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An Inquiry into the Concept of Professional Skepticism in a Financial Statement Audit

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Abstract

This paper deals with an independent auditor's professional skepticism in a financial statement audit. The auditing profession in the United States has moved toward new thinking on professional skepticism: the Statement on Auditing Standards No. 99 (2002) deleted the profession's conventional "neutrality view" statements. The landmark events following the Enron collapse (2001) stimulated the recognition of a new, workable concept: the "presumptive doubt view" (Bell et al. 2005). This concept, however, seems not to have achieved institutional status in that SAS No. 99 as well as other professional statements governing the quality of a financial statement audit have been silent in relation to that concept.

Professional skepticism in a financial statement audit (simply referred to as "audit skepticism") is dual in nature: It is fundamentally concerned not only with how deeply auditors exercise professional skepticism (this aspect is characterized here as *epistemic depth*) but also how widely or broadly auditors doubt the financial statements (characterized here as *epistemic width*).

Academics have vigorously inquired into professional skepticism (Nelson 2009; Hurtt 2010) but almost all from a similar perspective, its epistemic depth. These efforts have contributed to a deeper and more precise discussion but have overlooked the other aspect of audit skepticism.

This paper (1) proposes a conceptual framework for a complete view of

audit skepticism and (2) presents a more operational definition to which auditors, academic and practicing, could generally agree to.

1. Introduction – audit skepticism at the crossroad

The Enron collapse (2001) and Arthur Andersen's unexpected audit failure (2002) eroded society's trust in the quality of an independent financial statement audit. As a natural response, the auditing profession issued the Statement on Auditing Standards (SAS) No. 99, which deleted statements representing the profession's conventional position on audit skepticism, i.e., the neutrality view, and took steps to cope with material misstatements due to fraud. SAS No. 99 emphasized the need for auditors to revise their skeptical mindset, "regardless of their past experience with the entity or their belief about the integrity of management" (para. 13), particularly when considering the possibility of a material misstatement due to fraud and explained in detail how auditors can strengthen their responses to the risk of such material misstatement. SAS No. 99 has contributed to making auditors' responses more effective and in this sense took an important step toward strengthening the quality of a financial statement audit. It has not been clear, however, whether the profession, at that time, thought *conceptually* about the different degrees of the skeptical mindset (including the neutrality view) allowable under the concept of a financial statement audit. Consequently, SAS No. 99 is silent on how different degrees of audit skepticism can be conceptually related to each other and how they can be understood as its constituent parts. These issues remain an open question.

1-1 Academic inquiries into audit skepticism

Why do we need to bring skepticism into academic focus? First, auditors encounter organizational, economic, environmental, and psychological factors that may hinder their ability to exercise skepticism. Even though they are prudent, skeptical, and competent, auditors' failure to exercise appropriate

skepticism during the cognition process may have a disastrous effect on the financial community. Second, schemes for fraudulent financial reporting can be extremely complex and ingenious. Although the Lincoln Savings and Loan case in 1987 (Erickson et al., 2000), the Enron case in 2001 (Reinstein and Weirich, 2002; Benston and Hartgraves, 2002; SEC 2008a; SEC 2008b; SEC 2008c; SEC 2008d; SEC 2008e; [AAER No. 2774-2778]), and the WorldCom case (SEC 2008f; SEC 2008g [AAER No. 2808 and 2809]) in the United States and the Olympus case in 2011 (Soble 2011) and the Toshiba case in 2015 (The Japan Times, 2015a, 2015b, and 2015c) in Japan underscore the importance of audit skepticism in evaluating financial statements. The complexity and skillfulness of the fraudulent schemes may still overwhelm professional due care. Greater understanding of audit skepticism is needed.

Even for professional auditors, some new areas may be difficult to deal with. Digital documents and enormous amounts of digitized transactions (Nearon 2005; Caster and Verardo 2007), high-tech products and complex financial instruments, fair value accounting heavily based on estimates (SAS No. 101 [ASB 2003]; Martin et al. 2006), and high-growth areas (Martin 2002) have increased the need for skepticism during the process of gathering evidence. Knechel (2007, 391) notes that in circumstances where transactions and systems have become more complex and the traditional audit approach has declined, "more and more of the body of evidence accumulated during the course of an audit was traceable to client statements rather than third party or even documentary evidence." In a different light, the rise of the business-risk approach may have replaced detailed evidence with analytical procedures, and thereby may have weakened auditors' skepticism in critically examining the transactions underlying the financial statements. Inquiring into audit skepticism is currently an urgent topic because it affects the overall quality of the financial statement audit itself.

The importance of audit skepticism has been stressed in relation to failures by independent auditors. From a historical perspective (for more detail see Toba 2011; Hurtt et al. 2013), the American Institute of Certified Public

Accountants (AICPA), inspired by its early recognition by the Securities and Exchange Commission (SEC), began to emphasize the importance of audit skepticism in the latter half of the 1970s, and to spread the word to its members (Cohen Commission 1978).

Until the 1980s, audit skepticism was of more interest to accounting professionals than to academics. The only exceptions were Mautz and Sharaf (1961, 96), Mautz (1964, 63), and the Committee on Basic Auditing Concepts (ASOBAC: 1973, 29-31). Mautz and Sharaf (1961) and Mautz (1964) approached the subject in terms of an auditor's way of knowing but did not go beyond introducing skepticism. They were perhaps the first to implicitly recognize the epistemic width aspect of professional skepticism. Scholars as a whole did not deeply explore the epistemic aspect of audit skepticism at that time(1). Their insights were not immediately followed by subsequent audit research. Not until Shaub (1996), Shaub and Lawrence (1996 and 1999), Nelson (2009), and Hurtt (2010) were academic inquiries into the subject restarted.

The ASOBAC (1973, 30) referred to the concept in terms of how an auditor should observe objects and stressed that seeing "*more than* meets the eye" (a form of exercising professional skepticism) means bringing one's questioning mind into full play to identify whether any false statements, contradictions, or irregularities are hidden in the financial statements, accounting books, and records. In other words, the auditor does a "smell test." Thus the ASOBAC noted the epistemic depth aspect of audit skepticism.

As with increased developments/discussions of audit skepticism by the AICPA and the SEC, research on the subject, on the whole, has steadily

(1) The word "epistemic" as it appears throughout the text is not used in its purely philosophical meaning in the basic discipline of epistemology. It is used to mean a context in which more probability or less probability is at issue. Auditing is never "epistemic" in a strict sense because auditors do not fully and absolutely determine the truth or falsehood of a proposition nor its knowledge status. In a financial statement audit, they determine whether a particular audit proposition is *true* in a probable sense on the basis of their observations (evidence), and then form a reasonable belief about the proposition. The basic nature of such audit cognition (or audit pursuit) is characterized here as *epistemic* in that when auditors are engaged in verifying a proposition, they are engaged in a sort of "knowing about the world" in a broad sense.

expanded. Since the 1990s, in the United States, researchers such as Shaub (1996), Bell et al. (2005), Nelson (2009), and Hurtt (2010) have presented different insights and together have furthered the research. However, a current controversial issue—the neutrality perspective vs. the presumptive doubt view—has not been discussed persuasively either academically or practically. Empirical research into skepticism in auditing seems to have started without a complete set of conceptual foundation.

Taking the presumptive doubt view a step further, Nelson (2009) presented a conceptual model of determinants of skepticism in audit performance (referred to as "the Nelson model") in which he explained how each determinant affects the auditor's "skeptical judgment" and "skeptical action" (2009, 5). The Nelson model has influenced subsequent research (Carpenter and Reimers 2011; Harding and Trotman 2011), including recent extensions and reinforcements by Hurtt et al. (2013).

Nelson (2009) analyzed the different approaches to or definitions of skepticism in the audit literature, and then offered a new but incomplete definition with a focus on the assertion risk: Professional skepticism is "indicated by auditor judgments and decisions that reflect a heightened assessment of the risk that an assertion is incorrect, conditional on the information available to the auditor" (2009, 4). Nelson importantly has noted an assertion in defining or approaching audit skepticism. Nelson (2009) was concerned mainly with proposing a workable model of the determinants of skepticism in audit performance, and not with refining the definition or constructing a conceptual framework for audit skepticism itself. In this sense, the definition issue is still unresolved.

A conceptual inquiry is necessary because it will lend support to explaining: (1) how the two perspectives mentioned above are not substitutive but complementary in determining the level of an auditor's skepticism(2), (2) how

(2) The level of audit skepticism is used throughout this paper as an overall level that reflects both the scope and degree of professional skepticism, its characteristics and applications.

"the neutrality perspective" and "the presumptive doubt perspective" can be measured and can differently influence the audit cognition process, (3) how financial statement audit skepticism and forensic audit skepticism differ (including whether forensic skepticism is reasonable within the framework of a financial statement audit), and (4) how the level of audit skepticism changes proactively and reactively depending on the perceived risks that auditors face.

2. Difficulties in dealing with audit skepticism

The concept of audit skepticism has now gained increasing professional and academic attention. Regardless of its importance, until the issuance of SAS No. 82 (ASB 1997), explicit attention to the concept was confined to a few academics and accounting professionals. Audit skepticism has been defined in different ways, as shown in the professional and academic literature (Shaub 1996; SAS No. 82 [ASB 1997]; Cushing 2000a and 2000b; Choo and Tan 2000; Kinney 2000; PCB 2000; Bell et al. 2005; Nelson 2009; Hurtt 2010), but the definition remains incomplete, as several researchers have pointed out: audit skepticism has been "ill defined" (Bell et al. 2005, 66), there has been no general consensus about the definition (Quadackers 2009, 9), and "the academic literature likewise has been somewhat inconsistent in defining PS" (Nelson 2009, 4). As a result, scholars seem to have reached an impasse that may hinder the further development of research on the subject (Hurtt 2010).

Any definition of audit skepticism needs to include both perspectives mentioned by Nelson (2009) in his extensive literature survey. He roughly classified the academic inquiries into those favoring "the neutrality perspective" (Hurtt 2010; Bamber et al. 1997) and those favoring "the presumptive doubt perspective" (Shaub 1996; Nelson 2009). But, why do we need to choose just one of these perspectives? Concepts reflecting both perspectives are necessary for several reasons: (1) auditors do not fix their skepticism at a single level, but shift from one level to another proactively and reactively to the risks they face, (2) different concepts can mirror different levels of a skeptical

mindset, and (3) auditors also need to have a skepticism mix that makes their audit more effective and more efficient under given circumstances. Too much skepticism as well as too little skepticism must be avoided. These two perspectives or concepts are complementary, not mutually exclusive.

Why is it difficult to define the term "skepticism" precisely? Conceivably, the difficulty is related to the inherent nature of an audit: audits inherently involve a set of actions such as "examine," "analyze," "compare," and "question" (i.e. critical thinking) with respect to all information provided by another individual. Even without emphasizing the elements of critical thinking, auditors are expected to raise questions during the evidence process, particularly in the field. What is considered natural in a practical sense, however, can hamper a conceptual inquiry into audit skepticism itself.

There are also fundamental and mutually related factors that make the inquiry more difficult: the contractual nature of a financial statement audit, the multi-faceted nature of skepticism itself, and the positive nature of assertions.

2-1 The contractual nature of a financial statement audit

An audit engagement starts with a tentative mutual trust between the auditors and the management of the enterprise. Generally speaking, people want to be agreeable with the person(s) with whom they work during the engagement. But audit skepticism does not imply a philosophy of either dishonesty or distrust (Burton 1980). Auditors tentatively and subjectively trust their clients to tell the truth with respect to the records underlying the financial statements and their business risk. This trust is one factor in determining the nature, timing, and extent of audit procedures (Shaub 1996, 154). As a result, auditors may have become inclined to trust the evidence from clients *at the expense of adequate professional skepticism*. They thus face the difficult problem of keeping a balance between the need to collaborate with client personnel and the need to maintain professional skepticism while minimizing the cost of the audit.

2-2 The multiple facets of audit skepticism

The definitions so far are not broad enough to deal with the multiple facets of audit skepticism as shown in Table 1. Four categories (general characteristics) of factors affect the degree of skepticism: personal, organizational, contractual (economic), and environmental factors, including the "audit culture" (PCAOB 2011b)[(3)]. All of the factors weaken or increase skepticism. The approach to skepticism differs depending on the category (or facet) on which one focuses. Its multiple facets seem to have made both the research on audit skepticism and the convergence of the results more difficult.

Table 1 Factors that may influence the depth of audit skepticism

Categories	factors	Related literature
Personal	Traits	Hurtt 1999, 2010; Bazerman et.al. 2002; Wooten 2003; Nelson 2009; Quadackers 2009
	Knowledge	Nelson 2009; Quadackers 2009; Plumlee et al. 2011; Grenier 2013
	Incentives	Nelson 2009; Quadackers 2009
	Audit experience (practice/feedback with fraud)	Messier 1983; Abdolmohammadi and Wright 1987; Moeckel 1990; Choo and Trotman 1991; Choo 1996; Carpenter et al. 2002 ; Payne and Ramsay 2005; Nelson 2009; Quadackers 2009
	Group affiliation	Joe and Vandervelde 2007
	Cultural backgrounds	Endrawes and Monroe 2012
Organizational	Career levels	Shaub and Lawrence 1999
	Justifiee (supervisor) preferences	Peecher 1996
	Accountability to superiors	Endrawes and Monroe 2012
	Audit firm rotation	Nagy 2005

(3) Hurtt et al. (2013) and Toba (2011) conducted extensive literature surveys, separately but during almost the same period of time, in order to identify factors influencing auditors' professional skepticism. Aside from the period covered and the expressions used ("characteristics" or "categories"), there are three distinct differences in:

1. identifying organizational factors
2. identifying evidential characteristics (or framing of propositions)
3. considering "skeptical action"

The first difference may be easily resolved, while the second difference is quite essential, and the third may depend upon the purpose for looking at professional skepticism.

Organizational	Long partner tenure	Bedard and Johnstone 2010
	Evaluation of auditors' performance (client-getting ability)	Cohen and Trompeter 1998
	Audit quality control	Hermanson et al. 2007; Hermanson and Houston 2008
	Engagement quality review	Messier et al. 2010
	Reliance on standard audit procedures	McKnight and Wright 2011
	Timing of strategic analysis application	O'Donnell and Schultz 2003; Ballou et al. 2004
	Assessment of the material misstatement risk in a financial statement account	Phillips 1999
	Prior working paper reliance	Tipgos 1978; Wright 1988
	Culture, including reward system	Beasley et al. 2000; Francis 2004
	Auditors (engagement, concurrent and audit team) rotation	Francis 2004; Bowlin et al. 2013
	The tone at the top (partners' emphasis on professional skepticism)	ASB 2002b (SAS No. 99); Carpenter and Reimers 2011
	Time (budget) pressures	Landsittel 2000
Contractual	Trust in management	Shaub 2004; Rennie et al. 2010
	Justifiee (client) preference, credence preference	Peecher 1996; Turner 2001; Jenkins and Haynes 2003; Earley et al. 2012
	Non audit services	Francis 2004; Joe and Vandervelde 2007
	Interpersonal relationships with the client people (management) including accounting firm 'alumni'	Latham et al. 1998; Carcello and Neal 2000; Beasley et al. 2000; Johnstone et al. 2001; Bazerman et al. 2002; Francis 2004; George 2004; Knechel 2007; Joe and Vandervelde 2007; Love 2010
	Deadline pressures	Landsittel 2000
Environmental	Situational indicators (red flags); client risk including management fraud	Uretsky 1980; Benson 2009; ASB 2002b (SAS No. 99); D'Aquila et al.2010; Dorminey et al. 2010; Carpenter and Reimers 2011
	Justifiee (the profession at large) preference	Peecher 1996
	Attitude indicators (dishonest, aggressive, hostile etc.)	Heiman-Hoffman et al. 1996
	Internal Control (management integrity)	Beasley et al. 1999; Kizirian et al. 2005
	Corporate governance (audit committee)	Beasley et al. 1999; Carcello and Neal 2000; Cohen et al. 2008; NACD 2013
	Non-routine/non-standard accounting matters (entries)	Spurlock and Ehlen 1999; Carmichael 2010; ASB 2002b (SAS No. 99)
	"Revolving door" practice	Menon and Williams 2004; Wright and Booker 2005

Environmental	Fair value option use; fair value classification judgments	Ratcliffe 2007; Earley et al. 2012, 2013

Note: This table is based on the author's own survey of audit literature, academic and practicing, to identify factors that are considered to positively or negatively influence the depth of an auditor's skepticism.

2-3 The positive nature of assertions

The problem of skepticism is closely related to *confirmation*, auditors' current way of knowing in a broad sense, which has been conventionally and institutionally adopted for a financial statement audit. In this context, "to confirm" is to "substantiate management's assertion with evidence." Management's assertions are positive, and this positive nature weakens auditors' skepticism whether or not they recognize it.

A financial statement audit is performed on the basis of the fundamentally positive nature of accounting. Management asserts the financial statements to be appropriately prepared in conformity with GAAP, even if they are not. Auditors are expected to assume, first of all, that the financial statements have been appropriately prepared, then to substantiate them with evidence. Ideally, all information provided for the auditors should be supportive, but along with a large quantity of supportive information they may receive contrary information that the positive nature of assertions may lead the auditors to justify. The positive nature of assertions is associated with *confirmation bias*: "Auditors may seek to confirm their hypotheses and so may favor information that confirms rather than refutes their initial assessments" (McMillan and White 1993, 443; Martin et al. 2006, 298-299). A confirmation bias is *structural* in that it results from the structure of a financial statement audit itself; it is not considered only a personal trait. In other words, the very nature of a financial statement audit, by itself, can weaken the ability to exercise skepticism and, in some cases, actually prohibit it. Auditors have too often fallen into the trap of *confirmation proneness*.

Management has an incentive to present the financial statements with as much positive evidence as possible, and auditors must struggle not to be

overwhelmed by it. But in actual audit practice, based on analysis of the SEC' s disciplinary activities in the 1990s, Brown and Calderon (1996, 56) observed that three related categories of problems—lack of skepticism, lack of sufficient evidential matter, and improper reliance on management—were often linked and that "there was too much reliance placed on management assertions. In other words, the auditor was not skeptical enough—and the result was too little test work." Based on his experiences in audit practice, Wyatt (2004a, 50) observed that "clients were more easily able to persuade engagement partners that their way of viewing a transaction was not only acceptable but also desirable. Audit partners too often acquiesced to the client's views in the current period, agreeing to fix the problem next year." In short, he was alarmed that the auditors' healthy skepticism was lessened in this way and finally replaced by concurrence (Wyatt 2004b, 26).

3. Further analysis of the nature of an assertion

Before discussing assertions in accounting and propositions in auditing, it is appropriate to consider the general relationship between a statement and an assertion. With respect to a statement, Lee (2002, 25-26) states, "A **statement**, also called a claim, is an assertion about the world. A statement is expressed in a sentence, but a statement is not the same as a sentence. A statement is *what* is expressed or asserted, while a sentence is *how* a statement is expressed or asserted." Statements are prepared (by management) to represent the financial position of a company, but for an epistemic purpose auditors are interested in neither the sentences nor the statements themselves, but the assertions included in them.

Stalnaker (1978, 315) states that "an assertion expresses a proposition." With respect to a proposition, Cohen (1977, 23) explains that "propositions have been treated linguistically as declarative sentences, psychologically as judgments, and logically as that which is true or false." Only propositions can be either asserted or denied. They are different from questions, requests, commands, and exclamations, none of which can be affirmed or denied, or

judged to be either true or false. In the context of auditing, management's assertions explicitly or implicitly express propositions to be verified. To the auditors, a proposition represents management's accounting assertions as having a certain meaning. Propositions in auditing, however, are not treated as strictly as those in logic. They are determined to be not ether true (yes) or false (no) but more probable, less probable, or not probable on the basis of evidence, information that is offered to support the propositions.

Finally, an assertion is closely related to a belief (Jary 2010, 2). Assertions express what the management believes is true(4). An assertion is also related to commitment (MacFarlane 2012, 80). In the accounting context, assertions express the managers' commitment that they are responsible for the assertions.

3-1 Assertions in accounting and propositions in auditing

The term "assertion" was initially introduced to auditing by Mautz (1959), while the term "proposition" was implicitly recognized much earlier (Montgomery 1912, 87). The term "assertions" is commonly used in the literature and in statements on professional standards, for example, in defining the term "auditing" (Committee on Basic Auditing Concepts 1973, 2). SAS No. 31 (ASB 1980, par.03) officially recognized assertions, explicit and implicit, under the heading "Nature of Assertions." Since then the term has prevailed in auditing literature and professional standards.

Audit cognition is basically assertion-oriented. This prevailing concept has led to the understanding (1) that an assertion is a statement by management about recognition, measurement, and/or presentation and disclosures of economic events, transactions, or conditions underlying the financial statements and also included there, (2) that an assertion is presumed by management to be true, so it is positive, both explicitly and implicitly, (3) that

(4) Management does not need a guarantee that the assertions are true in order to be entitled to make them: some form of justification or warrant is sufficient.

an assertion mirrors management's perspective and assumes truth, and consequently (4) that an assertion whose meaning is negative is not appropriate for the auditor's epistemic (verification) purpose in a financial statement audit.

Two studies, however, have recognized negative assertions in a financial statement audit: Smieliauskas (1999) in a conceptual type of research and Fukukawa and Mock (2011) in empirical research(5). How should negative assertions be treated? To raise this question is significant in that the form of an assertion (strictly speaking, the wording of a proposition), either positive or negative, may affect the level of the auditor's skepticism.

Propositions in auditing (referred to as "audit propositions" or simply "propositions") are *analytically* separable from assertions in accounting (simply referred to as "assertions") because an assertion is presumed by management to be true while a proposition is awaiting proof by auditors. Since propositions mirror the auditors' perspective, unlike assertions, they are not necessarily positive but can be stated either positively or negatively, depending on the circumstances.

Usually, auditors accept management's assertions as the propositions to be verified. It makes no epistemic difference whether auditors use "assertions" or "propositions" because both are stated positively. However, auditors may need to recognize negative propositions when they are aware that material misstatements may result from unusual or unnatural events (particularly management fraud or illegal acts) and when they are aware of a serious going concern (GC) risk. Smieliauskas (1999, 92-93) correctly acknowledged the necessity of recognizing "negative assertions" (strictly, "negative proposi-

(5) Fukukawa and Mock (2011) introduced negative assertions in audit research. Since negative assertions may have been unfamiliar to practicing auditors participating in their research, the participants might have wondered "Why do we need to consider negative assertions in an explicit way?" The idea of "proposition framing" per se has not been explicit in the auditing literature in English except when Fukukawa and Mock (2011) use "assertion framing" in their comparative/empirical analysis of how positive and negative assertions influence audit quality (effectiveness and efficiency). However, their analysis contains an inconsistency in that it operationalizes a negative "assertion" that might confound their results (Maksymov et al. 2012, 15).

tions") even in a financial statement audit.

Recognizing negative propositions (negatives) should be restricted to when auditors feel serious doubts about the financial statements and the company's GC status. Recognizing "negatives" heightens auditors' professional skepticism and may drive them to perform a forensic audit. Since false "negatives" could impair the relationship with management, *negative propositions must be implicit*(6). Positive assertions can be either explicit or implicit; however, false "positives" jeopardize audit effectiveness and increase the risk that the financial statement users will suffer loss.

In summary, a conceptual framework for professional skepticism in a financial statement audit needs to reflect the negative aspect as well as the positive aspect of the auditor's epistemic activity.

3-2 Framing propositions

It is generally understood in cognitive psychology that "decisions can be influenced by how information is presented" (Robinson-Riegler and Robinson-Riegler 2008, 525). Earlier research (Tversky and Kahneman 1981; Levin et al. 1986; Levin et al. 1987; Loke 1989) on the study of judgment and decisions in cognitive/economic psychology has dealt with "how we are affected by the way in which information is presented or *framed*" (Loke 1989, 329, emphasis added). Thus, the way a proposition is *framed* can influence the level of skepticism exercised during the cognition process.

In the context of auditing, the scope and kind of evidence to be collected and the selection and application of audit procedures can be differently influenced by proposition framing (or "assertion framing," to borrow the terminology of Fukukawa & Mock [2012]). But auditors are subject to some restrictions in framing audit propositions: explicit negative propositions are

(6) With respect to a negative (i.e. a client's serious GC risk) proposition, a careful consideration (analysis) may be necessary, for false negatives have sometimes occurred (Francis 2004, 350). This suggests that false negatives referring to misstatements and false negatives referring to a serious GC risk should be discussed separately even in a financial statement audit.

not appropriate under a financial audit, while implicit negative propositions are allowed only when auditors face higher-risk situations.

The following is, for example, a list of propositions that auditors may recognize in order to examine the year-end balance of accounts receivable. Some propositions (assertions) are adapted from Fukukawa and Mock (2011, 82-83) and Asare and Wright (2012, 200). "P" stands for a positively stated proposition (assertion), "N" stands for a negatively stated proposition), and "PQ" stands for a positive proposition that is questionable as to its appropriateness:

P-1: The balance of accounts receivable included in the balance sheet as of xx 31, 20xx is fairly presented.
P-2: The presentation of accounts receivable included in the balance sheet as of xx 31, 20xx is free from material misstatements.
P-3: The balance of accounts receivable due from XYZ Company included in the balance sheet exists as of xx 31, 20xx.
P-4: The presentation of accounts receivable due from XYZ Company included in the balance sheet as of xx 31, 20xx is free from material misstatements with respect to their existence.
PQ: The presentation of accounts receivable included in the balance sheet as of xx 31, 20xx is free from material fraud.
N-1: The balance of accounts receivable included in the balance sheet as of xx 31, 20xx is not fairly presented.
N-2: The presentation of accounts receivable included in the balance sheet as of xx 31, 20xx is materially misstated.
N-3: The accounts receivable included in the balance sheet as of xx 31, 20xx are not properly valued.
N-4: A material amount of accounts receivable that do not exist as of xx 31, 20xx is included in the balance sheet as of xx 31, 20xx.

3-2-1 Positive propositions

Positively framed propositions, represented by Ps, are basically in line

with the Mautz and Sharaf 1961 postulate that presupposes that there is no necessary conflict of interest between management and auditors and anticipate that auditors can confirm (substantiate) the assertions in the financial statements(7). To the auditors, the financial statements are presented as positive, and the propositions are similarly positive.

For example, proposition P-1 (referred to as "P-1"; abbreviation for the other propositions are similar) is usually framed explicitly because it mirrors management's basic assertion that the financial statements are presented fairly. P-2 is basically in line with P-1 in that they both lend epistemic support to the fair presentation of financial statements, and also in that SAS No. 98 (ASB 2002a: par.08 e) requires that auditors provide reasonable assurance that there is no material misstatement in the financial statements. However, its epistemic task is a little different: P-1 and P-3 favor substantiation with positive evidence, while P-2 and P-4 favor uncovering negative evidence or negative symptoms or signs that suggest the possibility of a material misstatement(8). Propositions P-2 and P-4 require auditors to exercise more skepticism.

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(7) The author thinks that at its roots, the way one frames audit propositions depends on how one looks at the conflict of interest between the auditor and the company management. Mautz and Sharaf (1961) and Robertson (1979) take different positions regarding the framing of propositions and seem to suggest different levels of professional skepticism during the cognitive process.

Mautz and Sharaf (1961, 42) presuppose "no necessary conflict of interest between the auditor and the management of the enterprise under the audit." This presupposition (i.e. "postulate" to borrow their terminology) implies that both management and auditors are *interested in the same result*, that is, the fair presentation of the financial statements (Mautz 1958, 41).

Robertson (1979, 31) and Cohen Commission (1978, 5) presuppose that there is always "*a potential conflict of interest* between the auditor and the management of the enterprise under audit" (emphasis added). This position recognizes more that management may have incentives to distort the financial statements: Management wants to represent the company's financial position and its operations in the best possible light.

(8) The postulate recognized by Mautz and Sharaf (1961) supports an auditor's cognitive activity (*confirmation*) in collecting appropriate (competent and relevant) and sufficient evidence to substantiate management's assertions. On the other hand, the postulate recognized by Robertson (1979, 31) and Cohen Commission (1978, 5) suggests that auditors focus more on "not less-than-persuasive evidence" (ASB 1997 SAS No.82, par.9; ASB 2002b SAS No.99, par.13) or on negatives which may be implicit in management's assertions (*falsification*).

Although P-1 and P-2 equally support the fair presentation of financial statements, their epistemic meanings are different. In order to verify P-2, auditors must be more concerned with uncovering material misstatements (negative evidence) because they have to focus on negative instances which may lead to material misstatements. In other words, under this proposition framing, the auditors are asked not only to simply confirm P-2 with positive evidence but also to more consciously uncover negative instances against P-2, a negative approach that has already been recognized in SAS No. 99 (for example, ASB 2002b, pars. 51 - 68). Recognizing P-2 demands a heightened degree of professional skepticism in gathering and evaluating audit evidence. Such an audit thus outgrows its purely confirmatory framework, laying more stress on its detective facet.

Auditors can verify propositions, even though they are syntactically different, with different approaches to framing them and with different ways of verification (confirmation and falsification) and so with different levels of skepticism.

Finally, proposition PQ is stated positively but has to be considered problematic. Auditors will be required to assess whether the financial statements are free from material misstatements. Such an assessment is essential because the subject of the audit is a statement, not a human act (fraud, illegality, noncompliance, etc.). Professional standards demand that auditors proactively uncover inappropriate acts which (may) result in material misstatements, but this does not mean that PQ is appropriate under a financial statement audit. The concept of fraud is defined as "an intentional wrongful act with the purpose of deceiving or causing harm to another party" (Arens and Loebbecke 1988, 103); thus recognizing PQ makes the financial statement audit a forensic audit wearing a statement audit costume.

3-2-2 Negative propositions

Negative propositions, Ns, are not appropriate except when auditors face unusual or abnormal situations, because management does not explicitly

include negative assertions (proposition Ns) in the financial statements. For example, in order to verify N-4, auditors would have to examine all of the open account sales transactions and focus their resources on uncovering something that presumably does not exist (namely, fictitious accounts receivable), using audit procedures that can no longer be described as normal. Such examinations do embody skepticism, but such professional skepticism can, at best, be described as unhealthy.

Negative propositions may, however, be *implicitly* recognized when auditors perceive a higher risk that fictitious accounts receivable are included in the balance sheet, when they uncover material deficiencies in internal controls, or when they become aware of a serious GC risk. In these situations, the degree of professional skepticism should be heightened and auditors need to focus on uncovering negative instances about the propositions. In actual practice, the auditors might already have implicitly recognized N propositions.

Depending on the situation, auditors may consider whether to recognize negative propositions so that they can share them with members of the audit team and with the audit committee of the board of directors, particularly when the auditors believe that complicated financial fraud involving external interested parties has been planned by management. Some practicing auditors (Bernardi 1994; Davidson 1994) have expressed objections, but at the same time acknowledged research opportunities related to negative propositions (Davidson 1994, 87).

Evidence provided by a client, in particular, documentary evidence and oral evidence, attempts to support management's assertions. Auditors are generally occupied with the positive nature of evidence, even if only apparently positive, and although they have often been deceived, it does not necessarily follow that they have lacked skepticism. The positive nature of evidence weakens auditors' inquisitiveness. Behaviors such as pretending not to recognize, compromising judgment without seeking further evidence, taking the whole explanation by management on trust, and failing to gather

additional evidence from a different source have repeatedly been revealed in audit failures in the U.S.A. and Japan. Such failures may demonstrate that false positives are inherent in any type of a statement audit. One purpose of heightening skepticism is to cope with epistemic problems caused by evidential positives. Auditors need to be very clear about what they are looking for and the relevance of their findings. In addition, they must always check documents for authenticity or any possible alteration.

4. Professional skepticism as an ongoing process

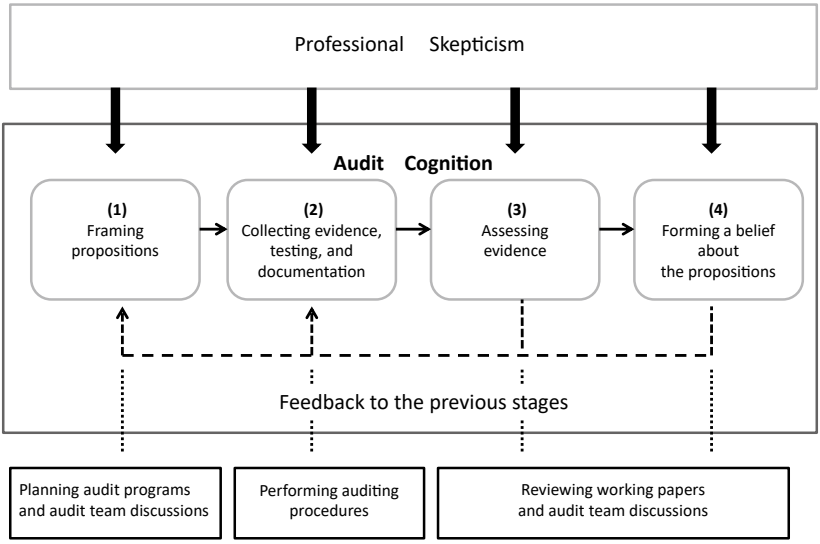
Professional skepticism is not an on or off issue. It needs to be exercised throughout the audit cognition process, starting from the planning stage, continuing through the testing and evidence-evaluating stage in the field, and again in reflectively reviewing the effectiveness of the testing, the findings, and the audit judgments. The level of professional skepticism is determined proactively based on the risks in relation to the client, the account, the types of transactions, and the presentations to be examined and then is revised reactively to what is actually perceived in the field. In this sense, the application of professional skepticism is an ongoing process that does not stop until the auditors form a reasonable basis for expressing an opinion. It is "a continuum" (Glover and Prawitt 2013, ii). In the next section, the relationship between professional skepticism and the audit cognition process is examined in more detail.

4-1 Audit cognition process and professional skepticism

Professional skepticism influences not only the reliability of the results of audit cognition and overall audit quality, but also the volume of resources consumed and ultimately the cost. Insufficient skepticism may result in an ineffective audit, while excessive skepticism results in an inefficient audit. Ideally, professional skepticism should be defined so that its level cost and quality can be measured, but "just as it is difficult to measure auditor independence, per se, it is difficult to measure professional skepticism" (Doucet

and Doucet 1996, 158).

Audit cognition is a mental process of making judgmental activities that start with (1) framing a proposition to be verified, (2) collecting evidence, testing, and documenting it, (3) assessing both the quantity and quality of the evidence, and finally (4) forming a belief about the proposition. The activities that lead to the formation of beliefs as to the fair presentation of the financial statements should be purely evidence-related. Professional skepticism, audit cognition, and audit quality are closely interrelated. A heightened level of professional skepticism supports the effectiveness of cognition, which leads to a high-quality financial statement audit. Figure 1 shows the relationship between each stage of audit cognition and professional skepticism. Stage (1) and the remaining three stages (2)-(4) have separate meanings in audit cognition.



Note: The original Figure 1 is in Japanese (Toba 2014).

Figure 1 Professional skepticism and the audit cognition process

4-1-1 Stage (1): Framing audit propositions

Stage (1) is concerned with the way propositions are selected and framed. Propositions play a vital role in audit cognition because the kind of evidence, how much evidence is collected, how the evidence is assessed, and finally whether the belief about the propositions is reasonable depend on how the propositions are framed, tested, and interpreted.

Stage (1) is related to *planning audit programs*: auditors "establish a level of professional skepticism that is proper to achieve reasonable assurance that material errors or irregularities will be detected" (Wallace 1991, 19) through conducting initial risk assessment. In particular, SAS No. 99 (ASB 2002b) requires that, in planning audit programs, auditors recognize propositions in such a way as to display professional skepticism in response to their assessment of the risk of fraud (also see Payne and Ramsay 2005). Stage (1) also includes the team's discussions about the appropriateness of the propositions: PCAOB (2007) inspectors have warned about audits in which the team's discussion session occurs only after stages (1) and (2) have begun. The Institute of Chartered Accountants in England and Wales (ICAEW: 2012, 3) has recognized the organizational aspect of professional skepticism with references to skepticism as a behavioral issue for the entire audit team.

The way propositions are framed influences the auditors in gathering supporting evidence, both in quality and quantity, in examining the sufficiency and competence of the evidence, and in reading working papers carefully so as not to overlook negative instances or signs. A heightened level of professional skepticism may initially or reactively demand P-2 in place of P-1. For example, uncovering material deficiencies in internal controls may require that the auditor ensure that the accounts receivable are free from material misstatements (P-2), not to simply confirm that they are fairly presented (P-1).

4-1-2 Stage (2) with using checklists and documentation

Stage (2), the center of the audit cognition process, is related to *perform-*

ing audit procedures: collecting relevant evidence, assessing its reliability, and then performing substantive testing to ascertain that the propositions are supported evidentially. Stage (2) is usually performed through programs with checklists (simply referred to as "audit programs) and documented in working papers.

Audit programs are a means by which an accounting firm can manage the overall quality of the audit as well as provide the audit staff with specific objectives or related detailed instructions for a particular audit procedure (including propositions). Audit programs are developed on the basis of the firm's policies as well as professional standards (The AICPA's Statements on Auditing Standards [SASs] and the PCAOB's Auditing Standards [ASs]). They convey to the staff what to do in the field so that the firm can ensure that its quality requirements are met. However, more attention needs to be paid to the negative aspect of checklists. Audit programs also state specific self-disciplined norms that the staff members must follow to discharge their epistemic responsibility in the field. The normative nature of checklists may, therefore, breed both a "check-the-box" mentality and a "compliance" mentality and may gradually make the staff less skeptical and more prone to confirmation. SAS No. 99 (ASB 2002b), as Ramos (2003, 36) recognized, "is a standard that reaches into all areas of the audit process and it moves auditors in a different direction, away from the 'checklist mentality' and more into a thinking person's audit." The perception that using a checklist may hinder the auditor's professional skepticism is also found in the IAASB Discussion Paper (IAASB 2011, par.72).

With respect to stage (2) and in relation to the Lincoln Savings and Loan audit failure, Erickson et al. (2000) noted that even if auditors had collected sufficient information or data from management, if they failed to exercise the required skepticism and to apply the most effective audit procedures, they might have overlooked management fraud. Auditors need to exercise skepticism not only outwardly (that is, assessing the competence of evidence collected) but also inwardly (that is, reflecting on their own evidential judg-

ments and conclusions). Heightening the skeptical mindset, both outwardly and inwardly, is possible only when auditors look not only at "what is there" but at "what isn't there that could be." That is why getting to know the client and its industry is so important.

Stage (2) also includes documenting the evidence and the reasoning process the auditors followed. In particular, documenting the full set of audit evidence, not only for confirming the propositions but also for disconfirming them or for finding negative signs and alternatives, is important in increasing professional skepticism at the organizational level (Vanilla et al. 2011, 13). With respect to documentation, PCAOB inspectors expressed their concerns about insufficient skepticism: "[Auditors] often document their consideration of fraud merely by checking off items on standard audit programs and checklists" (PCAOB 2007, 3). In this connection, the Chartered Professional Accountants of Canada (2013) emphasizes the linkage between the exercise of and documentation of professional skepticism.

Working papers are a way for the audit staff to show their accountability for performing the audit properly. To successfully perform epistemic activities in the field, the audit staff needs to examine, analyze, and question all of the information (that is, "to think critically")(9). Critical thinking cannot be programmed through audit checklists. Therefore, more emphasis should be given to how documentation and review work in the cognition process (Solomon and Trotman 1997, 493; Power 2003, 386). Francis (1994, 260-261) has already noted that "working papers become the discursive representation of the auditor's deliberation, discernment and judgment," and an "audit may even

(9) The expressions "to think critically" and "critical thinking" are often used not only in educational institutions, but also in professional organizations. Woodhouse (2006, 42), who points out that "critical thinking" is distinct from "thinking" or "thinking hard," gives the following definition: "*Critical thinking is purposeful, goal-directed thinking that follows a principled, reasoned track.*" He amplifies the definition: Critical thinking is "'means to ends' thinking. It is 'getting from point A to point B' thinking. It is 'problem-solving thinking" (41). Fisher (2011, 4) also introduces a widely-used definition given by Norris and Ennis (1989): "Critical thinking is reasonable, reflective thinking that is focused on deciding what to believe or do."

become more focused on the production [and reviewing] of working papers than on the 'doing' of an audit." Working papers should include what the audit staff observes, examines, analyzes, questions, figures out, and concludes, and finally what needs to be conveyed to the senior member of the team with respect to the proposition.

Peecher et al. (2013, 613-61), however, have recognized a potential problem with the traditional style of working papers. Not all of the information obtained during the audit is written in the working papers: a huge amount of implicit information underlies the explicitness and may remain in the auditor's mind. The style of the working papers, therefore, needs to encourage the audit staff to freely convey implicitness and not diminish the degree of skepticism in those who review them. Improving the conventional style of working papers may be useful in making explicit what has been only implicit.

4-1-3 Stage (3): Reviewing working papers

Stage (3) is related to reviewing working papers and to sharing with other team members what auditors have examined, obtained, and concluded. Professional skepticism at stage (3) is exercised organizationally. Reviewers, senior auditors, or concurrent reviewers must understand that judgment and intent, which are usually implicit, are difficult to document and even more difficult to prove in a lawsuit. SAS No. 108 (ASB 2006b, par. 29) recognizes the importance of audit team discussions in exercising professional skepticism when gathering (stage [2]) and evaluating evidence (stages [3] and [4]). A heightened level of skepticism is necessary in reviewing the working papers because material negative evidence or negative signs may have been overlooked in the field and because "evidence fabrication" and "evidence marshaling" may be involved in the documentation (Solomon and Trotman 1997, 493-495). In addition, when audit staff are not certain that there is a problem, even though something seems slightly unnatural or suspicious, they are inclined to document nothing or little about it in order to escape the additional work of making their suspicions explicit in working papers. In this

sense, reviewers of working papers must keep in mind that such uncertain items and conditions may be implied but may not have been documented: the audit staff's incentives are not always well-aligned with the partner's incentives.

4-1-4 Stage (4): Overall review and audit team discussion

Stage (4) is related to review by concurrent reviewers and discussions by the audit team and thus also represents professional skepticism at the firm or organizational level. At the highest degree of professional skepticism, the audit firm (engagement partners and concurrent reviewers) may decide to conduct a "stress test" (APB 2012a, 4 and 7) or employ forensic procedures to handle critical accounting/auditing issues.

As Figure 1 shows, professional skepticism should be applied at all four stages of the cognition process. Depending on the findings (counter-instances or negative signs suggested in working papers and other doubts raised in team discussions), auditors may need to revise the level of their professional skepticism and return to stages (1) and (2) as necessary. Such feedback action can reinforce the cognitive process. In particular with respect to stages (3) and (4), auditors need to develop their ability to think critically (reflectively) about all of their judgments in assessing the evidence, interpreting what the evidence says, and selecting what evidence to document: this thinking represents inward skepticism.

5. Defining professional skepticism

The definition of professional skepticism as "an attitude that includes a questioning mind and a critical assessment of audit evidence" (SAS No. 99 [ASB 2002b, par.13]) has been widely accepted as the starting point for discussing the subject. But, it is neither comprehensive nor operational enough to explain the dynamic (proactive and reactive) and multi-faceted nature of skepticism in relation to the cognition process and thus may hinder its measurement.

Professional skepticism in a financial statement audit is broadly defined as *an ongoing process of raising sufficient and appropriate questions, outwardly and inwardly, individually and organizationally, and proactively and reactively at each stage of the cognition process*[10]. This definition implies that auditors can look at professional skepticism differently in terms of (1) who exercises it, that is, individually or organizationally (collectively or at the organization level) and (2) the direction of the skepticism, that is, outward or inward. Raising appropriate questions in verifying the proposition with pertinent evidence from other sources includes "why" and "why not" (Baril et al. 1998, 392; Ranzilla et al. 2011).

Figure 2 summarizes the relationship between who exercises professional skepticism and its direction.

Figure 2 Who exercises professional skepticism and the direction

		Who exercises professional skepticism	
		Individually	Organizationally (collectively)
The direction of professional skepticism	Outward	・assessing the quality and quantity of evidence collected	・wrong, poor, or insufficient evidence ・inappropriate audit procedures ・suggested irregularities/inconsistencies
	Inward	・auditors' own judgments about their evidential observations	・misjudgments or inappropriate judgments by audit staff or partners ・negative instances or overlooked signs ・evidence of fabrication/marshalling

[10] The author thinks that the professional skepticism to be exercised at the acceptance/continuance (engagement) stage should be separated from that at the subsequent stages and so assumes that the cognitive process starts at the planning stage. However, following is an important but hypothetical observation: "The degree of professional skepticism for an engagement may be effectively set at the client-acceptance/continuance stage of the audit," and "any subsequent consideration of management integrity that could arise, for example, when assessing fraud risk during audit planning, may not sufficiently adjust the auditor's mindset and, therefore, not affect the audit plan and professional skepticism" (Shelton et al. 2001, 22). On the basis of audit practitioners' expressed concern, "after the auditor assesses management integrity, he/she develops an impression that is difficult to alter" (Shelton et al. 2001, 22).

5-1 Raising questions outwardly and inwardly

In raising questions outwardly, auditors assess the quality of evidence from internal and external sources. The audit literature and professional standards have conventionally emphasized the importance of outward skepticism especially in assessing audit evidence: raising questions (inquiry) alone is not enough. Auditors must obtain sufficient and competent evidence. In raising questions inwardly, auditors direct skepticism towards their own judgment processes. Inward skepticism, which generally corresponds to "reflection-in-action" (SchÖn 1983, 69), has also been recognized by Bell et al. (2005, 483) and covers the entire cognitive process. Peecher et al. (2011), who approach professional skepticism in terms of how to increase the quality of the financial statement audit, proposed a reform "to refine the concept of professional skepticism so that auditors must *actively question their own judgment-process quality*" (2005, 39: emphasis added). In this connection, Bell et al. (2005, 34) also emphasize the concept of inward skepticism, in which auditors question both their own judgments and the effectiveness of the process through which these judgments are made.

5-2 Raising questions individually and organizationally (collectively)

Raising questions individually is the most basic form of professional skepticism. In most cases, individual auditors pose questions to the clients, get responses, then either identify a pertinent assertion to be scrutinized or assess the validity, relevance, reliability, and sufficiency of the evidence for the assertion, explicit or implicit, and eventually verify the responses. In this sense, raising *appropriate* questions in an appropriate form is crucial.

Raising questions organizationally has received more emphasis in recent audit literature. Inadequate audit procedures and erroneous or poor quality evidence are, directly or indirectly, creeping into working papers, in addition to inappropriate practices (evidence fabrication and evidence marshaling). Working paper reviews by superiors or concurrent reviewers and discussions within an audit team are the final inward-organizational stage for exercising

skepticism to uncover negative instances (counterfactuals) or area that need more or more relevant evidence. The AICPA (Center for Audit Quality 2010, 24) stressed the importance of face-to-face meetings ("brainstorming") among team members to discuss the potential for material misstatement due to fraud or any other reason.

6. The dual nature of professional skepticism[11]

Auditing is the human action of assessing, on the basis of evidence, the quality of what (a statement) others have written or what (an action) they have or have not performed. Unlike accounting, which is concerned with portraying the financial condition of a company, the substance of auditing consists of raising doubts (a skeptical mindset) about either the statement or the action. Such an activity originates in the human action of pursuing knowledge of what is true.

The cognition in a financial statement audit belongs broadly to the category of human actions called knowing about the world, in that auditors form their beliefs about the truthfulness of a particular proposition on the basis of observations (evidence). Critical thinking and raising questions are closely associated with obtaining appropriate knowledge. Audit skepticism is essentially related to this pursuit. The basic nature of such cognition (or pursuit) is characterized as *epistemic*, but in a broad sense; that is, it is based on "a matter of more or less true" resulting from observations/evidence. Professional skepticism is characterized here as "epistemic skepticism." It is separate from "forensic skepticism," which focuses only on the detection of inappropriate human acts or negative items/instances.

Epistemic skepticism has two aspects: *epistemic width* (scope) and *epistemic depth*. The former aspect is concerned with what form, positive or negative, and the number of appropriate propositions auditors frame in rela-

(11) Arguments and discussions under this section are based on Toba (2011) with extensions and modifications.

tion to the financial statements. The more propositions auditors frame in relation to an account, transaction, or disclosure, the more widely they exercise their skepticism; if they reactively switch the proposition from positive to negative, they widen their skeptical scope in a different way. This aspect is not only a matter of proposition framing but also a matter of verification (positive vs. negative approaches, or *confirmation* vs. *falsification*). In addition, it also includes what propositions are appropriate in a financial statement audit.

The epistemic depth is concerned with what kind of evidence and how much evidence auditors collect in order to convince themselves of the truth of a particular proposition. The more competent evidence they collect, the more deeply they are convinced. This aspect is basically related to performing (selecting and applying) procedures and assessing evidence both in quality and in quantity. It represents the auditors' investigative stance: *the neutrality view* vs. *the presumptive doubt view*. Figure 3 presents an overall framework for understanding the role of professional skepticism in terms of the two axes, which reflect its dual nature (epistemic width and epistemic depth).

Figure 3 A framework for understanding the role of professional skepticism in a financial statement audit

			Width (scope)	
			Auditor's Way of Knowing (verification)	
			Positive Approach (confirmation)	Negative Approach (falsification)
Depth	Auditor's Questioning/ Critical Mindset	Neutrality View	I	III
		Presumptive Doubt View	II	IV

Viewed within the philosophy of auditing, the positive approach (confirmation) and the negative approach (falsification) are not mutually exclusive, but rather complementary, and support the entire process of audit cognition. The universe of potential sources of misstatements is large; therefore, audi-

tors may need to inquire more deeply and more extensively to uncover them, and the confirmation approach alone is often not effective in circumstances where management has used skillful schemes to deliberately distort financial statements. This issue is not simply a matter of an auditor's attitude toward collecting/assessing evidence and testing (epistemic depth), but also a matter of proposition framing (epistemic width).

Regardless of whether auditors take the neutrality view or the presumptive doubt view, they must remain *independent*, *sincere*, and *objective* in their decisions. However, their level of skepticism will differ according to (1) how strongly they come to believe in the possibility that a particular account or item may be materially misstated, (2) how strongly they recognize the possibility that material misstatements are due to fraud, (3) whether they become aware of unusual or unnatural matters (items, transactions, or conditions) in the field, and (4) how seriously they recognize a GC risk. The level of skepticism changes *proactively* depending on the degree of risk they perceive and also *reactively* depending on audit findings in the field.

6-1 The epistemic width (scope) of audit skepticism: Two ways of knowing

What propositions the auditor selects and how they are framed (i.e. positively or negatively, and explicitly or implicitly) not only can influence the way of knowing but also widen or shrink the scope of skepticism, an aspect of professional skepticism that has so far not received sufficient attention. Both *confirmation* (substantiation: *a positive approach*) and *falsification* (refutation: *a negative approach*) are basic ways of knowing in the philosophy of science and both, though having different meanings, are possible under a financial statement audit.

The philosophy literature (Salmon 1967; Popper 1968; Quine and Ullian 1970; Chalmers 1999) explains two different ways of knowing: *confirmation* and *falsification*. Confirmation (substantiation) is based on the idea that the strength of the evidence increases with each piece of such supporting evidence. Thus, auditors confirm a particular proposition by increasing the

amount of positive evidence. The more positive evidence, the higher the probability that the evidence is persuasive. But confirmation as a means of verification carries an epistemic problem (i.e. confirmation bias, confirmation-proneness).

There is another way of knowing in the philosophy of science: it is a negative or counter-evidencing approach called *falsification*. Popper (1968) advocated falsification as the most powerful alternative to confirmation. It stresses the function of negative evidence or negative instances related to the positive proposition and emphasizes the strength of negative evidence over positive (affirmative) evidence. Quine and Ullian (1970, 67-68) explain the asymmetry between affirmation and negation as follows:

> A lawlike generalization, then, is confirmed by each of its instances. An instance does not of course clinch the generalization, but each instance adds to the plausibility of it. A generalization with even a single false instance, on the other hand, is irremediably false. Any hypothesis, indeed any statement at all, which implies a falsehood, is itself false. This *asymmetry* is pure logic: what implies a truth may be true or false, but what implies a falsehood is false. It would appear to be easier, therefore, to refute a false hypothesis than to establish a true one. (emphasis added)

6-1-1 Confirmation as the positive approach

Confirmation is generally used to support (substantiate) the proposition (for example P-1 and P-3, as mentioned in **3-2**). However, it involves a human (psychological) problem in that when trying to collect information, people tend to seek out information that potentially confirms their belief over information that might disconfirm it (Gilovich 1991, 32-33). McMillan and White (1993, 443 and 463) suggest that confirmation bias and professional skepticism have a complementary effect on auditors' evidence evaluation and evidence search and that "confirmatory behaviors may not prevail or dominate in the audit judgment process." Church (1990) and Guiral et al. (2011) suggest that

auditors exhibit a confirmation-prone attitude toward evidence and, more importantly, that confirmation proneness is likely to erode professional skepticism and impair audit effectiveness. Bamber et al. (1997, 250) go so far as to state that a confirmation-prone attitude appears to conflict with professional standards.

Confirmation assumes that auditors basically look for evidence that supports, not negates, a particular proposition. It does not follow, however, that they ignore negative evidence. They must carefully assess the evidence, determine whether it contains some negative signs, and judge what it tells them. The affirmative approach is still the prevailing GAAS practice, but combined with the positive statements from management, it may erode skepticism and may explain, in part, why auditors often make do with the evidence management supplies.

6-1-2 Falsification as the negative approach

The negative approach, falsification, is a cognitive methodology in which, in order to verify the proposition (for example, P-2 and P-4 as mentioned in **3-2**), auditors proactively search for negative instances or their signs that may lead to material misstatements. This negative approach might be equivalent to a "forensic-type fieldwork phase" (POB 2000, 75-76, 88), but it is not a forensic audit per se: the evidential focus of the auditors under the GAAS audit is, to the last, a statement—not an action—by management.

In order to heighten the degree of professional skepticism at the firm level, falsification must be explicit (documented) and effectively shared among the audit team or the entire organization. One cannot see what is implicit. Therefore, communication among the audit team members and careful review of working papers, both of which help to make falsification explicit, are crucial in heightening the auditors' professional skepticism (Harding and Trotman 2011).

Shifting the focus from positives to negatives or adding to such a new perspective can impact the width and depth of skepticism, and recognizing

the negative approach has the potential to significantly change financial statement audit theory and practice.

6-2 The epistemic depth of audit skepticism: Neutrality and presumptive doubt

The epistemic depth refers to the auditors' attitude toward raising appropriate questions at each stage of the cognition process and is fundamentally related to how deeply the auditors exercise their skepticism in planning audit programs, performing audit procedures, documenting, and reviewing the results. The two attitudes identified so far to represent the degrees of skepticism are neutrality and presumptive doubt.

As with the width (framing), the depth (degree) of skepticism required depends on whether the audit engagement is initial or continuous, on what was uncovered in the previous audit, and on whether the auditors have uncovered negative instances or signs which may influence the fair presentation of the financial statements or have uncovered or suspected fraud. The degree of skepticism also depends on (1) how well acquainted the auditors are with the client's business and business model and its industry, (2) the materiality of any assertion (explicit or implicit) related to accounts, items, or disclosures in the financial statements or to transactions underlying the statements, and (3) a variety of risks the auditors face in relation to the client (such as the opacity of the corporate governance, management's aggressiveness in determining accounting policy, and weaknesses in internal controls).

The degree of skepticism is changeable, and different concepts are needed to mirror the different degrees; nevertheless SAS No. 99 (ASB 2002b) deleted the references to the AICPA's previous position on professional skepticism (the neutrality view) and current GAAS (SASs and ASs) have not explicitly stated the degree(s) of skepticism that an auditor should exercise. The deletion leaves room for interpretation. One may interpret SAS No. 99 as going no further than stating that the neutrality view is inappropriate when there is a possibility that material misstatements are due to fraud, and

another may interpret SAS No. 99 as indicating that the neutrality view itself is no longer appropriate.

6-2-1 The neutrality view

The neutrality view, later called the neutral concept of professional skepticism (POB 2000, 76), is the attitude that the auditors should neither unquestionably assume management's honesty nor flatly deny it. This view, which has been, perhaps symbolically, called "healthy skepticism" and "reasonable skepticism" (Anderson 1977, 125), was the conventional view of skepticism at least until SAS No. 82 (ASB 1997) and has been the premise for empirical research on evidence evaluation (Haynes 1999). It emphasizes that auditors should hold an unbiased view of management's honesty (dishonesty); a financial statement audit based on a presumption of dishonesty would be contrary to the audit culture. However, the neutrality view is less tenable in actual practice; The critical issue is not whether management is honest or dishonest but that management has incentives to prepare financial statements that contain material misstatements. In the neutrality view, auditors assume no material bias in management's statements ex ante (Nelson 2009; Quadackers et al. 2012).

6-2-2 The presumptive doubt view

Audit failures suggest that the neutrality approach alone is not sufficient. No matter how much "healthy" or "reasonable" skepticism the auditors have exercised, management has been able to design very complex and skillful—and initially successful—schemes for fraudulent financial reporting. This fact indicates the need to consider the presumptive doubt view. .

Bell et al. (2005) and Nelson (2009) have contributed to the recognition of this new perspective, but this view per se has not enjoyed either official or prescribed status[12], even though Nelson (2009, 3) observed that "regulators appear to take more of the 'presumptive doubt' perspective, as they typically refer to professional skepticism as something that was missing when an audit

failure has occurred." The presumptive doubt view stresses that auditors take a proactive approach to the fact that management may have incentives to intentionally misstate amounts or disclosures. It generally implies serious questioning of things and situations. Thus, as pointed out by Nelson (2009), management may strongly oppose this explicit orientation.

Early on, Burton (1980, 53) mentioned that "the auditor should perhaps become an investigator, starting with the assumption that his responsibility is to find errors [and fraud (added)] rather than to participate in a cooperative process designed to report in the most meaningful fashion. This would require auditors to adopt much higher standards of proof while essentially eliminating reliance on representations of management." The presumptive doubt orientation, however, does not mean that the GAAS audit should be restructured as a forensic audit. Auditors cannot be held responsible for uncovering material misstatements caused by all types of fraud or illegal actions because collusive fraud and other intricate schemes such as "special purpose companies," as already experienced in Enron (Batson 2003, 76), "circular transactions," and "*tobashi* transactions" are difficult to uncover. The presumptive doubt orientation does, rather, call for auditors to exercise more skepticism proactively and reactively, to extensively and rigidly assess the internal and external risks that they face, and then to apply the audit risk approach more effectively.

7. The Search for a framework for audit skepticism[13]

Figure 3 shows a basic framework to help auditors understand where they stand with respect to skepticism. The framework consists of four cells

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(12) Quadackers et al. (2012) conducted an experimental study which examined the relationship between two individual trait measures of professional skepticism ("neutrality" and "presumptive doubt") and a set of auditors' professional judgments and decisions concerning analytical procedures. However, the research design may have been flawed because the current GAAS is too ambiguous to understand how the different perspectives on skepticism should.

(13) Arguments and discussions under this section are based on Toba (2011) with extensions and modifications.

in which the two axes (the epistemic width [horizontal] axis and the epistemic depth [vertical] axis) each represent a notional mode that shows a combination of the two axes. The framework is flexible: by combining two or more cells the auditors can determine the most appropriate level of skepticism for the circumstances.

The four notional modes (Cells I to IV) each define a different level of professional skepticism and of audit effectiveness and efficiency. But no mode alone constitutes the entire skeptical mindset to be exercised during an engagement. Different levels of skepticism can be combined depending on the circumstances. This section develops several forms of combined levels of professional skepticism and explains their meanings in audit practice.

The presumptive doubt orientation does not mean it is applied, regardless of the circumstances, in every audit, in every assertion, in every transaction, in every account, in every disclosure, and in any specific stage of the cognition process, The level of skepticism represented by the neutrality view suffices for some financial statement items and transactions, and does not for others. Auditors' skeptical mindset may be on the neutrality level in planning an audit program and later shifted to the presumptive doubt level depending on their findings. The framework for audit skepticism allows auditors to proactively and reactively change the level according to the risk (circumstances) assessment. The framework should serve to improve not only audit effectiveness but also audit efficiency.

7-1 Mode I: The positive approach with the neutrality view

Skepticism under Mode I is moderately strong. This level of skepticism is appropriate when the materiality of an assertion, an account or item, or a transaction and the degree of risk is moderate. This mode is explainable in terms of the postulate "no necessary conflict of interest between the auditor and the management of the enterprise under the audit" (Mautz and Sharaf 1961, 42) and its interpretation: both the management and auditors are *interested in the same result* – that is, the fair presentation of financial statements

(Mautz 1958, 41).

One possible interpretation of SAS No. 99 is that Mode I is no longer allowable. If SAS No. 99 is interpreted in this way, perhaps a natural consequence that has been accepted by the audit community in the United States as a lesson of the audit failures in 2001 and 2002, a financial statement audit in the United States may well be simpler with respect to its skepticism framework and higher in quality: But there must be possible differences between assuming Mode I, Mode II, or both, even among developed countries with IAASB membership. Whatever negative/social reactions follow audit failures, the basic structure of a financial statement audit cannot be founded solely on the Robertson postulate that there is always a potential conflict of interest between the auditor and the management of the enterprise under audit." There is a need for *explicating* the Mautz & Sharaf postulate in discussing professional skepticism in a financial statement audit.

The neutrality view requires that auditors presume neither the freedom from nor the inclusion of material misstatements: In other words, the auditors remain "neutral" until evidence proves otherwise. Propositions written in the form of P-1 and P-3 represent Mode I. Provided that an extensive assessment of the risks has been done on accounts, items, disclosures and transactions included in or underlying the financial statements, the neutrality view allows auditors to make a balanced consideration as to the integrity and expertise of people (including management) and the effectiveness of the organization (internal controls) and also to assume the competence of evidence unless evidence appears to be unnatural, unusual, incomplete, or informal. The neutrality level may generally suffice for verifying the fair presentation of a particular account or item that may be materially misstated because of mistakes in accounting procedures or treatments.

7-2 Mode II: The positive approach with the presumptive doubt view

Mode II also reflects the positive approach: audit propositions are positive, explicitly and implicitly. Under Mode Ⅱ, auditors are more skeptical

than neutral. Mode II assumes a potential conflict of interest between the auditor and the management (i.e. the Robertson postulate). Depending on the circumstances, auditors may become (or need to be) more aware that a particular item or account may be materially misstated and that the material misstatements may be due to fraud, but they stay with confirmation (positive propositions). Or they may recognize a higher risk that the financial statements of a newly merged/acquired company may include material misstatements due to substantial mistakes in accounting treatments or accounting procedures. Propositions written in the form of P-2 and P-4 represent Mode II.

In Mode II, auditors carefully substantiate unusual/unnatural items with more persuasive evidence (or with "not less than persuasive evidence" [SAS No. 87 and SAS No. 99]), perhaps from different sources (*triangulation*: Bell et al. 2005), and then determine whether a related component of the financial statements is materially misstated. An unusual or unnatural item by itself may be a symptom of a misstatement but does not signal misstatements. In the current circumstances, auditors have been required to stay with Mode II more than previously in order to maintain the quality of the audit as a whole.

7-3 Mode III: The negative approach with the neutrality view

The neutrality view may not be consistent with the negative approach orientation (falsification) because to recognize negative propositions (in the form of Ns) reflects a heightened skeptical mindset, not a neutral mindset. In this sense, Cell III as represented by Mode III has null content. The neutrality perspective urges auditors to stay with only confirmation, to close their eyes to any negative propositions; conversely, the negative approach demands that auditors do not stay with the neutrality mindset but with the presumptive doubt mindset. Looking at skepticism in the light of the framework as shown in Figure 3, Mode III can be reasonably understood as null.

7-4 Mode IV: The negative approach with the presumptive doubt view

Professional skepticism under Mode IV is more robust than under any other Mode, close to forensic skepticism. If auditors become aware of the high possibility that a particular item and account is materially misstated, based on assessing the risks, they may wish proactively, particularly at the planning stage, to shift their epistemic width from confirmation to falsification. In addition, they need to reactively move to Mode IV when they recognize in the findings a greater possibility that materially and pervasively misstated financial statements are due to management fraud. Therefore, this level of skepticism is appropriate only when the auditors seriously doubt the integrity of the financial statements as a whole.

Mode IV is also allowable when the auditors face unusual or unnatural items, especially in the field. Although unusualness or unnaturalness itself does not mean something bad, it may at times be associated with management fraud. When the auditors consider the possibility of management fraud, they may decide that confirming P-1 is not enough and change their epistemic width from confirmation to falsification (N-4) in order to obtain a stronger assurance that no material misstatements have been caused by management fraud. Of course, they are also able to obtain similar assurance through confirmation, but the required level of skepticism is lower. Under Mode IV, the auditor focuses on uncovering unusual or unnatural items in order to verify the propositions (Ns). In other words, the focus becomes closer to that of a "forensic-type" audit (POB 2000, 88).

Under Mode IV, auditors can recognize a negative proposition implicitly. For example, they may recognize that "a particular transaction with XYZ company included in the balance of accounts receivable is fictitious" and focus on uncovering (negative) evidence to substantiate it. The "implicit/negative" is appropriate under Mode IV; false explicit negatives could strain an auditor's relationship with management or jeopardize the audit engagement itself, and could also be costly.

Mode IV must be managed by the entire audit team or by the account-

ing firm because it is by no means ordinary to recognize negative propositions, even implicitly. Unusual/unnatural situations must be documented in the working papers as explicitly as possible, so that the audit team can share the situational information including what, how deeply, and why individual auditors come to have serious doubts.

When auditors in charge on the scene become aware of the possibility of fraudulent accounting schemes with external interested parties (especially including banks), they may reactively wish to consider N-2 instead of P-2, and then focus on uncovering pertinent negative evidence. They will become more concerned with examining, for example, whether sales transactions are real or fictitious, with evidence from appropriate sources including support from the firm's forensic team.

7-5 Conditions for shifting the level of audit skepticism

Within the framework of the three Modes, auditors determine the level of skepticism most applicable to the circumstances. First, in planning the audit procedures, they need to choose an initial level (referred to as "the base") based on the results of assessing the company's internal/external risks. Ideally, the base should be determined on separate accounts, items, and disclosures in the financial statements, and on classes of separate transactions underlying the financial statements. Audit skepticism should not be fixed to a single level, that is, the level represented by the presumptive doubt view[14]. The level needed is a matter of judgment depending on how seriously the auditors assess the internal and external risks they face.

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[14] If one interprets SAS No. 99 as institutionally admitting only one level of skepticism (i.e. the presumptive doubt view with confirmation: Mode II), the concept of audit skepticism will be discussed within a limited domain and so will not be further developed or explicated academically and practically. Without a conceptual framework for audit skepticism but with the concept of risk in auditing and in business, auditors can succeed (have succeeded) in responding reactively/flexibly to risks internally and externally. To put it another way, the basic idea of changing audit action (including auditing procedures) in response to the client's business risk environment is inherently embedded in the audit risk model.

Generally speaking, Modes I and II are available as the base of any engagement. It is not practical to predetermine when to shift the base to Mode IV. Figure 5 presents general examples of conditions when auditors may need to shift to a heightened level. Two types of conditions (A and B) are included there. Type A enumerates conditions when auditors uncover unusual or unnatural accounting items as a result of testing, and Type B enumerates conditions when they perceive an increased possibility that material misstatements due to fraud are included in the financial statements or have an intuition that something is wrong with the financial statements and the company under audit.

Assuming that auditors have chosen Mode I as the base for a particular item or transaction, when they uncover unusual or unnatural items in the field (for example numbers 1-7 in Figure 5), they can ascertain whether any material misstatements result from such irregularities in staying with Mode I or by shifting the level of skepticism to Mode II, both of which belong to confirmation. If auditors choose Mode II, they may be more effective in ascertaining misstatements but with a decrease in audit efficiency. In addition, under the same assumption, when auditors face unusual situations (for example numbers 8-15 in Figure 5), they may decide it will be difficult to substantiate resulting material misstatements by staying with Mode I, so will consider moving to Mode II. They may be more effective in substantiation if they choose Mode II initially, but with a decrease in efficiency.

On the other hand, assuming that auditors' base is Mode II, when they face unusual situations (for example numbers 8-15), they can decide to stay with Mode II or will probably move to Mode IV (falsification) in order to increase their skeptical mindset to the highest level, which usually demands a forensic type of auditing. Exercising a heightened level of professional skepticism does not mean simply raising more questions or increasing the quantity and quality of evidence to support the positive proposition, but looking at the negative side of a proposition,

Figure 5 Possible conditions for increasing audit skepticism

Type A
1. When auditors uncover a material transaction that is doubtful in light of the client's normal course of business.
2. When auditors recognize material inconsistencies among books, documents, and records in relation to significant transactions.
3. .When an appropriate accounting treatment of a key transaction has not been settled close to the year-end.
4. When auditors uncover an unnatural correction of an accounting treatment near the year-end which substantially influences the current earnings.
5. When auditors uncover unexplainable inconsistencies within the accounting books or between the accounting books and records.
6. When a client changes the assumptions underlying the accounting estimates without any underlying change in the business environment
7. When there is an unadjustable or unexplained material difference between the amount of a particular item/account the customer supplied in response to the auditor's request for confirmation and the corresponding amount on the book.
Type B
8. When auditors receive information from a whistle-blower (internal or external) about the possibility of fraud that influences financial statements of the client
9. When auditors face situations suggesting the possibility of off-balance sheet transactions involving a money reflux.
10. When auditors become aware of opaque lending, borrowing, and offering/receiving collateral or guarantees for debt in relation to the client's related parties and other parties lacking a transparent relationship.
11. When auditors perceive the possibility that documents including contracts and minutes have been forged or altered
12. When basic documents that support a key transaction are unavailable or only drafts or copies are available.
13. When a client interferes with the auditor's confirmation procedures (for example, to change the addressee of an audit confirmation letter or to suggest that auditors should postpone confirmation requests to a certain company/person)
14. When auditors judge that the competence and objectivity of an expert whom the client uses with respect to a particular transaction which materially influences financial statements is questionable.
15. When auditors are not provided with sufficient information about the client's customers, investment partners (i.e. funds, SPEs, and other investees), and key custodians of the client's assets.

8. Explicit positives in accounting and implicit negatives in auditing

Accounting is naturally *positive* and explicit. It essentially represents the company's economic/financial position, which cannot be identified and observed directly, as information (a set of statements) that management prepares using accounting language, its peculiar data processing, and established accounting criteria (i.e. Generally Accepted Accounting Principles). The output is presented as financial statements. In this sense, accounting is *explicit*.

Managers have conventionally used accounting to show that they have fulfilled their accountability based on market transactions as well as on managerial stewardship. They are essentially interested in asserting that, through keeping orderly and correct accounts and records and then preparing truthful financial statements, they have honestly and appropriately discharged their managerial responsibility. In this sense, accounting *per se* is positive.

The positive nature of an assertion, together with other factors such as a demand for efficiency and time/budget constraints (including a deadline) as well as the auditors' human characteristics (traits) may suppress the exercise of robust skepticism. In addition, the evidence they collect may introduce epistemic difficulties: (1) accounting books and records that have been forged or altered often may look good, (2) kind behavior from client personnel may undermine the auditor's skepticism, and (3) the genuineness of physical evidence (for example, inventories) and the real state of affairs (for example, the progress of construction and basic assumptions underlying the management's accounting estimates) may be difficult for the auditors to assess.

The coexistence of positives with negatives is the reality of financial statements prepared by management: Positives favor explicitness, while negatives abhor it. Negatives are prone to be concealed and to stay implicit. Exercising or heightening professional skepticism means "smelling out" the existence of negatives and then making them explicit. In other words, exercising professional skepticism means successfully coping with implicit

negatives both present in and absent from the financial statements.

9. Closing remarks with further research opportunities

Audit failures have often resulted from the failure to review working papers thoroughly and reflectively in terms of (1) whether the audit staff in the field became aware of anything unnatural or unusual that suggests the possibility of misstatements, (2) whether the audit staff adequately considered the appropriateness of the instructions in the audit checklists in view of the findings, and (3) whether the staff followed up on any unnatural or unusual items. Time and budget pressures may cause auditors to focus only on "checking the compliance." The conventional form of the working papers by itself may decrease effectiveness in that it may (1) prevent the audit staff from freely raising doubts about the possibility of material misstatements and (2) make them reluctant to convey their doubts to the senior team members. Items or findings that the staff in the field believes are unnatural but which are still uncertain must be explicit and concrete in the working papers. The auditors can only overcome the "check-the box" or "compliance" mindsets when they have successfully reviewed the working papers.

Audit research has already stepped into more detailed and extensive analyses of the effects of confirming and disconfirming evidence in the process of forming beliefs, in evidence proneness in the planning stage, and in their relationship with professional skepticism. Empirical research, so far, has been concerned with how disconfirming evidence affects the degree of professional skepticism (*ex post* analysis). It does not address either how falsification (the negative approach) affects the level of professional skepticism or under what circumstances auditors shift from confirmation to falsification, or back (*ex ante* analysis). Under the framework of a financial statement audit and especially under GAAS, recognizing the negative approach may be challenging.

Giving increased recognition to the negative approach (Mode IV) may provoke opposition from auditors, academic and practicing. It is true that the

negative approach has been beyond the academic horizon except for Smieliauskas (1999), and Fukukawa and Mock (2011). It may also be true that, in general, auditors have been unskilled at dealing with the negative approach and its implications in practice. But recognizing the negative approach as one strategy to heighten auditors' professional skepticism differs from conducting a forensic audit. The negative approach is not a response to the observation that "growing public sentiment demands that auditors should be fraud detectives" (Venuti et al. 2002, 33).

However strong public demand has grown, we should not shift the basic nature of a financial statement audit to that of a forensic or fraud detection audit. Skepticism issues must be discussed with the basic understanding that the financial statement audit is not an "action" audit. The base should stay with positive propositions, explicit and implicit. However, auditors need to proactively and reactively combine the base mode (modes) with Mode IV, when appropriate, so that the whole level of their professional skepticism is responsive to the circumstances.

Both academic and practicing auditors have stressed that professional skepticism must be healthy and heightened. Unhealthy skepticism means (1) collecting evidence solely to satisfy the auditor's curiosity, (2) collecting evidence unnecessarily in such a way as to impair the relationship of mutual trust with management, and (3) recognizing an explicit negative proposition. Healthy skepticism can support and enhance engagements with roots in mutual trust between auditor and client. However, it is not a predisposition to accept management's assertions without corroboration; it is an objective attitude of "tell me why *and* show me."

Because auditors must struggle with the explicit positive nature of accounting, one single degree of professional skepticism is not enough. Further research is needed not only "to determine under which circumstances confirmation proneness dominates, as opposed to a skeptical attitude toward evidence" (Guiral et al. 2011,174), but also to determine under which circumstances auditors decide to shift to a falsification approach.

Auditors have perhaps not dealt effectively with the negative implicit aspects of financial statements. Generally speaking, the negatives tend to be covered up in human society. The more material they become, the more skillfully they may be concealed or manipulated. Although management may be able to keep statement fraud covered up for a short time, in most cases, the cover-up cannot be maintained over the long term, largely because the cash or other assets supporting the fraudulent schemes eventually runs out. Fictitious accounting figures often start small enough to be corrected, but usually grow. In spite of its explicit positive nature, accounting has entered an underground world where fraud is better organized and better concealed with skillful schemes and management is better prepared to outwit auditors. Therefore, the real issue of professional skepticism lies in whether auditors can find a way to see the implicit negative world into which management may have stepped. In this sense, long-standing procedures that put audit personnel in touch with recurring transactions solely to confirm the accounting figures need to be scaled back (Wyatt 2004b, 26).

Although auditors may not have ignored the negative/implicit approach and may have taken advantage of "the implicit" so as to focus on "the negative," when they face delicate and complex audit issues at the individual stage or even at the team stage, auditors may deliberately overlook negatives when they do not desire to make them explicit, in order to suspend judgment on them, to complete fieldwork by a deadline, and to reduce the cost of an audit.

Rather than asking auditors to mechanically follow a checklist, it is more important to ask them to raise the appropriate questions, both in and outside of management, and then to make explicit in their documents any questions, doubts, issues, and problems in their mind, even if the underlying intent and judgment are difficult to document. Team discussions of any negative signs including suspicions of fraud, as already required by SAS No. 99 (ASB 2002b), are also quite effective in making explicit something that members of the team have in mind. Training audit staff and developing the supporting tools are crucial in heightening the whole level of professional skepticism. Inquiry

as the most basic auditing technique and also as a means of face-to-face communication must again be positively evaluated because raising the *appropriate* question to the *appropriate* person will help the auditor heighten skepticism in identifying appropriate propositions, evaluating the competence and sufficiency of the evidence for the propositions, and finally in reaching an appropriate conclusion.

Audit research should focus on making explicit what stays negative and implicit. Implicitness always exists in our lingual world not only because of "the impossibility of complete explicitness" but also because of "strategic avoidance of making explicit" (Verschueren 1999, 25-31). An integration of explicit positives and implicit negatives in a conceptual framework will provoke a more effective and more comprehensive foundation for audit cognition. Following is a list of research opportunities related to the negative aspect of a financial statement audit and audit skepticism in general

1) Does considering the negative approach (falsification) increase auditors' skepticism or is it a result of increased skepticism? Either/or both? Does the negative approach necessarily increase the cost of auditing? Does the negative approach enhance audit quality (the level of assurance provided)?
2) Under what circumstances do the auditors come to recognize the negative approach during the cognitive process? And under what circumstances and at which stage of the cognitive process have the auditors so far recognized falsification, explicitly or implicitly?
3) What effect does the negative approach have on the auditors' planning, collecting, and assessing of evidence? Does the so-called audit risk approach assume the negative approach rather than the positive approach?
4) Is it possible to measure professional skepticism's effectiveness and efficacy even ex post? What are the effects on professional skepticism of stylizing working papers?
5) What are the economics of professional skepticism? To put it another

way, what is the optimal level of audit skepticism in terms of effectiveness, efficiency, and cost? How can it be determined?

6) How can working papers be stylized to better represent what audit staff have in their mind, particularly about negatives related to the cognition?
7) With respect to differences between a forensic audit and a financial statement audit, the Standing Advisory Group of the PCAOB (2004) posed "Discussion Question 49: Does a forensic accountant employ an investigative mindset that is different from the professional skepticism of an auditor of financial statements?"
8) Does the concept of professional skepticism constitute one of the basic concepts of auditing? If the answer is yes, what elements (including the neutrality and the presumptive doubt) constitute the concept? This is probably a more fundamental topic for audit research.

Recognizing that professional skepticism eventually reflects individual personal traits and is in essence a psychological trait, this paper takes the position that, in addition to its personal nature, it is epistemic/philosophical, organizational, economic, structural, and environmental. Professional skepticism in auditing is really a multi-faceted concept.

Research, no matter its form, in attempting to measure the width (scope) and depth of audit skepticism, must struggle not only with its dual aspect, but also with the difficulty of its multi-faceted structure. Research into professional skepticism in auditing, a concept that is more difficult and broader than one might imagine, has only just begun. But an increased focus on professional skepticism should revitalize the auditing profession. The following passage with which Gilovich (1991, 194) finishes *The Social Scientist's Obligation* is a fitting conclusion:

> What is most important, then, is not dispelling particular erroneous beliefs (although there is surely some merit in that), but creating an

understanding of how we form erroneous beliefs. To truly appreciate the complexities of the world and the intricacies of human experience, it is essential to understand how we can be misled by the apparent evidence of everyday experience. This, in turn, requires that we think clearly about our experience, question our assumptions, and challenge what we think we know.

Postscript: The Need for Concept-oriented Research

In the world of accounting research, in a broad sense, it seems like a long time ago when accounting researchers developed their accounting (auditing) approaches with their own but tenable perspectives on solving the issues facing them, and then produced their research results. Such research results were broadly shared in academia through papers and in particular, monographs. Accounting research results at that time were innovative/fresh in developing accounting thought, although most ideas remained without empirical support.

However, perhaps since the early 1980s (or late 1970s), the current data-oriented type of research (the empirical research) has prevailed over the concept-oriented type of research. The current research methodology emphasizes that objectivity and interdisciplinarity with basic disciplines must be vigorously sustained and increased. The currently predominant academic inquiries are not necessarily a mistake: the functions, effects, and values in the broad sense of accounting must be critically analyzed, assessed, and reconsidered if necessary, as objectively as possible in market, organizational, social, and even cultural contexts. The empirical approach also serves to evaluate research output more objectively and allows for research results to become available in a relatively short period of time. We have to recognize, however, the potential risk that innovative opportunities for new concepts and new thought will shrink and that such ideas may not be explored, in other words, that academic ventures for progress will be nipped in the bud.

Concepts are the foundation for exploring and developing (new) account-

ing and auditing theories as well as for understanding them. Concepts represent the "prism" through which a researcher looks at phenomena and at physical and human objects. Whatever concept we use might include hidden blind spots, or some part of an existing concept might not correctly look at the object or the phenomenon. Fundamental concepts are taught in the early stages of accounting education and are imbedded into students through textbooks, in-class exams, and more deeply through the CPA exams. Learning begins with an understanding of concepts, but once these concepts are imbedded and form the basis of thinking, it becomes difficult to reconsider them with a critical eye. Many researchers, not only in the United States but also in Japan, have been inclined to accept the concepts and definitions produced by the accounting profession and simply proceed with empirical research based on them. This tendency weakens innovative research by academia.

In fields such as financial accounting and financial statement audits, which are tightly influenced by professional standards and have been incorporated into a legal system, innovative research has become especially difficult. In addition, recent research has been inclined to focus on narrower topics and on similar types of research and/or methods. Researchers have expressed serious concerns about the present orientation of accounting research (Demski 2001; Basu 2012; Waymire 2012). In order to respond to their voices positively, we accounting researchers must make the greatest effort to innovate in accounting/auditing, even though innovation in the sense of "creative destruction" as advocated by an economist of worldwide reputation, Schumpeter (1950, 83), may be very challenging in our legal environment and institutional affiliations.

There must be clues leading to innovative accounting studies. In designing research projects and approaches, we may have counted more on economic terms/indexes (e.g. market price), financial terms/ratios (e.g. income and cash flow), uncertainty-related terms (e.g. business risk and audit risk) than on fundamental/social concepts underlying accounting (e.g. stewardship, accountability, management and control, responsibility, safeguarding of

assets). Conventional accounting concepts have been treated as plain, have stayed just as they were, and unfortunately may have come to be ignored. These concepts, although old, ought to be deeply rooted in the networks of our economic society and of corporate organizations. We as scholars living in the world of accounting, need to reflect on whether we have been dragged too much into thinking of accounting/auditing in relation to GAAP and GAAS.

Have we tried to fully "*explicate*" (Hempel 1952) the meaning/functions of these concepts not only in the contemporary context but also in the historical context of our economic society and in the organizational context of a business corporation? Have we tried to explore the contemporary roles of these fundamental concepts of accounting, in particular in terms of promoting our welfare, strengthening our morality, and constructing the infrastructure of under-developed countries to help them emerge from their economic backwardness?

We have to have fundamental concepts underlying financial accounting and a financial statement audit that have been fully explicated in relation to the development of economic history as well as the emergence of new thought on social values. Such fundamental concepts must be continually re-explicated, strengthened, and then preserved, however much our society changes. Accounting and auditing research have so far depended heavily on GAAP and GAAS while paying little heed to the development of new/dynamic accounting/auditing ideas that can wrap up and appeal to all accountants.

A Japanese proverb says, "Fishing begins with carp (*funa*) and ends with carp (*funa*)." This means that in Japan, children learn how to fish for "carp" from their fathers, but they come to learn the true difficulty of fishing for "carp." A researcher starts by learning a concept. Conceptual research seeks to conceptualize the object(s), of thought and then to develop a set of related concepts for a framework. This type of research is not easy, however, and takes a great deal of time. It is very difficult to shape ideas in a consistent

and effective way in a short period of time. In addition, for reviewers to review the results of conceptual research is challenging because the appraisal of its academic value often varies depending on who reviews it. But accounting scholars and in particular the American Accounting Association will, I believe, be able to overcome such difficulty.

Empirical research and conceptual research are like the two front (or rear) wheels of the car. If either is missing, the car won't move. This essay concludes with the words of Waymire (2012, 1077) to stimulate our innovative accounting and auditing research:

> I define "scholarly innovation" as material long-run improvement in the state of knowledge within an academic discipline. The (unobservable) construct I have in mind is the change through time in the extent to which thinking about accounting is supported by a body of theory and empirical evidence that explains why accounting exists and takes the form that it does. Stated broadly, scholarly innovation refers to positive long-run change in the body of knowledge present in an academic discipline.

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