81%
<b>36 – 45 years</b>	71%	75%	67%	85%	71%	78%
<b>46 – 55 years</b>	65%	81%	47%	80%	58%	81%
<b>56 – 65 years</b>	65%	80%	76%	77%	70%	79%



**Figure 10: The graphic presentation of the average results for different age groups**

The research does not clearly indicate the influence of age on trait professional skepticism. It shows that companies select employees on the basis of specific characteristics indicated by the candidates. The range of results is three percentage points.

On the other hand, the results showed considerable fluctuations depending on age. The lowest level of professional skepticism was shown by subjects between 18 and 25 years (67%). One percentage point more was obtained by subjects between 26 and 35 years of age (68%). The highest result was shown by subjects between 36 and 45 years of age (78%). This may indicate a difficult implementation process for young auditors. It should be noted that subjects in advanced age groups are people who decided to remain in the industry after the implementation stage, which proves that they are less disturbed by hardships related to their work. Young subjects entering the audit market often decide to work on auditing financial statements in order to gain experience, but they do not feel comfortable with this specificity of work. I do not take into account the responses from the age group 66 and above because in this group I only got an answer from one subject.

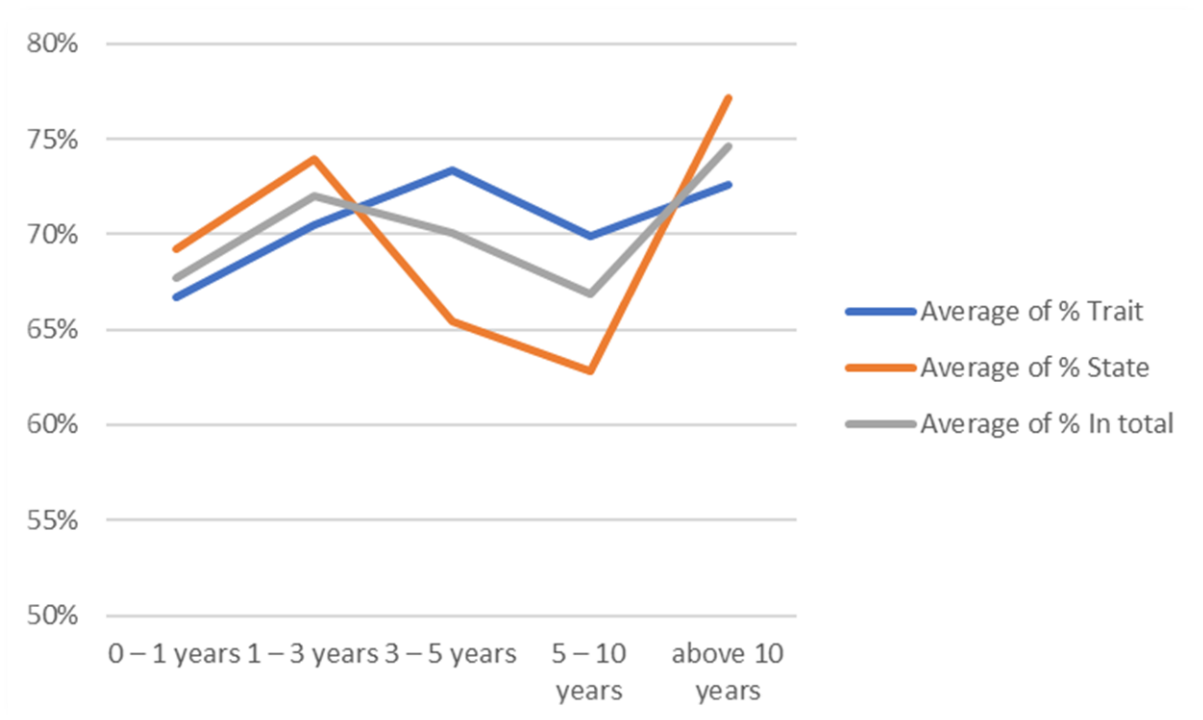
#### 4.4.3. Experience in auditing

Table 6 presents statistical data on trait, state and in total professional skepticism presented by subjects with different experience in auditing.

**Table 6: The statistical data showing the participants' results presented for subjects with different experience in auditing, self-reported data based on carried out questionnaire.**

Row Labels	Average of % Trait	Average of % State	Average of % In total	Standard Deviation from Trait (in %)	Standard Deviation from State (in %)	Standard Deviation from Total (in %)
1 – 3 years	71%	74%	72%	6%	6%	5%
3 – 5 years	73%	65%	70%	5%	11%	6%
5 – 10 years	70%	63%	67%	4%	9%	5%
above 10 years	73%	77%	75%	5%	6%	4%
<b>Grand Total</b>	<b>72%</b>	<b>70%</b>	<b>71%</b>	<b>5%</b>	<b>10%</b>	<b>6%</b>

	Trait		State		In Total	
	Min	Max	Min	Max	Min	Max
<b>1 – 3 years</b>	62%	80%	65%	85%	65%	81%
<b>3 – 5 years</b>	60%	82%	48%	84%	56%	81%
<b>5 – 10 years</b>	65%	76%	47%	79%	58%	74%
<b>above 10 years</b>	65%	81%	65%	87%	66%	81%



**Figure 11: The graphic presentation of the average results for subjects with different experience in auditing**

The results show that the general level of professional skepticism is the highest among subjects with work experience from 1 to 3 years (72%) and over 10 years (75%). It may suggest that at the beginning of their careers, auditors pay attention to any weakness in the financial statements. Then, with the experience they gain, they more and more often pay attention only to essential issues which results in lowering professional skepticism. Subjects with the most experience (over 10 years) also pay attention only to the most important issues, but this does not affect their professional skepticism, because they can better identify the existing risks than their colleagues with less experience. I do not take into account the responses from the experience group 0 – 1 year because in this group I only got an answer from one person.

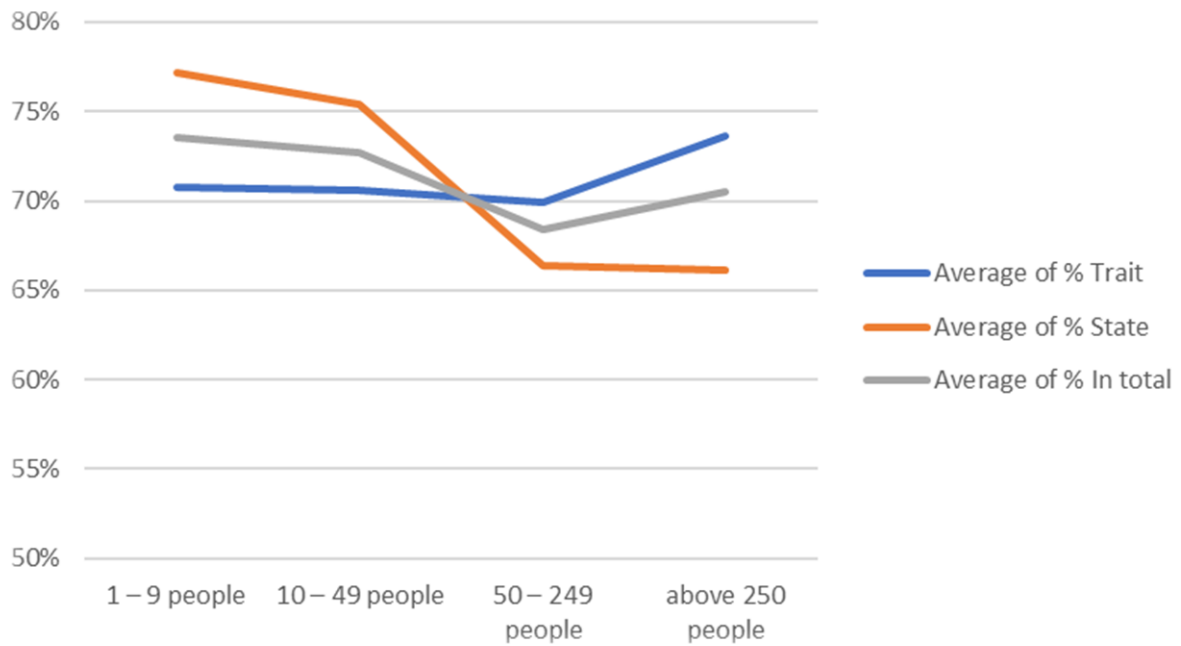
**4.4.4. The size of the company in which you are working in terms of the size of employment**

Below I present statistical data on trait, state and in total professional skepticism presented for subjects who work for companies with a different structures of employment.

**Table 7: The statistical data showing the participants' results presented for subjects who work for different size companies (measured in employment), self-reported data based on carried out questionnaire.**

Row Labels	Average of % Trait	Average of % State	Average of % In total	Standard Deviation from Trait (in %)	Standard Deviation from State (in %)	Standard Deviation from Total (in %)
1 – 9 employees	71%	77%	74%	5%	6%	5%
10 – 49 employees	71%	75%	73%	5%	8%	5%
50 – 249 employees	70%	66%	68%	7%	11%	8%
above 250 employees	74%	66%	70%	4%	9%	5%
<b>Grand Total</b>	<b>72%</b>	<b>70%</b>	<b>71%</b>	<b>5%</b>	<b>10%</b>	<b>6%</b>

	Trait		State		In Total	
	Min	Max	Min	Max	Min	Max
<b>1 – 9 employees</b>	65%	81%	68%	87%	66%	81%
<b>10 – 49 employees</b>	62%	80%	61%	85%	64%	81%
<b>50 – 249 employees</b>	60%	82%	47%	80%	56%	81%
<b>above 250 employees</b>	66%	80%	48%	84%	62%	79%



**Figure 12: The graphic presentation of the average results for subjects who work for different size companies (measured in employment)**

While the level of trait professional skepticism measured in the questionnaire participants working in companies of various sizes did not indicate significant differences (the range of results is four percentage points), the level of state professional skepticism is different. The range of results for state professional skepticism is eleven percentage points.

It can be noticed that the state professional skepticism decreases with the increase in the size of the company. The lowest level of state professional skepticism was shown by subjects working in medium and large companies (66%). This may be due to the large number of duties imposed by these companies on their employees and a higher number of overtime hours than in the case of micro and small companies.



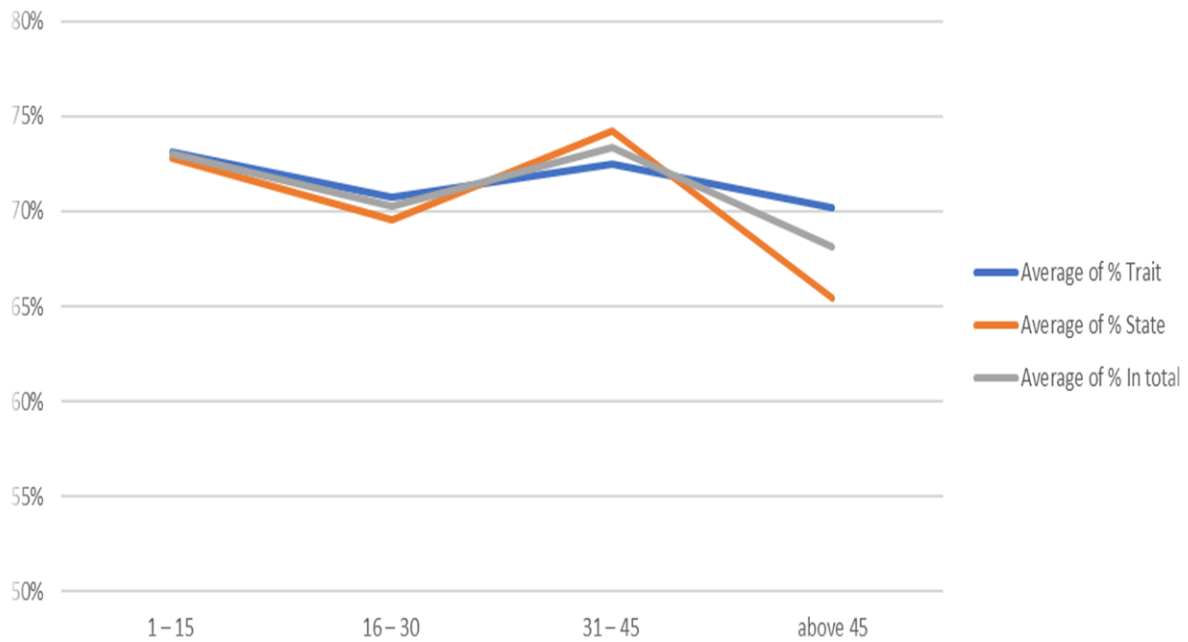
#### 4.4.5. The annual number of audits that participants conduct

Table 8 presents statistical data on trait, state and in total professional skepticism presented for subjects who annually conduct different number of audits.

**Table 8: The statistical data showing the participants' results presented for subjects who annually conduct different number of audits, self-reported data based on carried out questionnaire.**

Row Labels	Average of % Trait	Average of % State	Average of % In total	Standard Deviation from Trait (in %)	Standard Deviation from State (in %)	Standard Deviation from Total (in %)
1 – 15	73%	73%	73%	5%	9%	5%
16 – 30	71%	70%	70%	5%	9%	5%
31 – 45	73%	74%	73%	6%	4%	4%
above 45	70%	65%	68%	6%	12%	8%
<b>Grand Total</b>	<b>72%</b>	<b>70%</b>	<b>71%</b>	<b>5%</b>	<b>10%</b>	<b>6%</b>

	Trait		State		In Total	
	Min	Max	Min	Max	Min	Max
<b>1 – 15</b>	65%	82%	56%	87%	65%	81%
<b>16 – 30</b>	62%	80%	48%	85%	64%	81%
<b>31 – 45</b>	63%	79%	69%	79%	68%	79%
<b>above 45</b>	60%	81%	47%	84%	56%	78%



**Figure 13: The graphic presentation of the average results for subjects who annually conduct different number of audits**

On the basis of the questionnaire, I did not notice that there is a relationship between the level of trait professional skepticism and the annual number of audits that participants conduct. The differences in the points obtained are not significant and amount to three percentage points.

However, a significant decrease in the level of professional skepticism among subjects who carry out more than 45 audits a year. This group obtained 65% of the points. This phenomenon confirms that overworked subjects show a lower level of state professional skepticism.

#### 4.5. Conclusions

Maintaining an appropriate level of professional skepticism by the auditor is essential because skeptical judgment and skeptical action (decision) depend on it. Because skepticism is an ambiguous concept, designing a model without determining what exactly affects professional skepticism would be incomplete, so this thesis has two purposes:

- a) determining the factors that affect professional skepticism (understood both as a trait and as a state),
- b) design a model to measure the level of professional skepticism, understood both as a trait and as a state, among statutory auditors and professionals dealing with financial statements auditing.

Thanks to the help of people who deal with financial statements audits from the practical side, I was able to both compare my vision of which factors affect professional skepticism with theirs and design a model that enables to determine the level of professional skepticism of the respondents by answering the right questions. These questions were selected based on:

- a) a questionnaire in which practitioners were to indicate what factors, in their opinion, determine the level of professional skepticism,
- b) existing research on professional skepticism provided by Hurtt and Nelson,
- c) study about skepticism in ancient philosophy that is a progenitor of skepticism,
- d) psychological research,
- e) law acts and accounting standards.

All results were graded using a 5-point Lickert scale and were compared as a percentage of the scored points. Thanks to the questionnaire, it was possible to measure the level of professional skepticism among subjects dealing with professional skepticism. It was also possible to notice that most subjects understand professional skepticism as a neutrality more than presumptive doubt presented by Nelson although according to Quadackers [2012] research presumptive doubt approach shows better skeptical judgments and decisions in working with higher-risk clients [Quadackers 2012].

Because today's financial world becomes more and more complex, professional skepticism will never lose its relevance. The master's thesis will be helpful both for theoreticians and practitioners dealing with accounting and auditing. It can also provide a foundation for further research and development of tools to measure the level of professional skepticism more accurately.

#### **4.6. Limitations and Recommendations**

The biggest limitation is the number of respondents. The inquiry should be conducted on a larger group of subjects with different years of experience, holding different positions and working in entities of various sizes. Moreover, the model should be less predictable because those who discover the purpose of the study may manipulate the responses to score better results.

Further research on professional skepticism should be done by economists in collaboration with psychologists. Relevant conclusions can be drawn from the together work of economists and behavioral psychologists.

In further research, it is worth considering the latest research by D. Kahneman published in the book "Noise". It describes the discrepancies in judgments that exist among one entity, e.g. in the same insurance company. The results of these studies should be taken into account in the context of the auditor's professional skepticism.

The model I created also requires further research. To verify the usefulness of the model for measuring professional skepticism, a case study of the audit of financial statement in which errors will be introduced should be carried out. Subjects participating in the experiment will have to fill in a questionnaire after the examination of the financial statement. The case will allow to compare to what extent the level of professional skepticism determined by the questionnaire influenced the rightness of the decisions made by the participants.

Another interesting experiment will be to conduct a study on a wide group of subjects from a selected audit company, taking into account the projects on which they worked and waiting

for the control from the Polish Audit Oversight Agency to verify the effects of their work. Compare the results of the surveys with the control results and check whether the level of skepticism determined by the survey is adequate to the control results - whether the higher level of professional skepticism had a positive impact on the quality of judgment.

## Attachment I

# Badanie sceptycyzmu zawodowego

Szanowni Państwo,

Jestem studentem Uniwersytetu Ekonomicznego w Poznaniu.

Piszę pracę magisterską, której celem jest wyjaśnienie wielowymiarowego pojęcia sceptycyzmu zawodowego, a także próba stworzenia modelu umożliwiającego zbadanie poziomu sceptycyzmu u audytora, dlatego zwracam się do Pani/Pana z uprzejmą prośbą o wypełnienie niniejszej ankiety celem uzyskania danych badawczych na powyższy temat.

Zapewniam, że badania są prowadzone anonimowo z zachowaniem dobrowolności i będą wykorzystane tylko dla potrzeb mojej pracy.

Bardzo proszę o udzielenie szczerych odpowiedzi na pytania zawarte w kwestionariuszu ankiety.

Wyniki badań zostaną przesłane osobom, które udostępnią swój adres e-mail.

Serdecznie dziękuję za pomoc i poświęcony czas.

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\*Wymagane

### Pytania wstępne

#### 1. Płeć: \*

*Zaznacz tylko jedną odpowiedź.*

Mężczyzna

Kobieta

#### 2. Wiek: \*

*Zaznacz tylko jedną odpowiedź.*

18 – 25 lat

26 – 35 lat

36 – 45 lat

46 – 55 lat

56 – 65 lat

66 lat lub więcej

3. Doświadczenie w badaniu sprawozdań finansowych: \*

*Zaznacz tylko jedną odpowiedź.*

- 0– 1 lat
- 1 – 3 lat
- 3 – 5 lat
- 5 – 10 lat
- powyżej 10 lat

4. Wielkość przedsiębiorstwa, w którym Pan/ Pani pracuje ze względu na wielkość zatrudnienia: \*

*Zaznacz tylko jedną odpowiedź.*

- 1 – 9 osób
- 10 – 49 osób
- 50 – 249 osób
- powyżej 250 osób

5. Ilość przeprowadzanych przez Pana/ Panią badań sprawozdań finansowych rocznie: \*

*Zaznacz tylko jedną odpowiedź.*

- 1 – 15
- 16 – 30
- 31 – 45
- powyżej 45

6. Adres e-mail na który chcą Państwo otrzymać wyniki badań (dobrowolnie):

1. Część I z III

Czy zgadza się Pan/ Pani z poniższymi stwierdzeniami?

1. Podczas badania nie miałem/miałam wątpliwości co do żadnego przedstawionego dowodu, wszystko było dla mnie jasne i spójne. \*

*Zaznacz tylko jedną odpowiedź.*

- zdecydowanie tak
- raczej tak
- trudno powiedzieć
- raczej nie
- zdecydowanie nie

2. Podczas przeprowadzanego badania zwracam uwagę na to, kto badał daną jednostkę przede mną. \*

*Zaznacz tylko jedną odpowiedź.*

- zdecydowanie tak
- raczej tak
- trudno powiedzieć
- raczej nie
- zdecydowanie nie

3. Jeśli uważam, że biegły rewident, który badał jednostkę przede mną zrobił to w sposób nieprawidłowy (badanie nie było przeprowadzone rzetelnie) ja sam/sama badam ją jeszcze dokładniej. \*

*Zaznacz tylko jedną odpowiedź.*

- zdecydowanie tak
- raczej tak
- trudno powiedzieć
- raczej nie
- zdecydowanie nie



4. W przypadku badania jednostek, w których główny księgowy jest osobą z wieloletnim doświadczeniem pozwalam sobie na mniej szczegółowe badanie. \*

*Zaznacz tylko jedną odpowiedź.*

- zdecydowanie tak
- raczej tak
- trudno powiedzieć
- raczej nie
- zdecydowanie nie

5. Podczas badania sprawozdań finansowych często ciąży na mnie presja czasu. \*

*Zaznacz tylko jedną odpowiedź.*

- zdecydowanie tak
- raczej tak
- trudno powiedzieć
- raczej nie
- zdecydowanie nie

6. Praca pod presją czasu jest dla mnie utrudnieniem, nie pozwala mi ona na dokładne przeprowadzenie badania. \*

*Zaznacz tylko jedną odpowiedź.*

- zdecydowanie tak
- raczej tak
- trudno powiedzieć
- raczej nie
- zdecydowanie nie

7. Lubię pracować pod presją czasu, motywuje mnie ona do szybszego myślenia i działania. \*

*Zaznacz tylko jedną odpowiedź.*

- zdecydowanie tak
- raczej tak
- trudno powiedzieć
- raczej nie
- zdecydowanie nie

8. Zadowolenie klienta z przeprowadzanego audytu ma dla mnie duże znaczenie. \*

*Zaznacz tylko jedną odpowiedź.*

- zdecydowanie tak
- raczej tak
- trudno powiedzieć
- raczej nie
- zdecydowanie nie

9. Często w trakcie badania oszacowuję ponownie poziom ryzyka po głębszej analizie. \*

*Zaznacz tylko jedną odpowiedź.*

- zdecydowanie tak
- raczej tak
- trudno powiedzieć
- raczej nie
- zdecydowanie nie

*Przejdź do pytania 16*

Część II z III

Proszę o dokończenie zdania lub odpowiedź na poniższe pytania

1. Częste zmiany kierownictwa jednostki \*

*Zaznacz tylko jedną odpowiedź.*

- powodują, że uważniej sprawdzam poszczególne obszary podczas badania.
- nie mają wpływu na badanie.
- skutkują obniżeniem przeze mnie czasu poświęconego na badanie.

2. W przypadku konieczności bardziej wnikliwej analizy któregoś z badanych obszarów \*

*Zaznacz tylko jedną odpowiedź.*

- zwiększam liczbę godzin potrzebnych na badanie zostając dłużej w pracy.
- przyglądam się dokładniej obszarowi, który wzbudził moje podejrzenia, poświęcając mniej czasu na inne obszary.
- nie poświęcam dodatkowego czasu na dany obszar i przeprowadzam badanie według standardowych procedur.

3. Czy bierze Pan/Pani pod uwagę możliwość współpracy z klientem w przyszłości w innej formie, niż badanie sprawozdania finansowego? Na przykład zatrudniając się w badanej jednostce na stanowisku głównego księgowego? \*

*Zaznacz tylko jedną odpowiedź.*

- zdecydowanie tak
- raczej tak
- trudno powiedzieć
- raczej nie
- zdecydowanie nie

4. Czy zarządza Pan/Pani pracą przynajmniej jednej innej osoby? \*

*Zaznacz tylko jedną odpowiedź.*

Tak

Nie

5. Czy często weryfikuje Pan/Pani pracę pracowników, Panu/Pani podlegających? \*

*Zaznacz tylko jedną odpowiedź.*

zdecydowanie tak

raczej tak

trudno powiedzieć

raczej nie

zdecydowanie nie

nie zarządzam pracą innych osób

6. Jakie jest Pana/Pani podejście do klienta, który nie przekazał dokumentów do badania zgodnie z ustalonym terminem? \*

*Zaznacz tylko jedną odpowiedź.*

nic się nie zmienia, nie przeszkadzają mi drobne zmiany w harmonogramie badania,

poświęcam więcej czasu na przeanalizowanie otrzymanych dokumentów. Uważam, że skoro nie przygotował ich na czas to może to świadczyć o próbie zatajenia niewygodnych kwestii.

z racji tego, że przez nieterminowość klienta mam mniej czasu na badanie, skupiam się jedynie na istotnych kwotach i obszarach i nie przyglądam się kwestiom poniżej istotności.

7. Kiedy otrzymuje Pan/Pani komplet dokumentów do badania i wszystkie potrzebne informacje dotyczące jednostki w idealnym stanie (wszystko jest prawidłowo)? \*

*Zaznacz tylko jedną odpowiedź.*

- sprawdzam obszary jeszcze dokładniej pod kątem innych procedur.
- badam wszystkie obszary standardowo i nie zmieniam procedur.
- sprawdzam obszary mniej dokładnie, ponieważ nie mam zastrzeżeń co do przekazywanych dowodów.

8. Czy dostosowuje Pan/Pani poszczególne procedury do klientów u których ryzyko jest większe przy badaniu sprawozdań finansowych? \*

*Zaznacz tylko jedną odpowiedź.*

- zdecydowanie tak
- raczej tak
- trudno powiedzieć
- raczej nie
- zdecydowanie nie

9. Czy w przypadku wątpliwości co do przedstawionych przez klienta dowodów \* zwiększa Pan/Pani liczbę przeprowadzanych procedur w danym obszarze?

*Zaznacz tylko jedną odpowiedź.*

- nie, każdą badaną jednostkę badam według tych samych procedur.
- tak, w przypadku szczególnie istotnych obszarów, gdy standardowe procedury nie pozwoliły mi osiągnąć pewności co do prawidłowości otrzymanych dowodów.

10. Czy warunki w jakich Pan pracuje (np. ciasne pomieszczenie, brak klimatyzacji) wpływają na Pana samopoczucie? \*

*Zaznacz tylko jedną odpowiedź.*

- zdecydowanie tak
- raczej tak
- raczej nie
- zdecydowanie nie

11. Czy Pana/ Pani wynagrodzenie jest zależne od liczby przeprowadzonych badań? \*

*Zaznacz tylko jedną odpowiedź.*

- Tak
- Nie

12. Po ile godzin dziennie średnio w miesiącu Pan/ Pani pracuje w czasie sezonu audytowego? \*

*Zaznacz tylko jedną odpowiedź.*

- do 160
- 161 – 180
- 181 – 200
- 211 – 230
- 231 lub więcej.

13. Rozpoczynając badanie \*

*Zaznacz tylko jedną odpowiedź.*

- mam neutralne podejście – swoją opinię o jednostce definiuję dopiero na podstawie otrzymanych od klienta dowodów i ich weryfikacji.
- mam nieufne podejście. Wiem, że sprawozdanie mogło zostać zafałszowane w celu odniesienia określonych korzyści i dopiero odpowiednie dowody muszą mnie przekonać do zmiany zdania.
- inna odpowiedź- proszę wpisać jakie jest Pana/Pani podejście?

*Przejdź do pytania 29*

Część  
III z III

Proszę przywołać w pamięci ostatnie przeprowadzane przez Pana/Panią badanie i udzielić odpowiedzi na poniższe pytania.

1. Czy podczas pracy u ostatniego klienta warunki pracy były odpowiednie i komfortowe? \*

*Zaznacz tylko jedną odpowiedź.*

- zdecydowanie tak
- raczej tak
- trudno powiedzieć
- raczej nie
- zdecydowanie nie

2. Czy podczas ostatniego badania Pana/Pani samopoczucie było dobre? \*

*Zaznacz tylko jedną odpowiedź.*

- zdecydowanie tak
- raczej tak
- trudno powiedzieć
- raczej nie
- zdecydowanie nie

3. Czy obecnie czuje się Pan/Pani przytłoczona ilością pracy? \*

*Zaznacz tylko jedną odpowiedź.*

- zdecydowanie tak
- raczej tak
- trudno powiedzieć
- raczej nie
- zdecydowanie nie

4. Czy podczas pracy miał/a Pan/Pani wystarczająco czasu, żeby spożywać posiłek? \*

*Zaznacz tylko jedną odpowiedź.*

- zdecydowanie tak
- raczej tak
- trudno powiedzieć
- raczej nie
- zdecydowanie nie

5. Czy branża, w której działała badana jednostka godzi w Pana/Pani przekonania światopoglądowe (np. toczy się wobec niej proces o odprowadzanie zanieczyszczeń do rzek) \*

*Zaznacz tylko jedną odpowiedź.*

- zdecydowanie tak
- raczej tak
- trudno powiedzieć
- raczej nie
- zdecydowanie nie



6. Czy w trakcie przeprowadzonego badania odkryto naruszenia w kwestii dyskryminacji pracowników? \*

*Zaznacz tylko jedną odpowiedź.*

- zdecydowanie tak
- raczej tak
- trudno powiedzieć
- raczej nie
- zdecydowanie nie

7. Czy badanie danej jednostki przebiegało pozytywnie i nie generowało nadmiernej ilości problemów lub stresu? \*

*Zaznacz tylko jedną odpowiedź.*

- zdecydowanie tak
- raczej tak
- trudno powiedzieć
- raczej nie
- zdecydowanie nie

8. Czy osoba, która sprawuje funkcję wyższego szczebla w badanej jednostce pracowała kiedyś w firmie audytorskiej? \*

*Zaznacz tylko jedną odpowiedź.*

- tak
- nie
- nie posiadam informacji na ten temat

9. Czy odczuwa Pan/Pani syndrom wypalenia zawodowego? \*

*Zaznacz tylko jedną odpowiedź.*

- zdecydowanie tak
- raczej tak
- trudno powiedzieć
- raczej nie
- zdecydowanie nie

10. Czy czuł Pan presję ze strony przełożonych, żeby skończyć badanie w określonym czasie? \*

*Zaznacz tylko jedną odpowiedź.*

- zdecydowanie tak
- raczej tak
- trudno powiedzieć
- raczej nie
- zdecydowanie nie

11. Czy sprawdził Pan/Pani opinię o badanej jednostce w Internecie (przeгляд prasy, stron internetowych zawierających opinie o pracodawcach, media społecznościowe itp.)? \*

*Zaznacz tylko jedną odpowiedź.*

- Tak
- Nie

12. Czy w związku z prowadzonym badaniem odbył Pan/Pani podróż służbową? \*

*Zaznacz tylko jedną odpowiedź.*

Tak

Nie

13. Czy odległość Pana/Pani firmy od klienta była duża? \*

*Zaznacz tylko jedną odpowiedź.*

Tak

Nie

Badanie było w formie zdalnej i nie wymagało podróży

14. Czy czuł Pan/Pani zmęczenie podczas badania? \*

*Zaznacz tylko jedną odpowiedź.*

zdecydowanie tak

raczej tak

trudno powiedzieć

raczej nie

zdecydowanie nie

15. Czy podczas pobytu u klienta pracował Pan/Pani po 8 godzin? \*

*Zaznacz tylko jedną odpowiedź.*

Pracowałem/ am więcej niż 10 godzin dziennie.

Pracowałem/ am między 8, a 10 godzin dziennie.

Pracowałem/ am 8 godzin dziennie.

Pracowałem/ am mniej niż 8 godzin dziennie.

16. Czy jednostka badana wprowadziła wszystkie proponowane korekty? \*

*Zaznacz tylko jedną odpowiedź.*

- Tak, wprowadziła wszystkie zaproponowane korekty.
- Wprowadziła większość korekt.
- Wprowadziła mniej niż połowę korekt.
- Nie wprowadziła proponowanych korekt.

17. Jaki był rodzaj opinii wydany przez Państwa? \*

*Zaznacz tylko jedną odpowiedź.*

- opinia bez zastrzeżeń
- opinia z zastrzeżeniami
- opinia negatywna
- miała miejsce odmowa wydania opinii

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**List of Figures:**

**Figure 1: The difference between Professional Skepticism, complete trust, and complete doubt, IAASB presentation Enhancing Auditor Professional Skepticism Professors Steven M. Glover and Douglas F. Prawitt, Brigham Young University. .... 21**

**Figure 2: Professional Skepticism Framework, Hurtt R.K., 2010, Development of scale to measure professional skepticism, Auditing: A Journal of Practice & Theory p. 150. .... 34**

**Figure 3: The impact which antecedents to and impact from having on skeptical judgments and skeptical actions of Professional Skepticism, Hurtt R.K. 2013, Research on Auditor Professional Skepticism: Literature Synthesis and Opportunities for Future Research p. 50. .... 36**

**Figure 4: Determinants of Professional Skepticism in Audit, Nelson, M. W. 2009. “A model and literature review of professional skepticism in auditing.” Auditing: A Journal of Practice & Theory 28 2 : 1–34..... 47**

**Figure 5: The gender diversification of participants, self-reported data based on carried out questionnaire..... 61**

**Figure 6: The age diversification of participants, self-reported data based on carried out questionnaire..... 62**

**Figure 7: Participants’ experience in Auditing, self-reported data based on carried out questionnaire..... 63**

**Figure 8: The size of the company in which questionaired subjects work for, self-reported data based on carried out questionnaire. .... 64**

**Figure 9: Annual number of audits which are conducted by participants, self-reported data based on carried out questionnaire..... 65**

**Figure 10: The graphic presentation of the average results for different age groups, self-reported data based on carried out questionnaire..... 68**

**Figure 11: The graphic presentation of the average results for subjects with different experience in auditing, self-reported data based on carried out questionnaire..... 70**

**Figure 12: The graphic presentation of the average results for subjects who work for different size companies (measured in employment), self-reported data based on carried out questionnaire. .... 72**

**Figure 13: The graphic presentation of the average results for subjects who annually conduct different number of audits, self-reported data based on carried out questionnaire. .... 74**

List of Tables:

**Table 1: Presentation of questions from section II ..... 56**

**Table 2: Presentation of questions from section III ..... 58**

**Table 3: Presentation of questions from section IV ..... 60**

**Table 4: statistical data showing the participants’ results presented in a gender distinction, self-reported data based on carried out questionnaire..... 66**

**Table 5: The statistical data showing the participants’ results presented for different age groups, self-reported data based on carried out questionnaire. .... 67**

**Table 6: The statistical data showing the participants’ results presented for subjects with different experience in auditing, self-reported data based on carried out questionnaire. . 69**

**Table 7: The statistical data showing the participants’ results presented for subjects who work for different size companies (measured in employment), self-reported data based on carried out questionnaire..... 71**

**Table 8: The statistical data showing the participants’ results presented for subjects who annually conduct different number of audits, self-reported data based on carried out questionnaire..... 73**

**List of Attachments:**

**Attachment 1: The questionnaire.....80**