

Views on the Influence of 'Timing' on the Effectiveness of the Internal Audit Function: A Q-methodological Study

CHAPTER OVERVIEW

The focus of this study is on the understanding of the timing factors that might be of influence on the Internal Audit (IA) effectiveness and the importance thereof for the internal auditors and management (the auditees). Various factors influencing IA effectiveness have been already studied; however, our knowledge of the relevance of timing factors on the IA effectiveness is limited. The aim of this study is to explore views of internal auditors and auditees concerning 'which timing related factors play a role and determine that the time is right (not too early and not too late) for the internal auditor to communicate the risk warnings to the auditee so that the Internal Audit function will be most effective?'. For the purpose of our study we defined IA effectiveness as the extent to which the internal auditor's message recipients (auditees) are willing to listen or not to listen to the internal auditors' risk warning message.

A Q-method approach was adopted that allow us to perform a wide pattern analysis combining qualitative and quantitative exploration of the timing factors. Auditors (N=26) and auditees (N=26) each performed a sorting task in face-to-face interview setting. The respondents were asked to rank 43 statements describing timing factors from 'most important' to 'least important'. The responses were analyzed using by-person factor analysis. The results revealed five different viewpoints in relation to the importance of the timing factors for the IA effectiveness. These viewpoints are: "Communicate important issues immediately, no matter what", 'Establish good relation first, then communicate issues', 'Communicate when changes are still possible, not afterwards', 'Communicate risk warnings when you have evidence first', 'Communicate immediately, and remain independent'. The early communication of risk

warnings, immediately when issues are observed, is central to all identified viewpoints in our study.

With this study we address an important knowledge gap concerning the IA effectiveness as well as in our understanding of timing i.e. when is the right moment to act.

Keywords: timing factors, internal audit effectiveness, internal audit function, internal auditor, auditee, risk warning messages, Q methodology

5.1 INTRODUCTION

"Timing is everything. Act too early or too late, and the results can be disappointing – or even disastrous." (Albert, 2013, p.1).

If timing is everything in every aspect of business to make a difference between success and disaster, it may also be a relevant factor for the effectiveness of the Internal Audit function (IAF). The internal auditor operates in a dynamic organizational environment that has its own tempo and dynamic. At the same time, audits have their own planning and rhythm that are based on prescribed audit methodology and auditing standards. In certain situations, the internal auditor needs to report his findings and recommendations even though the audit investigation is not yet finalised, simply because the time is right to act and make a difference. In other situations, the time may not yet be right and the auditor may then consider to wait and hold reporting of findings and recommendations.

The IAF can be considered effective when organizations follow their internal auditors' (independent) advice for improvement (Lenz, 2013). Lenz and Sarens (2012) consider the internal audit report as an output that cannot be effective per se. However, it may trigger an intended change, a specific outcome and possibly lasting impact, and this is what matters. If the timing of 'when to act' indeed is everything (Albert and Bell, 2002), we may assume that the timing of the internal auditor's trigger for the intended change matters for the IA effectiveness.

As discussed earlier in Chapter 1 and 2 of this thesis, prior research on factors influencing IA effectiveness has tended to focus predominantly on factors such as the acceptance and implementation of the audit recommendations, the size of the audit department, compliance with the auditing standards, the positioning of the Internal Audit department in the organization and relation with the Audit Committee, and interaction with line managers (Arena and Azzone, 2009), top management support (Cohen and Sayag, 2010; Van Peurse, 2005; Mihret and Yismaw 2007), staff expertise, executing the audit plan, audit communication (Mihret and Yismaw, 2007), organizational support' (Sarens and De Beelde, 2006a; 2006b). In their study Nuijten et al, (2016) tested some causes of deaf effect (the reluctance to hear bad news) on strategic topics such as continuation of an escalating Information Systems project and suggested that deaf effect can be considered as a deficiency in the effectiveness of the IA function. Despite the many studies on the IA effectiveness, our knowledge of the relevance of timing factors remains limited.

Albert and Bell (2002) did an extensive review of the organizational literature on timing and noted that timing questions (point-moment problems) appear mostly focused on sequencing problems (Lieberman and Montgomery, 1988), rate problems (Eisenhardt, 1989; Brown and Eisenhardt, 1998; Gersick, 1989), synchrony problems (Perlow, 1999),

deadlines (Waller et al, 2001), and duration and coordination (Ancona et al, 2001a). In other words, although the importance of timing is acknowledged in the literature (Blount and Janick, 2001, Ancona, et al, 2001b, Lawrence, 1988, Albert and Bell, 2002), we still know little about when is the right point of moment to act. Albert and Bell (2002) posit that when a well-developed and valid theory about when to act is lacking, there is no guidance for the decision makers about when is the right moment to act but they must rely on heuristics like 'the sooner the better'(Albert and Bell, 2002).

Therefore, in this study we aim to obtain a better understanding about the influence of timing factors on the effectiveness of the IA. The research question we address is: What are the views of the auditors and auditees (management) about the influence of timing related factors that determine the time is right (not too early and not too late) for the internal auditor to communicate the risk warnings to the auditee so that the auditee will listen to the internal auditor's message? The IA function is our unit of analysis we study (Blumberg et al, 2014; Sekaran and Bougie, 2013) and we define the IA effectiveness as auditee's willingness to listen or not to listen to the auditor's risk warning message. We consider risk warning messages as part of both planned audit engagements as well as other occasions outside planned engagements, when the auditor has contact with the auditee.

Understanding the views of auditors and auditees about the timing may be relevant from a theoretical as well as practical perspective. By lack of theory in this area, the empirical results of this study can be used for theory development. From a practical perspective it is interesting by itself to gain insight in how internal auditors and the auditees (as important stakeholders of the IAF) perceive the importance of timing for the effectiveness of the IA.

The paper is organised as follows: we start describing our research methodology, thereafter we elaborate on our results. We then follow by a discussion on the implications of our study for research as well as practice.

5.2 RESEARCH METHOD

Q methodology

In this study we applied Q methodology (Watts and Stenner, 2012) to explore the views of auditors and auditees about the influence of timing factors on the effectiveness of the IAF. Q methodology is a form of pattern analysis for the study of subjectivity that combines aspects of qualitative and quantitative methods (Stenner et al, 2000). It was introduced by William Stephenson in the 1930s but it can still be considered as a innovative method in the field of auditing and accounting. In a Q methodological study, respondents are asked to rank a set of statements about a certain topic according to

their opinion, and explain this ranking in a follow-up interview. By-person factor analysis identifies the main patterns in the rankings of statements across respondents, and the statements that illustrate the consensus and difference of opinion between patterns (Watts and Stenner, 2012).

Below we describe the consecutive steps in conducting this study. Because Q methodology may be novel to part of the readership, we describe each step elaborately.

Development of the statement set

The Q methodological study starts with the development of the research instrument. The research instrument is a collection of statements representing the broadest possible variety of perspectives on the topic under investigation. In a Q methodological study the statement set represents the study sample. In line with the Q methodological approach of Watts and Stenner (2012; 2014), we developed the statement set in such a way to fit the demands of the research question we seek to answer in this study and is broadly representative of the population of people from which it is drawn (Watts and Stenner, 2012; 2014).

The statement set for this study was based on previous qualitative research on timing factors (see Chapter 4 of this thesis). Five focus group interviews were conducted with in total 15 auditors and 15 auditees, which resulted in 48 timing factors. For the purpose of this study, we first translated these identified timing factors into 48 statements, based on quotes extracted from the focus group interviews. In an iterative process, we evaluated the usefulness and formulation of the statements in relation to the research question of this study. Next, we conducted a pilot test with these statements with two internal auditors and one auditee to check the intelligibility of individual statements and the comprehensiveness of the statement set. Following this pilot test, a number of statements were removed because participants identified them as ambiguous, double-barrelled and/or overlapping, and several changes were made to the wording of statements. This fine-tuning resulted in a set of 43 statements related to timing factors. This statement set was again pilot tested with three auditors and two auditees to ensure the statements were complete, similarly worded and easy to understand. The pilot test showed no further changes were required.

The full list of the statements in relation to the timing factors identified in the previous study is presented in table 5-4 in Appendix 1.

Selection of participants

For this study, we selected a sample of 26 auditors and 26 auditees for face-to-face interviews. This is well within the common range of 40 to 80 participants in such studies (Watts and Stenner, 2012).

In a Q methodological study, where the aim is to explore the variety of views, participants are sampled purposively (Watts and Stenner, 2012). In line with this approach of Watts and Stenner (2012; 2014) we selected each participant carefully and with consideration because each participant becomes a variable in a Q methodological study (Watts and Stenner, 2012).

The main selection criteria for selecting the participants for this study was that the auditors had to have experience with conducting audit investigations and reporting audit issues to auditees. While the auditees had to have experience with audit engagements and have received audit issues and reports from auditors. The auditors and the auditees were selected from a large Bank in The Netherlands that was willing to cooperate in this study because the organization was in phase of taking strategic decisions (like the initial public offering, change of top management) in which the timing of the auditor's message was a matter of interest. The auditees were recruited from the network of the banking organization.

For the purpose of the study we approached individuals who were likely to hold pertinent viewpoints on the topic under investigation. The inclusion criteria included job function (auditor, auditee), department, age, gender, years of work experience, and education level. Exclusion criteria were not being involved in any kind of internal auditing (as an auditor or as an auditee), not being able to understand English (as our statements and instructions were presented in English), and not having the capacity to understand the sorting task. See table 5-1 for the characteristics of the final sample.

Table 5-1. Participants (n=52)

Characteristic	Value
Age (mean, range)	43.0; 28-60
Gender (%)	
- female	21.2
- male	78.8
Years of work experience (mean, range)	18.3; 3-36
Education (%)	
- below university degree	7.7
- university degree	57.7
- post-university degree	34.6
Department (%)	
- audit	50.0
- Auditees from 1 st line of defence	23.1
- Auditees from 2 nd line of defence (operational risk, compliance)	26.9

Data collection

All participants were interviewed individually, face-to-face. At the start of the interview, we explained the aim of the study, the task they were asked to perform, and the use and anonymity of the data they would provide. Then, we asked participants to rank the

In the second part of the interview, participants were asked a number of follow-up questions. First, they were asked for the reasoning behind the ranking of the two 'least important' and 'most important' statements (columns 1 and 9). Then they were asked for any other comments about statements or their ranking. This part of the interview was tape recorded by the researcher after consent by the participant.

Analysis

The 52 rankings of 43 statements were subject to by-person factor analysis (centroid extraction, varimax rotation) using the dedicated software package PQ method (version 2.35; Schmolck, 2014). The assumption behind this analysis is that participants' rankings of the statements reflect their viewpoint about the timing factors we study, and when the rankings of two participants are highly correlated, they have the same view. Factor analysis helps to identify the main groups of participants with correlated rankings of statements, and thereby identify the main views about the influence of the timing factors on the IA effectiveness.

For each resulting factor from our factor analysis (i.e. identified 'viewpoint'), an idealized ranking of the statements was calculated. This idealized ranking is a weighted average ranking of the statements based on the rankings of the respondents associated with that factor (hereafter, 'viewpoint'), with their correlation coefficient with the viewpoint as weight. In fact, this idealized ranking represents how a respondent with a 100% correlation with that viewpoint would have ranked the 43 statements, and provides the statistical basis for interpretation and description of the viewpoint.

We drafted a first interpretation of the viewpoints about the timing factors using the idealized ranking of statements of each viewpoint. Then, the communalities and differences between viewpoints were highlighted using the consensus statements, whose rankings did not differ significantly between any pair of viewpoints, and the distinguishing statements, whose rankings in a viewpoint differed statistically significantly from the ranking in all other. The interpretation was finalized using the qualitative materials from the follow-up interviews. In addition, citations from participants associated with the viewpoints were extracted for purpose of illustration of the views. By following these steps, we aimed for the viewpoints to reflect, as closely as possible, how participants perceived the importance of the timing factors for the IA effectiveness.

5.3 RESULTS

Analysis of the 52 rankings of the 43 statements revealed five distinct viewpoints among auditors and auditees. All five viewpoints had an eigenvalue > 1 and at least two defining variables, i.e. statistically significant and uniquely associated participant rankings (Watts

and Stenner, 2012). Extraction of more than 5 viewpoints would result into statistically insignificant viewpoints (eigenvalue < 1 or less than two defining variables). Each viewpoint offered a clear, distinct, and coherent explanation of the auditors and the auditees all together about the importance of timing factors for IA effectiveness, i.e. 'when is the right moment' (thus, not too early and not too late) for the internal auditor to communicate the risk-warning message so that the auditee will listen to the internal auditor. The five viewpoints had between five and nine defining variables each and together explained 52% of the variance in the data (see table 5-2). The correlations between the factors ranged between .33 and .57, indicating that there is quite some consensus between each pair of views and that there are no very distinct or opposing views. Correlations with Viewpoint 2 seem generally lower. Table 5-5 in Appendix 2 shows the viewpoints loadings table.

Table 5-2. Viewpoint characteristics

Characteristic	Viewpoint				
	1	2	3	4	5
Number of defining variables (n)	9	5	8	6	5
Explained variance (%)	14	6	12	11	9
Cumulative explained variance (%)		20	32	43	52
Correlations between viewpoints	2	.47			
	3	.53	.33		
	4	.54	.40	.51	
	5	.57	.33	.51	.55

Table 5-3 presents the idealised sorts of the five viewpoints and thus shows the ranking of statements that is characteristic for each viewpoint. A "+4" indicates that the statement is positioned at the far right of the distribution in that viewpoint ("most important"; column 9 in Figure 5-1); a "-4" that it is positioned at the far left ("least important"; column 1 in Figure 5-1). An * next to the score of the statement indicates that the statement is distinguishing for that viewpoint, i.e. has a statistically significantly different score ($p < .01$) relative to the other viewpoints.

We present the five viewpoints. The numbers in brackets represent the rankings of statements in the idealized ranking underlying that viewpoint. For example (2: -4) indicates that statement 2 was ranked in the -4 ('least important') position in viewpoint 1. Verbatim comments from participants associated with the viewpoint are shown in italics and are followed by the identification number of the participant in parentheses (with AUD=auditor and AEE=auditee). Although the identification codes of the participant distinguish auditors from auditees, in our analysis of the viewpoints we chose not to make this difference as assumed the right timing should be determined in dialogue between the auditors and the auditees. Hence, each viewpoint identified in our study is a viewpoint of the auditors and auditees all together.

Table 5-3. Complete list of statements and composite factor analysis scores for the five viewpoints

Statement	Viewpoint				
	1	2	3	4	5
1 The auditor communicates the risk-warning message when the organization makes a change of external auditor.	-3	-2	-2	-1	0*
2 Communication of the risk-warning message by the auditor is aligned with the timing of activities of the external auditor.	-4*	-2	-2	-1	0*
3 The auditor communicates the risk-warning message when the first and second line have finished their investigation.	-1	-3	-2	-3	-3
4 Communication of the risk-warning message by the auditor is aligned with the priorities and objectives of the auditee.	-2	+3	0*	+2	-1
5 The auditor communicates the risk-warning message before the auditee makes decisions about budgets.	-1	0	+1	-1	+1
6 Critical or high-risk findings are communicated directly at the moment the auditor has identified the risk.	+4*	+2	+2	+4	+4
7 Serious issues with high sense of urgency are communicated by the auditor directly, irrespective of the stage of the audit investigation.	+4	+4	+3	+4	+4
8 When the audit opinion is 'weak', the communication of the risk-warning message by the auditor starts in the early stage of the audit.	+3	-1*	+1	+2	+3
9 The risk-warning message is communicated by the auditor before the deadline for realisation of the Year Audit Plan at year end.	-3	-4*	-3	-2	-2
10 The auditor communicates the risk-warning message only after executing all the necessary audit activities with due care.	0	0	-2*	+1	0
11 The auditor communicates the risk-warning message only when there is sufficient evidence supporting the message.	0	+2	-1*	+3	+2
12 The auditor communicates the risk-warning message only when the factual accuracy checks have been performed.	+1	+1	-1*	+3*	0
13 The auditor communicates the risk-warning message at the end of the fieldwork, in the closing meeting.	-1	-1	0	0	-2
14 The auditor communicates the risk-warning message in early stage, during the orientation phase of the audit.	+1	-3*	0	-1	-1
15 Communication of the risk-warning message by the auditor is on a quarterly basis as part of the quarterly audit opinion reporting.	-2	-4*	0	-1	+1*
16 The auditor communicates with the auditee in frequent update meetings throughout the audit to discuss potential issues arising.	+2	+3	+1*	+3	+3
17 The auditor takes into consideration holiday periods and absence of key staff of the auditee in the communication of risk-warning messages.	-1	0*	-4*	-2	-1
18 The auditor takes the appraisal cycle of the auditee by year-end into consideration in the communication of risk-warning messages.	-4	-3	-4	-2	-4
19 The auditor takes into consideration that the auditee sometimes is already working on improvements.	+1	+3	+2	+2	-1*
20 The auditor takes into consideration that the auditee sometimes is too busy to listen to a risk-warning message.	-2	+1*	-3	-3	-3
21 Communication of the risk-warning message by the auditor comes during the phase of change of applications or processes, not after implementation of the change.	0	+1	+3*	0	+1

Statement	Viewpoint				
	1	2	3	4	5
22 When laws and regulations change, the auditor communicates the risk-warning message early enough for the auditee to have sufficient time to correct things.	+2	+1	+3	+1	+1
23 The auditor communicates the risk-warning message when the auditee has appointed new management within the department.	-1	0	0	0	-2
24 The auditor takes soft factors like the character of the auditee into consideration to decide on when to communicate of the risk-warning message.	0	+1	0	-3*	+1
25 The auditor is straight and bold enough to communicate the risk-warning message directly.	+3*	0	-1*	+2	+1
26 The auditor communicates the risk-warning message when the auditee understands the content of the issue.	+2	+2	-2*	0	0
27 Communication of the risk-warning message starts during the design phase, not after implementation of the project.	+1	0	+4*	0	+2
28 Communication of the risk-warning message by the auditor is aligned with market developments.	0	0	+2*	0	-4*
29 Communication of the risk-warning message is aligned with topics the auditor finds important at that particular moment.	0	+2*	-1	-1	-3*
30 The auditor communicates the risk-warning message directly when an incident is observed.	+3*	-2*	+1	+1	0
31 The auditor takes the personal preferences of the auditee about communication of risk-warning messages into consideration.	+1	+1	0	-4	-2
32 The moment of communicating the risk-warning message to the auditee is a personal choice by the auditor.	0	-2	-3	-4	-1
33 The auditor communicates the risk-warning message before the 'go-no go' decision of a project.	+2	-1	+2	0	+3
34 Communication of the risk-warning message by the auditor is aligned with the timing of requests for investigation by the bank's regulator/supervisor.	-3*	-1	-1	+1	0
35 The auditor takes into consideration the quality of the relation with the auditee (trust).	-1	+4	-1	-2	+1*
36 The auditor communicates the risk-warning message in strategic events when management makes critical decisions.	0*	+1	+4*	+2	+2
37 In audits abroad the auditee wants to know of the audit issues before the auditors leave.	+2	0	-1*	0	+2
38 In continuous auditing the auditor communicates the risk-warning messages continuously.	+1	0	+1	+1	-2*
39 The auditor communicates the risk-warning messages in audit that has an added value for the auditee.	+1	+2	+1	0	-1
40 The auditor communicates the risk-warning messages when the audit is requested by management.	-2	-1	0	+1	-1
41 Communication of the risk-warning message comes right after the post-mortem (of projects, products), not long after it.	-2	-2	0	-1	0
42 The risk-warning message concerns governance or soft controls related issues.	0	-1	+2	-2	+2
43 The risk-warning messages are communicated by the auditor in theme audits that receive great attention from management.	-1	-1	+1	+1	0

Viewpoint 1.

In viewpoint 1, communicating critical, high-risk or urgent findings immediately, irrespective of the stage of the audit investigation, is considered most important (6: +4*; 7: +4; 30: +3*; 16: +2). An auditor explained: *“Important issues should be communicated smoothly and fast, the internal auditor should not wait till all audit activities are finalised but communicate the issue as soon as it is observed. If you identify important issue you need to communicate it directly and not wait to finalise the audit”* (6: +4; AUD08). Another auditor: *“These two statements (6 and 7) indicate that these issues should be communicated directly. You can do extra investigation later on but you need to communicate these issues immediately and then you are in time to see what additional work you need to do”* (7: +4; AUD11). And an auditee stated: *“At the moment the auditor identifies serious issue he should not wait but directly communicate the risk to me. It is about the moment the auditor has identified an issue and at that moment the auditor should report the issue and not wait”* (6: +4; AEE26). For this purpose, it is important that the auditor is straight and bold enough to communicate the risk-warning message directly (25: +3*). In this respect one of the auditors noted: *“The auditor has to communicate his message at all times no matter of the timing. You should not be afraid of various formalities”* (25; AUD13). While one of the auditees said: *“The auditor should be bold and direct. The auditor should communicate the risk directly, to initiate discussion and dialog with the auditee so that the auditee is able to take action. If the auditor is too late with his risk message, this is not a preferred situation for the auditee”* (25; AEE14). Overall, early communication of issues arising throughout the audit is central to this viewpoint because it gives the auditee more time to intervene, for example when the audit opinion is ‘weak’(8: +3), when laws and regulations change (22: +2) or before the ‘go-no go’ decision of a project (33: +2). For example, one of the auditees said: *“It is important to me to know of the issue very early so that I can do something about it”* (33; AEE08). Thus the auditor should not hesitate to address important issues ‘when the iron is hot’.

In line with this strong focus on early and straight communication, which is distinguishing for this view, statements that mentioned fixed timings like the year-end (18: -4; 9: -3), alignment with the timing of activities of the external auditor (2: -4*) or the timing of requests for investigation by the bank’s regulator/supervisor (34: -3*), or just when requested by management (40: -2) were considered least important. One of the auditees associated with this viewpoint stated: *“The appraisal cycle of management is not important for the moment of the communication of the risk message by the auditor. The auditor can communicate the message anyway and not take into consideration this factor”* (18: -4; AEE09). And one of the auditors explained: *“The internal auditor’s activities are independent of the various events such as e.g. the involvement of the external auditor or budget decisions. These are no reasons not to communicate the message”* (2: -4; AUD07). Another auditor confirmed this view by saying: *“The internal auditor should not wait for*

the external auditor's or supervisor's alignment; the internal auditor should be able to report risks independently. Otherwise the internal auditor is too late with the communication of the risks. I expect that in these situations the internal auditor is even more early than the external auditor or supervisor in reporting the issues" (34: -3: AUD08).

Considering the above, we call this viewpoint '*Communicate important issues immediately, no matter what*'. This viewpoint can be expected among both auditors and auditees as it was defined by five auditors (AUD07, AUD08, AUD11, AUD13 and AUD18) and four auditees (AEE08, AEE09, AEE14, AEE26) (see Appendix 2).

Viewpoint 2.

The auditors and auditees in viewpoint 2 believe more than their peers in the other viewpoints that the most important factor for the timing of the communication of the risk warning message by the auditor is the quality of the relation with the auditee (trust) (35: +4*). With respect to the quality of the relation, one of the auditors said: *"We have to investigate the issues, but we need to have a good communication with the auditee. We need to address issues in our regular meetings with management. This is important for the relation with the auditee."* (35: +4; AUD12). Therefore this group found aspects such as communicating risk warning messages in frequent update meetings throughout the audit (16: +3), aligning the timing with the priorities and objectives of the auditee' (4: +3), taking the improvements of auditees into consideration (19: +3) also important as it contributes positively to the relation with the auditee and facilitates the effective communication of the risk warning messages by the auditor. One of the auditee stated: *"This statement relates to the moment when the auditor can place himself in the shoes of the auditees and this is for me most important timing factor"* (19: +3; AEE21).

That the relation with the auditee is important in this viewpoint, can be also seen in aspects this group found more important than other groups, like 'alignment with topics the auditor finds important at that particular moment' (29: +2*), 'taking into consideration busy periods of the auditee' (20: +1*) and 'the personal preferences of the auditee about the moment of communication of risk-warning messages' (31: +1*). Although the relation with the auditee takes the central place in this viewpoint, still having sufficient evidence supporting the message (11: +2) and understanding the content of the message by the auditee (26: +2) are seen by this group as important prerequisites to 'communicate serious issues with high sense of urgency immediately, irrespective of the stage of the audit investigation' (7: +4) and 'communicate critical or high-risk findings directly at the moment the auditor has identified the risk' (6: +2). For example one of the auditor said: *"It starts when the Auditee understands what the issue is about otherwise we cannot convince him that there is a risk"* (26; AUD10). This may be the reason why this group found aspects such as 'when the audit opinion is 'weak', the communication of the risk-warning message by the auditor starts in the early stage of the audit' (8: -1*), 'the

auditor communicates the risk-warning message directly when an incident is observed' (30: -2*) more unimportant compared to their peers in the other viewpoints.

For the auditors and auditees in this viewpoint more unimportant timing factors compared to their peers in the other four viewpoints are fixed timings related to the communication of the risk-warning message by the auditor is on a quarterly basis (15: -4*), the deadline for realisation of the Year Audit Plan at year end (9: -4*). They found that other fixed moments like the orientation phase of the audit (14: -3*), when the first and second line have finished their investigation' (3: -3), the appraisal cycle of the auditee by year-end (18: -3), or post-mortem (of projects, products) moments, also as not important. For this group the timing is not a personal choice by the auditor (32: -2) and it should not depend on the moment when the organization makes a change of external auditor (1: -2). The following statement of one of the auditees is informative in this respect: *"The statement about realisation of the Year Audit Plan is related to internal processes of the auditors and for me this is not important timing factor"* (9; AEE21). One of the auditors confirmed this by stating: *"The auditee is not interested in our deadlines related to audit plan"* (9; AUD10).

In this viewpoint establishing a good relation and trust between the auditors and auditees before communicating the risk warning message takes central place in determining the right timing for the auditor to act. We call this viewpoint 'Establish good relation first, then communicate issues'. Viewpoint 2 can be found among auditors and auditees as it was defined by four auditors (AUD01, AUD05, AUD10, AUD12) and one auditee (AEE21) (see Appendix 2).

Viewpoint 3.

In viewpoint 3 communicating risk-warning messages by the auditors in moments when the auditee listens the most, like in strategic events when management makes critical decisions (36: +4*), and during change, not after implementation of the change (27: +4*; 21: +3*) are much more emphasised compared to the other four viewpoints. In this respect, one of the auditees stated: *"The auditor should communicate the risk message at the moment when everyone listens. Strategic events are for me most important because at the moment of such events the auditee listens much more to the auditor's message"* (36; AEE06). One of the auditors explained: *"The auditor should perform audits more on changes/design. During change the auditor should communicate risks more often"* (27; AUD26). For this purpose, it is important to this group that the auditor communicates serious and high risk issues with high sense of urgency directly, at the moment the auditor has identified the risk irrespective of the stage of the audit investigation (7: +3; 6: +2), before the 'go-no go decisions but aligned with market developments and early enough for the auditee to have sufficient time to correct things (22: +3; 33: +2; 28: +2*), by communicating these issues in frequent update meetings throughout the audit to discuss

potential issues arising (16: +1*). One of the auditors illustrated this by saying: *"For senior management the internal auditor is effective when he/she is sensitive for risks entailed by market developments and in a phase of design/change"* (28; AUD26). And one of the auditees noted: *"The auditor should communicate the issues early, continuously, regularly and think together with the auditee about the issues and resolutions"* (16; AEE04). Another auditee said: *"Urgent issues should be communicated directly"* (7; AEE05) and confirmed by another auditee who said: *"Important issues should be directly communicated by the auditor. The auditor should not wait with it till he/she has finalised certain phases of the audit"* (7; AEE17).

In this viewpoint it is therefore more unimportant than in the other viewpoints that the auditor communicates the risk-warning message only after executing all the necessary audit activities with due care, when there is sufficient evidence and all factual checks supporting the message are done. (10: -2*; 11: -1*; 12: -1*). And for this group the auditor should communicate the risk warnings early, not at the end of the audit (37:-1), independently of being straight or bold enough (25: -1) or whether the auditee understands the content of the issue (26; -2*). In this respect one of the auditors said: *"Bold and straight are not relevant for the timing, you need to be more politic sensitive to be able to convince the auditee of the audit issues"* (25; AUD22). One of the auditees said: *"The auditor should not align the moment of communication of the risks with the external auditor. The work of the auditor is independent of the work of the external auditor"* (26; AEE18).

The focus on early communication of risk warning, before making strategic decisions and change implementations by management is emphasised in this viewpoint by considering subjective timing moments related to the appraisal cycle of the auditee by year-end (18: -4), holiday periods and absence of key staff or too busy periods of the auditee (17: -4*; 20: -3) in the communication of risk-warning messages, deadlines for realisation of the Year Audit Plan at year end (9: -3), personal choices by the auditor' (32: -3), and the moment of changing the external auditor' (1: -2) as unimportant. One of the auditors stated: *"The appraisal cycle has no role in the timing of the communication of the risks by the auditor"* (18; AUD26). While one of the auditees said: *"Holidays are nonsense. The auditor should not wait till the auditee is back from holidays or absence to communicate his risk message"* (17; AEE17).

Given the strong focus on early communication during strategic decisions and change and not after their implementation, we call this viewpoint *'Communicate when changes are still possible, not afterwards'*. Viewpoint 3 was defined by two auditors (AUD22, AUD26) and six auditee (AEE04, AEE05, AEE06, AEE17, AEE18, AEE23) (see Appendix 2).

Viewpoint 4.

In viewpoint 4 having collected sufficient evidence (11: +3) and especially having facts checked first (12: +3*) before immediately communicating serious issues to manage-

ment (6: +4; 7: +4; 36: +2; 16: +3), takes central place in determining the right timing for the auditor to act. This view is illustrated by one of the auditees who indicated: *"High and critical issues should be directly communicated by the auditor (6; AEE07) who also noted: "The auditor should not wait with the communication of issues that have a high sense of urgency. These issues should be communicated directly no matter in which phase is the audit investigation. With such issues the auditor should not wait till he finalises the audit but communicate these issues in an early stage" (7; AEE07). However, one of the auditors stated: "You need to make sure there is sufficient audit evidence that will support the communication of the findings. We need to check and double check and confirm before we communicate the issues." (11; AUD04). One of the auditees illustrated this by saying: "Factual accuracy of the issues that the auditor communicates to the auditee is very important. Only correct issues, confirmed for factual accuracy can be effectively communicated by the auditor as he/she can convince the auditee this way much better" (12; AEE12). This was confirmed by another auditee who said in his concluding remarks: "Issues should be early communicated but always be backed with good evidence" (AEE20).*

In this viewpoint aspects related to considering the character of the auditee to decide on when to communicate of the risk-warning message is seen as more unimportant compared to the peers in the other four viewpoints (24: -3*). For this group, the moment of communicating the risk-warning message to the auditee is not a personal choice by the auditor or the auditee (32: -4; 31: -4). To illustrate this, one of the auditors noted: *"The communication of the issues should not be a personal choice of the auditor. There should be some kind of guidance but personal choice is not important" (32; AUD04). This was noted by one of the auditees saying: "If the timing is personal choice by the auditor, he/she is not client focussed" (32; AEE26) and another auditee: "The personal preferences of the auditee are also not important for the timing. I cannot imagine this to be important timing factor" (31; AEE07). Also in this viewpoint, the timing should not depend on aspects like holiday periods and absence of key staff, too busy periods, or the moment when others have finished their investigation (17: -2; 20 -3; 3: -3).*

Communicating serious and high risk issues based on evidence and facts is central to this viewpoint and therefore we call this viewpoint 'Communicate risk warnings when you have evidence first'. Viewpoint 4 was defined by only one auditor (AUD04) and five auditees (AEE03, AEE07, AEE12, AEE20, AEE25) (see Appendix 2).

Viewpoint 5.

Early and frequent communication of serious, high risk, critical risk warnings is central to viewpoint 5 (6: +4; 7: +4; 16: +3; 15: +1*) because this way the auditee will have the chance to intervene directly and timely, for example when the audit opinion is 'weak'(8: +3), before 'go-no go' decision of a project'(33: +3), in strategic events when management makes critical decisions' (36: +2) or when there are issues related to governance

and soft controls (42: +2). To illustrate this, one of the auditors stated: *"In case of high sense of urgency you need to communicate directly and if we do not report these directly it will be too late and we have no added value and the relevance is gone"* (7; AUD03). One of the auditees said: *"Serious issues should be directly communicated to the auditee so that auditee can implement solutions directly"* (7; AEE02).

Although the early communication is central in this viewpoint, the group considers that the right timing for communication of the risk warning messages by the internal auditor is not determined by personal choices of auditors and auditees. This is reflected by statements that relate to what the auditors find important at that particular moment (29: -3*), preferences like the year-end appraisals (18: -4), personal preferences of the auditee (31: -2), too busy to listen to a risk-warning message (20: -3), when the first and second line have finished their investigation' (3: -3), which we found by this group as unimportant for the timing. That this group considers the auditor should remain independent of what others prefer when deciding about the timing, is illustrated by one of the auditees noting: *"The auditor should not wait the first or the second line of defence to finish their investigations but report the risks independently"*. (3; AEE13). This is confirmed by one of the auditors who noted: *"We are independent and objective and this is outside of the appraisal cycles of auditees. This is the least relevant of all statements here"* (18; AUD03). One of the auditees stated the following: *"The appraisal cycle is not important for the timing. It is my opinion that if the auditee does not want to listen to the auditor's message due to the appraisal cycle, he does not take the auditor seriously"* (18; AEE22). With respect to auditee being too busy to listen to the auditor's risk warning message, one of the auditors noted: *"This is not a reason not to communicate the risk and we cannot wait until for the auditee it is a good moment"* (20; AUD03). In addition, this group found aspects like continue communication (38: -2*), market developments, inside ongoing improvements (28: -4*; 19: -1*) much more unimportant compared to their peers. For example one of the auditees said: *"Timing should not depend on developments in outside market but the auditor should take into consideration what is important for the organization"* (28; AEE03).

Communicating serious risk warnings immediately in early stage, no matter of preferences of others is central to this viewpoint. We call this viewpoint *'Communicate immediately, and remain independent'*. Viewpoint 5 was defined by two auditors (AUD03, AUD17) and three auditees (AEE02, AEE13, AEE22) (see Appendix 2).

5.4 DISCUSSION

In this section we will be discussing the main findings and conclusions, the implications of our study for research and practice, as well as the limitations.

Main findings

Our study aimed at obtaining the views of the internal auditors and the auditees (management) on the influence of timing factors on the IA effectiveness. The research question we addressed in this study was: “What are the views of the auditors and auditees (management) about the influence of timing related factors that determine the time is right (not too early and not too late) for the internal auditor to communicate the risk warnings to the auditee so that the auditee will listen to the internal auditor’s message?”

This Q-methodological study gives insights into the heterogeneity and the subjectivities in views about the timing factors relevant to the effectiveness of the IAF. Our study revealed five distinct views of auditors and auditees about the factors that determine the right moment (i.e. not too early, not too late) for the auditor to communicate the risk warning message to the auditee. We summarize these viewpoints below:

- Viewpoint 1 ‘Communicate important issues immediately, no matter what’ can be found among both the auditors and the auditees. In this Viewpoint it was emphasised that important issues should be communicated immediately to auditees, no matter of other conditions such as e.g. the stage of the audit investigation and having collected sufficient fact evidence.
- In Viewpoint 2 ‘Establish good relation first, then communicate issues’, both the auditors and the auditees shared the view that the quality of the relation the auditor has with the auditee is prevailing factor for the timing. This view is less expected to be found among the auditors given the independent role of the auditor and we feel there is in a way some tension between the independent role of the internal auditor in the organization and their emphasize on having a good relation with management. This could be presumably clarified by studies showing that the internal auditor is more effective as a Partner to management than as a Policeman (Nuijten et al, 2016); however it needs further investigation.
- Viewpoint 3 ‘Communicate when changes are still possible, not afterwards’ can be also found among auditees and has a strong focus on hearing about the risks during decision making processes (e.g. strategic events, projects) when taking corrective actions are still possible and changes are made on time.
- Viewpoint 4 ‘Communicate risk warnings when you have evidence’ is also a view that can be found among the auditors and the auditees. It emphasizes having sufficient fact evidence as a precondition for the timing of the communication of the risk warning message by the auditor. We would expect having sufficient evidence and checked facts would be more auditor’s view given these aspects are part of their standard audit procedures. Apparently the auditees demand hearing about issues immediately but still these issues need to be correct and supported with sufficient evidence.

- Similarly to Viewpoint 1, Viewpoint 5 "Communicate immediately, and remain independent" is shared view among auditors and auditees. In this Viewpoint the timing is not determined by what others prefer as timings related to subjective aspects like for instance personal choices of auditors and auditees, year-end appraisals, end of year deadlines, absence of staff, holidays, having too busy periods, were considered more unimportant compared to the other four Viewpoints identified in this study. In this viewpoint the immediate communication of serious issues is important but the emphasize is on the independence of the auditor when choosing the right timing for the communication of the risk warning message.

The early communication of risk warnings, immediately when the issue is observed, is central to all identified viewpoints in our study. However, our study does not intend to give recommendation to the internal auditors to always communicate the risk warning messages to the auditees immediately. Each viewpoint in our study outlines different conditions which determine the right timing. All five viewpoints are shared among the auditors and auditees and we cannot link any of the viewpoints specifically to group of auditors or group of auditees.

Implications for theory and practice

The knowledge about the views of auditors and auditees of the timing factors in relation to the effectiveness of IAF is important for several reasons.

- There is no only one view that can be distinguished about the important of the timing for the IAF effectiveness but more views exist and these are to be found among auditors and auditees.
- The identified views in this study are not very different or opposing among the auditors and the auditees. There is a quite some consensus between each pair of viewpoints as they were moderately correlated with each other.
- Based on the identified viewpoints in our study, we cannot build only one 'objective' view about which timing factors are the most important and which are the least important for the IA effectiveness. Although, in our opinion, identifying five viewpoints on timing is quite extensive, our results do not provide one common policy guidance with regard to 'when is the right moment for the auditor to communicate the risk warning message'. There are more views, the views are subjective as one timing factor is most important in one viewpoint but less important in another viewpoint. Being aware of these views, the auditors and auditees can start discussion with each other to align views and expectations with respect to the right moment of communication of the risk warnings.
- The results of our study show that both subjective and objective timing factors play role in all five identified Viewpoints and choosing the right timing is an interchange between subjective and objectives timing factors. While the auditors and the au-

ditees worry about having facts first, there is a tension between having sufficient evidence and early communicating the risk. The auditors and auditees want to establish a good relation with each other before the auditor communicates the bad news but when choosing 'the right moment' for communication of the risk message, the auditor needs to remain independent of the personal preferences of others.

- Finally, the knowledge about the existence of different views regarding the importance of timing for the IA effectiveness can be used further within the audit organization to decide whether a formal policy for timing is necessary or is it perhaps to leave the choice to each auditor individually to decide on the right timing to communicate the risk warning message. The former could potentially have implications for the continuity of the audits in case one auditor would be replaced with another who has a different timing approach in a particular audit.

Our study has also important theoretical implications. One of the important implications of our study for the theory is that it addresses an important knowledge gap in the research area of IA effectiveness as well as broader, in the organizational literature with respect to timing. Academic studies that have (qualitatively as well as quantitatively) examined the role of the timing factors in the effectiveness of IA are, to our knowledge, not available. This study is perhaps a first attempt in examining the timing factors that may be of influence to the effectiveness of IA function.

Lenz and Hahn (2015) performed a comprehensive review of the literature on effectiveness of IAF and distinguished two different streams in the literature, the 'supply-side' perspective, i.e. empirical studies based on self-assessments of the Auditors, and the 'demand-side' perspective, i.e. empirical studies based on other stakeholders' perspectives. Prior research on effectiveness of the IAF was mainly focussed on the 'supply-side' perspective of the Auditors (e.g. the role of the CAE and the skills and competencies of auditors, organizational specifics, its politics and culture, support from senior management and the impact of the board, directly or through the audit committee (AC)) and the 'demand-side' perspective of other stakeholders (e.g. whether management will or will not implement recommendations made by the Auditor). In their comprehensive literature review of the empirical literature in the area of effectiveness of the IA, Lenz and Hahn (2015) stated that the 'demand-side' of the effectiveness of the IA is still under-examined area. With our study we contributed by adding the timing as a new dimension to the 'demand-side' perspective of the IA effectiveness.

While other studies explore the IA effectiveness only from a 'supply-side' perspective or only from a 'demand-side' perspective, our study is presumably the first study that addresses both perspectives simultaneously. Each identified viewpoint in this study is a viewpoint of both the auditors ('supply-side') and auditees ('demand-side'), which may be an indication that the determination of the right timing for communicating risk warnings by the auditors ideally should be done in an interaction between both

groups, the auditors and the auditees in the same time as this in fact happens in the audit investigations in practice.

In addition to the above, it is worth mentioning that during the study, the participants shared with the researcher they found the Q-sort procedure very useful and an eye-opener helping them to understand the impact timing may have on effectiveness of the IA. Some of the auditors shared with the researcher they do not think of the 'right timing' when they communicate the risk warning to the auditees and this study increased their awareness of the importance of the timing for the effectiveness of the IA.

Limitations and suggestions for further research

As with other studies, our study also has some limitations. This form of generalization in our study is driven by semantics rather than statistics (Watts and Stenner, 2012). The viewpoints presented in this study are representative only of those that can be observed among auditors in the selected Dutch banking organization and related auditees. Our Q-methodological study can say little about the prevalence of these five views among auditors and auditees, in this or other similar banking institutions in The Netherlands. However, we do not expect to identify different views in comparable larger banks in The Netherlands as these, similarly to our selected financial institution, at the time of our study, were subject to important strategic developments resulting in increased attention to the timing issues. Still, we recommend further study with respondents from other large banks in the Netherlands but also abroad to confirm this expectation.

During our study some of the respondents made some general comments about the timing that could be interesting for interpretation of the study results. When giving the rationale for their ranking choices they made on the Q sorting grid, the auditors and the auditees shared interesting views about how the timing factors may be categorised in order these to be more easy identified and managed:

- One of the auditees (AEE16) suggested dividing the timing factors in two groups, subjective and objective saying: *"On the right side I put the factors that have to do with concrete hard requirements on when I (as an auditee) wish the auditor to communicate the risk messages. On the left side I put statements that have to do with early warnings. I do not like early warnings, the auditor should come to me with hard evidence. Soft factors are not important to me but hard evidence. Thus divided the timing factors in two groups: objective and subjective"*.
- One of the auditors (AUD05) looked at the timing from a perspective of serious urgent issues and less important issues and said: *"The logic how I divided the statements was on basis of two groups: events that are damageable for the business and events that are not damageable for the business. If something will damage the business that the auditor should communicate the risk warnings as soon as possible"*. In a similar direction, one of the auditees said (AEE11): *"On the right side I put timing factors that have*

to do with risks that have an immediate impact for management. On the left side I put timing factors that have to do more with regulations, internal matters of the auditor and auditees which are not so important for the timing".

- AUD24 identified three categories of timing factors and said: "Overall I identified three theme's: first, timing factors related to factual accuracy and having evidence in order to be sure of the audit issues, second, fast communication of issues with no conditions and third, soft aspect".
- Finally one auditee (AEE22) referred to three categories of timing factors and said: "In general, the selected statements on the right side of the scheme have to do with direct communication of the risks by the auditor thereby remaining independent of other factors. In the middle I put the statements for which the auditor has to take care of (various factors related to audit procedures) and on the left side are the statements where the auditor takes into account circumstances of the auditee".

From the additional feedback we obtained during the face-to-face interviews we see the potential of deriving various categories of timing factors which we recommend to be studied in further research as we believe investigating this more in depth could give an important contribution for further understanding of timing and its relation to the IA effectiveness. From a practical perspective, if there is a more clear categorisation of the various types timing factors, the auditors and auditees can define approaches how to deploy these more effectively in the communication and acceptance of the risk warnings.

In our study we focus on communication of 'bad news' messages i.e. unwelcome messages about risks that threaten the organization. We assume there are different timing factors for communicating of 'good news' i.e. messages about positive observations identified by the auditors. These kind of messages were not part of our study as we considered the positive messages do not impair the IA effectiveness. Which timing factors play a role for communicating good news and their influence on the IA effectiveness could potentially be an interesting future research.

Our final remark about the limitations of our study is that in our study we focused on the timing at inter-personal level: with the auditor as communicator of the risk warning message and the auditee (a representative of management) as a recipient of the risk warning message. Studying the views of the timing factors between auditors and auditees in the context of a specific audit investigation, could be an interesting future research to obtain more understanding on the role of specific timing aspects and views thereof. For example we suggest to focus on a specific Viewpoint during a specific audit and investigate further how the timing factors in this specific Viewpoint are viewed by these groups, what is the dynamic and interaction of these groups with regard to the timing in general and analyse differences among specific groups.

In conclusion of this paper our study resulted in five viewpoints about the timing, each of which outlines different circumstances which determine the right moment for the auditor to act. Our study revealed that the early communication of risk warnings, immediately when the issue is observed, is central to all identified viewpoints in our study. However, based on this study, a general recommendation to the internal auditors to always communicate the risk warning messages to the auditees immediately cannot be given. All five viewpoints are shared among the auditors and auditees and each identified viewpoint emphasises different aspects of the timing.

We encourage others to use our study as an input to auditors and auditees during a mutual discussion about their expectation with regard to the right timing for communication of the risk warning messages by the auditor.

We believe our study opens up promising avenues for future research and we encourage also others to advance our understanding of the timing factors in the context of the IA effectiveness.

APPENDIX 1.

Table 5-4. Theoretical structure for selection of statements

Category*	Timing factors*	Statements
Alignment	Alignment external auditor	1. The auditor communicates the risk-warning message when the organization makes a change of external auditor. 2. Communication of the risk-warning message by the auditor is aligned with the timing of activities of the external auditor.
	Alignment three lines of defence	3. The auditor communicates the risk-warning message when the first and second line have finished their investigation.
	Alignment audit plan with auditee's needs	4. Communication of the risk-warning message by the auditor is aligned with the priorities and objectives of the auditee.
	Alignment with auditee's budget needs	5. The auditor communicates the risk-warning message before the auditee makes decisions about budgets.
Audit issue classification	Risk indication	6. Critical or high-risk findings are communicated directly at the moment the auditor has identified the risk.
	Severity of audit issues	7. Serious issues with high sense of urgency are communicated by the auditor directly, irrespective of the stage of the audit investigation.
Audit opinion	Audit opinion	8. When the audit opinion is 'weak', the communication of the risk-warning message by the auditor starts in the early stage of the audit.
Audit procedures	Audit procedures-audit time schedule	9. The risk-warning message is communicated by the auditor before the deadline for realisation of the Year Audit Plan at year end.
	Audit procedures-due care	10. The auditor communicates the risk-warning message only after executing all the necessary audit activities with due care.
	Audit procedures-evidence	11. The auditor communicates the risk-warning message only when there is sufficient evidence supporting the message.
	Audit procedures-factual accuracy	12. The auditor communicates the risk-warning message only when the factual accuracy checks have been performed.
	Audit procedures-fieldwork	13. The auditor communicates the risk-warning message at the end of the fieldwork, in the closing meeting.
	Audit procedures-orientation phase	14. The auditor communicates the risk-warning message in early stage, during the orientation phase of the audit.
	Audit procedures-quarterly reporting	15. Communication of the risk-warning message by the auditor is on a quarterly basis as part of the quarterly audit opinion reporting.
	Audit procedures-update meetings	16. The auditor communicates with the auditee in frequent update meetings throughout the audit to discuss potential issues arising.
Auditee's agenda	Auditee's agenda-absence staff	17. The auditor takes into consideration holiday periods and absence of key staff of the auditee in the communication of risk-warning messages.
	Auditee's agenda-end of year appraisal	18. The auditor takes the appraisal cycle of the auditee by year-end into consideration in the communication of risk-warning messages.
	Auditee's agenda-themselves busy with solutions	19. The auditor takes into consideration that the auditee sometimes is already working on improvements.
	Auditee's agenda-too busy periods	20. The auditor takes into consideration that the auditee sometimes is too busy to listen to a risk-warning message.

Category*	Timing factors*	Statements
Change	Change in applications	21. Communication of the risk-warning message by the auditor comes during the phase of change of applications or processes, not after implementation of the change.
	Change in laws and regulations	22. When laws and regulations change, the auditor communicates the risk-warning message early enough for the auditee to have sufficient time to correct things.
	Change in process	Covered with statement 21
	Change in staff	23. The auditor communicates the risk-warning message when the auditee has appointed new management within the department.
Character	Character auditee	24. The auditor takes soft factors like the character of the auditee into consideration to decide on when to communicate of the risk-warning message.
	Character auditor	25. The auditor is straight and bold enough to communicate the risk-warning message directly.
Content	Auditee's understanding of auditor's message	26. The auditor communicates the risk-warning message when the auditee understands the content of the issue.
Design phase	Design phase	27. Communication of the risk-warning message starts during the design phase, not after implementation of the project.
External factors	External factors-market development	28. Communication of the risk-warning message by the auditor is aligned with market developments.
Focus	Audit focus	29. Communication of the risk-warning message is aligned with topics the auditor finds important at that particular moment.
	Auditee's focus	Covered with statement 4
Incidents	Incidents	30. The auditor communicates the risk-warning message directly when an incident is observed.
Preference	Auditee's preference	31. The auditor takes the personal preferences of the auditee about communication of risk-warning messages into consideration.
	Auditor's preference	32. The moment of communicating the risk-warning message to the auditee is a personal choice by the auditor.
Project	Project	33. The auditor communicates the risk-warning message before the 'go-no go' decision of a project.
Regulator	Regulator involvement	34. Communication of the risk-warning message by the auditor is aligned with the timing of requests for investigation by the bank's regulator/supervisor.
Relation auditor-auditee	Relation auditor-auditee	35. The auditor takes into consideration the quality of the relation with the auditee (trust).
Strategic events	Strategic events-critical management decisions	36. The auditor communicates the risk-warning message in strategic events when management makes critical decisions.
	Strategic events-separation & integration	Covered with statement 36

Category*	Timing factors*	Statements
Type of audits	Type audits-audits abroad	37. In audits abroad the auditee wants to know of the audit issues before the auditors leave.
	Type audits-continuous auditing	38. In continuous auditing the auditor communicates the risk-warning messages continuously.
	Type audits-existing process	Covered with statement 21
	Type audits-maintenance audits	39. The auditor communicates the risk-warning messages in audit that has an added value for the auditee.
	Type audits-management requests	40. The auditor communicates the risk-warning messages when the audit is requested by management.
	Type audits-mandatory	Covered with statement 34
	Type audits-post-mortem audits	41. Communication of the risk-warning message comes right after the post-mortem (of projects, products), not long after it.
	Type audits-soft controls	42. The risk-warning message concerns governance or soft controls related issues.
	Type audits-theme audits	43. The risk-warning messages are communicated by the auditor in theme audits that receive great attention from management.

*Category and Timing factors as per Focus Groups study (Chapter 4: table 4-1 and table 4-8 throughout 4-25 in Appendix 3)

APPENDIX 2.**Table 5-5.** Factor loadings table, with * indicating statistically significant and unique loadings

Respondent	Viewpoint				
	1	2	3	4	5
1 AUD01	0.2993	0.4526*	-0.0142	0.2377	0.1275
2 AUD02	0.5470	0.3038	0.3348	0.3235	0.2809
3 AUD03	0.2152	-0.0344	0.2664	0.2079	0.6125*
4 AUD04	0.2544	0.1912	-0.0398	0.5559*	0.1027
5 AUD05	0.2043	0.4412*	0.1894	0.1221	-0.0978
6 AUD06	0.3591	0.0862	0.3894	0.0012	0.4416
7 AUD07	0.5405*	0.2410	0.0999	0.0832	0.0739
8 AUD08	0.6216*	0.1294	0.2903	-0.1042	0.2268
9 AUD09	0.4421	0.0099	0.3471	0.1184	0.5535
10 AUD10	-0.1125	0.5903*	0.2972	0.0960	0.2252
11 AUD11	0.5628*	0.2700	0.2991	0.3324	0.1353
12 AUD12	0.1962	0.5826*	0.0464	0.2276	0.3070
13 AUD13	0.4736*	0.2029	0.2568	0.1335	0.1856
14 AUD14	0.2388	0.1742	0.3367	0.5581	0.4420
15 AUD15	0.4887	0.1167	0.3275	0.5606	0.1375
16 AUD16	0.4973	0.2995	0.3756	0.3594	0.1697
17 AUD17	0.1981	-0.0847	0.1009	0.1736	0.5610*
18 AUD18	0.6107*	-0.0103	0.0392	0.4133	0.1108
19 AUD19	0.5837	0.0426	0.1333	0.3767	0.4479
20 AUD20	0.2064	0.2845	-0.3177	0.4194	0.3781
21 AUD21	0.1185	0.2971	0.0825	0.3890	0.2115
22 AUD22	0.1246	0.0294	0.4959*	0.2131	-0.1587
23 AUD23	0.4330	-0.1620	0.2456	0.5298	0.2759
24 AUD24	0.5432	0.3415	0.0812	0.3815	0.4756
25 AUD25	0.2987	0.3665	0.4480	0.1061	0.2518
26 AUD26	0.2001	0.1045	0.7916*	0.2288	0.1593
27 AEE01	0.4521	0.0612	0.4232	0.4427	0.1995
28 AEE02	0.1142	0.2088	0.1132	0.3032	0.5451*
29 AEE03	-0.0150	0.1678	0.0930	0.4708*	0.3747
30 AEE04	0.1729	0.0388	0.4536*	0.0714	0.3575
31 AEE05	0.1045	0.1453	0.6129*	0.3538	0.2256
32 AEE06	0.1417	0.0480	0.5325*	0.2948	0.1807
33 AEE07	0.3477	-0.0029	0.1830	0.5804*	0.2741
34 AEE08	0.4990*	0.0993	0.2519	0.1215	0.1954
35 AEE09	0.7021*	0.2966	0.0315	0.1207	0.1669
36 AEE10	0.1819	0.3036	0.3706	0.4034	-0.0426

Respondent	Viewpoint				
	1	2	3	4	5
37 AEE11	0.5193	0.0007	0.3001	0.5256	0.1759
38 AEE12	0.2930	0.2972	0.2063	0.5069*	0.0042
39 AEE13	0.1553	0.3303	0.0482	0.1395	0.6091*
40 AEE14	0.4394*	-0.1970	-0.2451	0.1053	0.1998
41 AEE15	0.4615	0.2806	0.3227	0.0842	0.2732
42 AEE16	-0.0343	0.2863	0.2728	0.2863	-0.2156
43 AEE17	0.4047	-0.0181	0.5493*	0.1625	0.3189
44 AEE18	0.2839	0.2064	0.6533*	0.0152	0.1230
45 AEE19	0.4134	0.0790	0.3488	0.4448	0.4771
46 AEE20	0.1692	-0.0211	0.3189	0.5681*	0.3320
47 AEE21	0.1537	0.7135*	-0.0012	0.0083	-0.0498
48 AEE22	0.4122	0.0408	0.1910	0.1716	0.5868*
49 AEE23	0.0614	0.0562	0.7261*	0.0897	0.2726
50 AEE24	0.4829	0.1913	0.4712	0.0504	0.0694
51 AEE25	-0.0746	0.1500	0.1897	0.4876*	0.1211
52 AEE26	0.6953*	0.0403	0.3420	0.3006	0.1530