

# ESCUELA INTERNATIONAL DE DOCTORADO Programa de Doctorado en Ciencias Sociales

"The effectiveness and value of internal audit in financial institutions: Evidence from qualitative research"

Autor: Jill Round

Directores:

Prof. Dr. Jeffrey Heidemann Prof. Dr. Gonzalo Wandosell Fernández de Bobadilla

Murcia, Febrero de 2021



# AUTHORIZATION OF THE DIRECTORS OF THE THESIS FOR SUBMISSION

Prof. Dr. Jeffrey Heidemann and Prof. Dr. Gonzalo Wandosell Fernández de Bobadilla as Directors<sup>(1)</sup> of the Doctoral Thesis "The effectiveness and value of internal audit in financial institutions: Evidence from qualitative research" by Ms. Jill Round in the Programa de Doctorado en Ciencias Sociales, **authorizes for submission** since it has the conditions necessary for his defense.

Sign to comply with the Royal Decree 99/2011, in Murcia, February 10, 2021.

Prof. Dr. Jeffrey Heidemann

I fur ben

Prof. Dr. Gonzalo Wandosel Fernández de Bobadilla

(1) If the Thesis is directed by more than one Director, both of them must sign this document.



#### **Abstract**

Effective and value generating internal audit activities have long been contested because they play a key part in the achievement of a financial institution's objectives. Internal audit's systematic risk-orientated approach to evaluate and improve a financial institution's risk management and governance processes pro- vides theoretical and methodological room for discussion. The Three Lines of Defense (3-LoD) model is found in financial institutions. This calls for interaction and cooperation to enhance the overall risk management in order to create effective and value generating internal audit activities.

An analysis is undertaken on the current state, the state of the art, and the future state of the internal audit discipline to determine how it can evolve to achieve the desired state of providing effective and value generating activities. By making use of grounded theory and conducting qualitative content analyses, key concepts and categories surrounding the internal audit discipline are extracted in a mixed-method approach. Starting points for effective internal audit activities are derived from the literature and its value generation is investigated in an interview study. Scientific relevant questions are derived from the literature study which are investigated in semistructured in-depth interviews.

Evidence is collected on the role of internal audit and its fields of relevance. The exogenous interest groups are positioned outside the financial institution and do not maintain a relationship with actors inside the financial institution. The exogenous perception of the internal audit discipline is essentially shaped by the regulatory supervision body, external audit and, to a lesser extent, of other interest groups. The findings from the conducted qualitative content analysis conclude that beneficial effects of internal audit mainly arise from the interaction with the management body and the financial institution's internal governance framework. The evolvement of effective activities depends on internal audit's ability to serve these endogenous and exogenous interest groups.

Three dimensions are used to categorize the generation of value: (1) profession and organization, (2) cooperation, and (3) output. (1) Regular and indepth assessments, advisory, project management support, and assurance are contributing internal audit activities that relate to quantitative and qualitative measurands. (2) Reporting, assurance, independence, taking on a sparring partner role, and advisory are the most valuable activities for the management body. (3)

An appropriate set-up of the 3-LoD for internal audit to maintain its independence requires a level of cooperation, sharing commonalities with the first and second line of defense, intensifying the exchange with the second line to avoid redundancies, the establishment of sparring partner roles, and a meaningful reporting. Explanatory hypotheses are formulated that infer the generation of value. Internal audit maintains causal relationships with exogenous and endogenous interest groups that shape the perception of the discipline.

The thesis concludes by discussing that value is generated from the concentration of internal audit's activities on the first and second line, internal governance to prevent findings from the regulatory supervision body, and the management body. The evolvement of the internal audit discipline depends on the importance assigned to it by the management body. The research contributes to the literature by providing insights on how the internal audit discipline needs to evolve to be effective and generate value for the financial institution's interest groups.

**Keywords**: Qualitative content analysis, grounded theory, internal audit, value, effectiveness

#### Resumen

Las actividades de auditoría interna eficaces y generadoras de valor están desde hace bastante tiempo bien consideradas, ya que desempeñan un papel clave en la consecución de los objetivos de cualquier institución financiera. El enfoque sistemático orientado al riesgo de la auditoría interna para la evaluacion y mejora de la gestión de riesgos y los procesos de gobernanza de una institución financiera proporciona un espacio teórico y metodológico para el debate. El modelo de tres líneas de defensa (3-LoD) se puede así encontrar en las instituciones financieras. Esto requiere interacción y cooperación para mejorar la gestión general de riesgos con el fin de generar actividades de auditoría interna eficaces y generadoras de valor.

Se ha realizado un análisis sobre el estado actual, el estado de la cuestión en el tema y el futuro estado de la disciplina de la auditoría interna para determinar cómo podría evolucionar para lograr el estado deseado de proporcionar actividades eficaces y generadoras de valor. Haciendo uso de la Teoría Fundamentada y mediante la realización de análisis cualitativos de contenidos, se han extraído los conceptos y categorías clave que rodean la disciplina de auditoría interna, en un enfoque de método mixto. Los puntos de partida para las actividades efectivas de auditoría interna se han derivado de la literatura y su generación de valor se ha investigado en un estudio basado en entrevista. Las preguntas científicas relevantes se han derivado del estudio de la literatura, las cuales han sido investigadas en entrevistas en profundidad semiestructuradas.

Se ha recopilado como evidencia pruebas sobre el papel de la auditoría interna y sus campos de relevancia. Los grupos de interés exógenos se posicionan fuera de la institución financiera y no mantienen una relación con actores dentro de la institución financiera. La percepción exógena de la disciplina de la auditoría interna está esencialmente moldeada por el órgano de supervisión regulatoria, la auditoría externa y, en menor medida, por otros grupos de interés. Las conclusiones del análisis cualitativo de contenidos realizados concluyen que los efectos beneficiosos de la auditoría interna se derivan principalmente de la interacción con el organismo de dirección y el marco de gobernanza interna de la institución financiera. La evolución de las actividades eficaces depende de la capacidad de la auditoría interna para servir a estos grupos de interés endógenos y exógenos.

Se han utilizado tres dimensiones para categorizar la generación de valor: (1) profesión y organización, (2) cooperación y (3) producción. evaluaciones periódicas y en profundidad, el asesoramiento, el apoyo a la gestión de proyectos y la garantía están contribuyendo a actividades de auditoría interna relacionadas con las mediciones cuantitativas y cualitativas. (2) La presentación de informes, la garantía, la independencia, la asunción de un papel de socio de competición (sparring) y el asesoramiento son las actividades más valiosas para el cuerpo de dirección. (3) Una configuración adecuada del 3-LoD para que la auditoría interna pueda mantener su independencia requiere de un nivel de cooperación, de compartir puntos en común con la primera y segunda línea de defensa, intensificando el intercambio con la segunda línea para evitar las redundancies, del establecimiento de funciones de socios de sparring y de un mecanismo de informes, reporting, significativo. Se han formulado hipótesis explicativas en la inferencia de la generación de valor. La auditoría interna mantiene relaciones causales con grupos de interés exógenos y endógenos que dan forma a la percepción de la disciplina.

La tesis concluye debatiendo que el valor como tal se genera a partir de la concentración de las actividades de la auditoría interna en la primera y segunda línea, la governanza interna para evitar las conclusiones del organismo regulador de supervisión y del cuerpo de dirección. La evolución de la disciplina de auditoría interna dependerá de la importancia que le asigne por parte del cuerpo de dirección. La investigación contribuye a la literatura proporcionando perspectivas sobre cómo debe evolucionar la disciplina de la auditoría interna para ser eficaz y generar valor para los grupos de interés de la institución financiera.

**Palabras clave**: Análisis cualitativo de contenidos, teoría fundamentada, auditoría interna, valor, eficacia

# TABLE OF CONTENTS

1	Intro	oduction	1
	1.1	Motivation	1
	1.2	Problem Outline and Objective	4
	1.3	Research Description	8
	1.4	Structure of the Research	11
2	Curr	ent State of Internal Audit: Conceptual Foundation	15
	2.1	Defining Internal Audit	15
	2.2	Understanding the Professional Relationship of the Internal	Audit
	Discip	line	23
	2.2.1	Classifying: Single Lines of Defense	24
	2.2.2	Sharing: Three Lines of Defense Model	28
	2.2.3	Unifying: COSO Framework	35
	2.2.4	Performing: Risk Management	41
	2.2.5	Measuring: Governance and Management	46
	2.2.6	Interacting: Regulatory Supervision Body	50
	2.2.7	Collaborating: External Audit	55
	2.3	Consolidating the Current State of Internal Audit	57
3	State	e of the Art: Review of Internal Audit	63
	3.1	Explaining Methodologies: Data Research Strategy	63
	3.1.1	Examining: Question of Interest	65
	3.1.2	Analyzing: Method	68
	3.1.3	Handling: Data	70
	3.1.4	Supporting: Software	74
	3.2	Utilizing Content Analysis	<b>7</b> 5
	3.2.1	Analyzing: Literature	76
	3.2.2	Using: Code Relationships with Internal Audit	77
	3.2.3	Organizing: Data Set	78
	324	Exploring: Fields of Relevance	82

V.	I		JILL ROUND
	3.2.5	Deciding: Excursus 3-LoD Model	91
	3.2.6	Theorizing: Guided Thinking	95
	3.2.7	Displaying: Conceptual Map of Codes	98
	3.3	Consolidating the State of the Art of Internal Audit	102
4	Futu	re State of Internal Audit	107
	4.1	<b>Explaining Methodologies: Interview Research Strategy</b>	107
	4.1.1	Examining: Question of Interest	111
	4.1.2	Analyzing: Method	112
	4.1.3	Handling: Data	113
	4.2	Utilizing Content Analysis	114
	4.2.1	Analyzing: Interview	115
	4.2.2	Using: Interview Questions	116
	4.2.3	Organizing: Interview Data	120
	4.2.4	Exploring: Dimensions	121
	4.2.5	Deciding: Comparison of Interview and Literature Co	des147
	4.2.6	Theorizing: Interpretation	152
	4.2.7	Displaying: Conceptual Map of Codes	160
	4.3	Consolidating the Future State of Internal Audit	164
5	Cond	clusion and Outlook	171
	5.1	Conclusion	171
	5.2	Opportunity for Future Research	174
	5.3	Outlook	175
6	Bibl	iography	177

# LIST OF FIGURES

Figure 1: Course of the Research	9
Figure 2: Structure of the Research	12
Figure 3: Audit Plan (European Confederation of the Institute of Internal A 2009, p. 32)	
Figure 4: Risk Universe (Protiviti 2006; adapted from Eppler and Aeschimann	2008,
p. 10)	21
Figure 5: Individual Assessment (Chartered Institute of Internal Auditors 201	4) 22
Figure 6: Example for Single Lines Responsibilities (Luburic et al. 2015, p. 244	)24
Figure 7: Risk Management among the Single Lines (Luburic et al. 2015, p. 247)	7).25
Figure 8: Groups 3-LoD Model (Anderson and Eubanks 2015, p. 10)	31
Figure 9: 3-LoD Model (Anderson and Eubanks 2015, p. 2)	32
Figure 10: 3-LoD Model at Volkswagen (2017)	33
Figure 11: 3-LoD Model at UBS Group AG (2019b, p. 109)	34
Figure 12: 3-LoD Model at Zurich Insurance Group Ltd (2019)	35
Figure 13: COSO Cube (Thabit et al. 2019, p.5)	37
Figure 14: Enterprise Risk Management (COSO 2017, p. 6)	38
Figure 15: Associated Risks with Strategy (COSO 2017, p. 7)	39
Figure 16: COSO and Internal Audit (Anderson and Eubanks 2015, p. 8)	40
Figure 17: Schematic Overview of a Risk Assessment Matrix (Levinson 2017).	41
Figure 18: Management of Risk in the 3-LoD (Scheld et al. 2015, p. 21)	43
Figure 19: Control Management with COSO (Scheld et al. 2015, p. 22)	45
Figure 20: Step Model of Deductive Category Application (Mayring 2000, p. 1	4) 71
Figure 21: Description of Steps to Take (Mayring 2014, p. 80)	71
Figure 22: Coding Example for Internal Audit	78
Figure 23: Code Frequencies	81
Figure 24: Exogenous Code Relationships of Coded Terms	83
Figure 25: Simple Code Segments Configuration for Exogenous Actors	85
Figure 26: Endogenous Code Relationships of Coded Terms	87

VIII JILL ROUND

·
Figure 27: Simple Code Segments Configuration for Endogenous Actors
Figure 28: Code Relations with the 3-LoD Model
Figure 29: 3-LoD Model Code Relationships of the Lines
Figure 30: Endogenous Code Relationships in Combination with all Codes94
Figure 31: Conceptual Map Dimensions centering on the Term Internal Audit 99 $$
Figure 32: Complex Code Segment for Endogenous Interest Group100
Figure 33: Complex Code Segment for Exogenous Interest Groups101
Figure 34: Code Frequencies relating to Profession and Organization
Figure 35: Code Frequencies of Measurands relating to Profession
Figure 36: Code Frequencies of Contribution relating to Organization128
Figure 37: Code Frequencies of Cooperation relating to the Management Body 134
Figure 38: Code Frequencies of Cooperation relating to the Governance Context
Figure 39: Code Frequencies of Output relating to the 3-LoD
Figure 40: Code Frequencies of Output relating to the Perception of Internal Audit
Figure 41: Comparison of Codes (Literature vs. Interview)
Figure 42: Dimension "Profession and Organization" relating to the Causal Relationship of Internal Audit
-
Figure 43: Dimension "Cooperation" relating to the Causal Relationship of Internal Audit
Figure 44: Consolidated Dimension "Output" relating to the Causal Relationship
of Internal Audit

# LIST OF TABLES IX

# LIST OF TABLES

Table 1: Research Methods (Market Connections 2020)64
Table 2: Research Perspectives in Qualitative Research (Flick et al. 2004, p. 6) 6
Table 3: Excerpt of Interview Characteristics (Gubrium et al. 2012, p. 195) 109
Table 4: Excerpt Strategy Fit in Interview Design (Gubrium et al. 2012, p. 200) 110
Table 5: Interview Questions
Table 6: Level of Agreement of the Interview Experts on Measurands 124
Table 7: Level of Agreement of the Interview Experts on Contribution

# LIST OF ABREVIATIONS

3-LoD Three Lines of Defense

ICAAP Internal Capital Adequacy Assessment Process

IIA The Institute of Internal Auditors

IPPF The International Professional Practices Framework

LoD Line of Defense

MRQ Main Research Question

RQ Research Question

SREP Supervisory Review and Evaluation Process

### 1.1 MOTIVATION

Already in 1836, the position of an auditor has been impressively described in a comedy named "The Auditor" by the Russian writer Nikolai Gogol. Hereafter, the mayor of the city asks his subordinates for an announcement:

"Gentlemen, I have asked you here to present to you a most unpleasant announcement: An auditor is coming to us. [...]."

The entire administration was in turmoil. He added that it should be ensured that everything is in order. However, everyone was aware of irregularities. The story supposedly ends well. The announced auditor turns out to be an impostor. But often, no matter how funny the portrayal is, each story has its true essence. Important and timeless public issues are ever present in society extending from the implementation of law in conjunction to the attitudes of officials to their duties. Oddly enough, the essence of the comedy written by Nikolai Gogol is still relevant in mordern realities.

The mere fact that there is an audit function has a preventive effect and should at least minimize the occurrence of risks. Audits originate from the world of financial regulation and accountancy (Shore 2008, p. 280). Since then, it has spread in a range of areas in which the method of auditing never existed (Power 1997, p. 7). The economic and financial crisis in 2008, which led to the collapse of the Lehman Brothers Bank, demonstrated the relevance of effective risk management and good corporate governance (Grove and Patelli 2013, p. 6). Since 2008, several regulatory measures have been implemented to strengthen the overall financial sector (Miele and Sales 2011, p. 277). The financial crisis made the internal audit profession to considerably rise which is to be interpreted as a wake-up call for the profession (Jamieson 2018, p. 6). One of the effects of the corresponding reform processes was that internal audit moved away from traditional internal auditing to a complex, management-supporting network with an IT-supported continuous auditing system. In essence, this led to the development of the internal

audit function executing risk-oriented corporate monitoring, assessments, project management related support, and advisory.

The continuously emerging corporate scandals and the resulting failures increased the focus laid on the internal audit discipline within organizations and in particular within financial institutions (Klamut 2018, p. 50). The shift represents positive moves for the internal audit discipline itself. However, the negative context about this shifted focus is the question whether it needs a major crisis leading to a collapse of large financial institutions such as the Lehman Brothers to achieve a change in expectations.

Supervising regulators have gradually made clear that bad behavior and immoral practices are punished (Khan 2018, p. 5). Thus, financial institutions such as banks have to identify potential conflicts of interest, and proof to authorities, and regulators respectively their ability to manage their risks. At the same time, these institutions have to make decisions to satisfy the demands and keep abreast of regulatory change (The Banker 2015, p. 1). Likewise, financial institutions are usually forced to put aside capital in order to prevent another global financial crisis (European Banking Authority 2014, p. 9). In this context, the task of the European Banking Authority is to maintain financial stability and promote convergence of supervisory practices in the European Union (European Banking Authority 2021).

The increasing focus of regulators and policymakers placed on risk management, internal governance, and the financial institution's culture is of special interest as it requires a well-resourced risk controlling function, compliance function, and internal audit function (European Banking Authority 2017, p. 3). For the majority of these institutions, the presence of an internal audit function represents a recognizable benefit and is an integral element of corporate management. In particular financial institutions such as banks granting loans are increasingly paying attention to whether there is an internal audit function in place or not. The same applies to potential investors.

In recent years, efforts have been made to measure and improve the performance of the internal audit function in order to clarify which benefits it provides to the overall institutional value. Moreover, it is determined in the standards on how to practice internal audit that the discipline has to be designed to operate effectively and add value to the organization (The Institute of Internal Auditors 2019b). The central question is how this state is achieved in practice. In

this context, the externally oriented corporate governance reporting and also the risk management function play a key role as the produced information are used to evaluate the financial institution's performance. Besides the performance, these information regarding the set-up and corporate governance are believed to have an impact on the development of a financial institution's share prices. Building trust is also the buzzword that is probably the most frequently heard in connection with corporate governance. The task of the internal audit function is to reduce information asymmetries between the internal governance framework and the external regulatory requirements. In consequence, internal audit provides the management with relevant information on the effectiveness and the appropriateness of the institutional monitoring proceedings.

The researcher is an internal auditor dealing with an ever-expanding portfolio that contains operational risk, strategic decision-making, compliance, fraud prevention, and detection, environmental risks, and the list goes on and on. The motivation for the research is the uncertainty regarding the current knowledge about the effectiveness, and value of the internal audit function, and its interaction within the financial institution's governance structures and business lines in Europe. Moreover, the motivation is strengthened by the curiosity as to how the profession will evolve and where to position oneself to be professionally successful in the future career. Who knows what the next decade will bring for the profession of internal audit?

It is the intention to fill the existing gap in the literature available on this very important and internationally relevant topic. This topic has gained in importance very quickly and will continue to do so. Is internal audit the corporate police or is it developing into an internal advisor? Which trends does internal audit face? Can the effectiveness and value of internal audit be determined and measured respectively at all?

The effectiveness and added value that an internal audit function can deliver to a financial institution is not immediately apparent and cannot be measured easily in facts and figures. In addition, there is certainly also the fact that internal audit is independent and does not generate business. Moreover, it does not undertake advertising approaches for a positive self-image on its own behalf. One would like to convince by achievement or tries this at least. Whether this is successful, however, depends on many factors.

There is a lack of qualitative research in this area which confirms that it is about time and appropriate to investigate the topic. Thus, the research adopts qualitative methodologies to conclude on the effectiveness of the function and the value of internal audit practices for the financial institution. As a result, implications for the financial institution's interest groups such as the management body, internal governance, the single business lines, external auditors, and regulatory supervision bodies are developed, and evaluated in the context of the internal audit discipline.

### 1.2 PROBLEM OUTLINE AND OBJECTIVE

Effective and value generating internal audit activities have long been contested because they play a key part in the achievement of a financial institution's objectives. The current scientific knowledge regarding the internal audit discipline, its effectiveness within and its value for a financial institution is scarce and miscellaneous. The same is applicable to the crucial intensity of exchange and the corresponding relationship between the internal audit function and the management body; i.e. the managing directors, management board, or CEO. Moreover, the internal audit discipline is considered as a key element of modern internal governance (Eulerich et al. 2013, p. 57). Besides, the internal audit function is part of the internal governance structures and at the same time its task is to assess these (Joksimovic and Alseddig 2017, p. 111). Especially at financial institutions such as insurance companies and banks, many efforts have been made to design internal control systems in line with an effective and adequate corporate governance processes (Bank for International Settlements 2015, p. 1).

Additionally, internal audit represents an essential part of the so-called Three Lines of Defense (3-LoD) and takes on different roles within it (European Banking Authority 2017, p. 10 and European Banking Authority 2020, p. 4). Hereafter, the single functions belonging to the 3-LoD - which are operational management (first LoD), surveillance functions such as compliance and risk management (second LoD), and internal audit (third line) - are currently quite heterogeneous and have evolved steadily in over the past years in Europe. The 3-LoD model has an impact on the success of a financial institution in achieving its objectives (Anderson and

Eubanks 2015, p. 2). Today, the 3-LoD model is used throughout the world (The Internal Auditor 2015, p. 7).

The implementation of an internal governance framework expressed in the 3-LoD is a prerequisite to identify risks and if possible, to already mitigate them or at least make them controllable. Furthermore, this consistent risk management must be embedded in the comprehensive revenue and cost management, in each case taking into account the many and varied internal institutional processes, and structures. Thus, internal governance, and thereby the 3-LoD must ensure that the management is based on transparent information and is in compliance with relevant regulatory frameworks. These particularities include, for example, the complexity of the 3-LoD model's institutional internal governance, conflicting behavior within the individual lines of defense, and a weak positioning of the individual areas within it.

There are also actors which are placed outside of a financial institution that are interested in the performance of internal audit like e.g. external audit checking the consistency of the financial statement and the regulatory supervision body.

Predominately, external auditing firms like PwC, KPMG, Deloitte, or EY conduct studies that concern the role of internal audit as part of the financial institution's risk management. These studies are partly inconclusive about the collection and processing of data, and to what extent the findings are generalizable.

In previous researches, data driven research has led to new scientific knowledge. Although these approaches are undeniably beneficial, they are based on conducted questionnaires by e.g. the "Common Body of Knowledge" carried out for a different purpose and therefore do not exploit the full potential of the research field. The author, that made use of the aforementioned study requests further empirical research on the subject (Eulerich et al. 2013, p. 57). Hereafter, only little research has been conducted on the theoretical and practical relevance of internal audit within corporate governance which is a prerequisite to operate within the 3-LoD.

Research studies of Eulerich et al. (2013), Sarens and Abdolmohammadi (2011) show that a mature internal control environment can positively affect the relative size of the internal audit function. The authors outline that this is an implication for the relative importance of an internal audit function. Hereafter, a

supportive internal control framework positively influences the organization's and presumably the financial institution's governance structure.

Further researchers have devoted their work to the relationship between the functions of internal audit and external audit (e.g. Brody et al. 1998; Grant et al. 2009; Desai et al. 2010). The same applies to the evaluation of the relationship between internal audit and the audit committee (Krogstad et al. 1999, Eulerich 2013). A multiple case study research conducted by Lenz et al. (2017) on the relationship between senior management and chief audit executives with internal audit reveals that interaction is a key determinant of internal audit's effectiveness. The latter is perceived as a black box in academic research as internal audit is considered an emerging profession (Lenz et al. 2018). Hereafter, a macro and micro understanding of factors that influence the effectiveness of internal audit is needed to get the best out of the discipline (Lenz et al. 2018, p. 30). According to a literature review on the value of internal auditing carried out by Eulerich and Eulerich (2020), the topic is still insufficiently investigated and lacks practical analyses (Eulerich and Eulerich 2020, p. 89).

Supplementary research on the role of internal audit and corporate governance was conducted by for example the European Confederation of the Institute of Internal Auditors (2009, p. 43) and Decaux (2015). It has shown that the key role of internal audit is to provide assurance and assist the board, the management body, and/or its committee. Hereafter, internal audit delivers a systematic analysis of processes and controls, provides an independent evaluation of the internal control system, reviews the single business lines, and is a source of information of areas of concern. Both researches offer opportunities for further research in the corresponding area.

At the point of time of the present research, there is no qualitative research study available that focuses on the effectiveness and the value of the internal audit discipline for a financial institution in the context of the 3-LoD. It is possible to link the research to a few existing findings on these factors. Hence, data on these factors needs to be collected and accumulated. In this respect, both a theoretical and a practical research gap must be assumed with regard to the object of research. Accordingly, the literature search for empirical findings remained almost unsuccessful. The review of the national and international literature illustrates the

necessity for more empirical experience regarding internal audit's evolvement to be effective and generate value for a financial institution.

The legally required or regulatory driven implementation of the 3-LoD model presumably does not sufficiently implement institutional internal governance, e.g. risk management systems. As a result of this reluctant use of governance instruments, crises or even insolvencies regularly occur. An effective audit function improves the propriety, security, efficiency of processes and functions, and thereby preserves, and creates institutional value (Westhausen 2015, p. 5). From an independent point of view, internal audit can shed light on central questions such as: What are the risks and are they mitigated in an appropriate and effective way? What role does assurance play in internal auditing? What is the main issue? What's it worth and how big is it? By highlighting and illuminating risks that have an impact on management decision and the institutional set-up in terms of risk identification, monitoring, and communication, it is to be believed that internal audit creates a value for the financial institution. These observations lead to the conclusion that the internal audit discipline will likely change in the nearer future to be useful in the upcoming years, which represents the research objective.

The objective of the current research is to draw conclusions on the role of internal audit within the so-called 3-LoD model. The goal is to shed light on the interplay of the single functions while focusing on the internal audit discipline in the corresponding model. It is not so much the sheer number of risks of an institution that poses a challenge to the 3-LoD model, but rather the combination of risks with the specific characteristics of a financial institution in Europe. The research focuses on the European regulations and market situation and does not cover non-European legislation.

In order to address the relevance of internal audit practice, the research takes an integrative view and aims to enhance existing knowledge. Yet, a holistic and integrative approach is taken on how to practice internal audit to be effective and generate value for the financial institution while being part of the 3-LoD. Thus, it is of interest to conduct a qualitative in-depth research and close the existing gap regarding the value and effectiveness of internal audit providing relevant assurance to the financial institution and its stakeholders.

The thesis fills the gap by adding novelties and showing evidence from the unexplored (or underexplored), and consequently sheds light on inconclusive

results in previous research concerning the effectiveness and value of internal audit. In the context of the research, an in-depth analysis is undertaken on the current state, the state of the art, and the future state of the internal audit discipline. Overall, the objective is to determine how the internal audit discipline can evolve to reach the desired state of being effective and generating value for the financial institution. With regard to the relevance of the topic, it should be noted that financial institutions have to set-up their own audit department or can outsource this function under certain conditions.

#### 1.3 RESEARCH DESCRIPTION

Internal audit is studied as a subject in detail to discover new information. The research is undertaken to generate knowledge regarding the internal audit discipline concerning its value and effectiveness in an institutional context. The present research addresses the following main research question (MRQ): "How can the internal audit discipline evolve to be effective and generate value for the institution?"

The question aims to describe the field as thoroughly as possible in order to uncover previously unknown relationships and provide an initial orientation. In economic dynamic times, the essential statement is that practicing internal audit will require a different way than the current one in order to be effective and valuable as a discipline.

Central to answer the MRQ is what the current contribution of internal audit is, what determines its effectiveness, what measures are appropriate for the performance of audit activities, and its value proposition. The effectiveness and value of internal audit beyond its function and its relevance for the financial institution has not yet been evaluated in greater detail in the context of the 3-LoD.

This is where empirical qualitative exploration comes in. In order to answer the MRQ the impact of economic dynamic times on the internal audit discipline requires a form understanding and description. Subsequently, it is presumed that internal audit as an independent discipline within a financial institution can prevent it from not being compliant with regulation. Thus, the performance of internal audit is of relevance for the financial institution and of interest to external bodies like the regulatory supervision bodies and many more.

Conclusively, internal audit delivers value to the financial institution in order to achieve its objectives and at the same time it is not participating in the process to generate business.

The thesis addresses the MRQ by applying a structured approach. The internal audit discipline is analyzed in its current state in order to derive the state of the art from it and provide future implications. The MRQ is broken down in three subquestions. The related questions are formulated in the following:

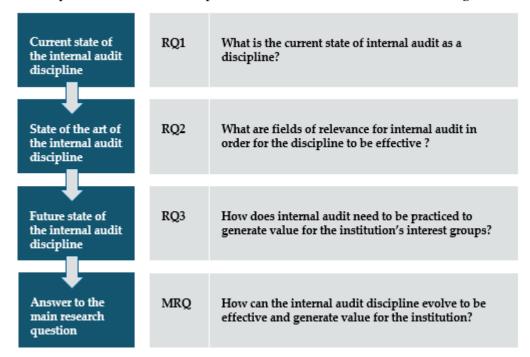


Figure 1: Course of the Research

Firstly, the research question aims to answer what the current and present respectively state of the internal audit discipline is. The answer provides the conceptual foundation for the subsequent analysis. Based on the answer, the second question is raised regarding the state of the art of the internal audit discipline. Consequently, the future state of the discipline will be derived from the previously gained knowledge and it will be addressed in the third question.

The first research question (RQ1) deals with the current state of the internal audit discipline which is embedded in the 3-LoD model, cooperating with the single business lines, the relationship with the management body, and the governance framework.. The evolutionary impact on the single lines making up the

3-LoD will be examined in this context. Different related concepts as the 3-LoD model and the "COSO" framework are defined and observed from internal audit's perspective. The relevance of risk management, governance arrangements, and the management body are presented and examined in detail while focusing on the internal audit discipline. There are also players which are placed outside the financial institution that for example determine, shape, and cooperate with the internal audit discipline. These external participants are the regulatory supervision body and external audit which represent a part of the research investigation.

The second research question (RQ2) dealing with the state of the art of internal audit identifies fields of relevance for this discipline and interrelated concepts and terms. The research looks at trends and emerging issues in the professions of the 3-LoD while focusing on the internal audit discipline within the European financial industry sector. Interest groups that have an impact on how internal audit is perceived are identified and analyzed. Conclusively, an appropriate implemented internal audit function contributes to the financial institution by supporting key business initiatives, identifying deficits and efficiencies along the business activities, and thereby becoming a so-called trusted advisor. Subsequently, the effectiveness of the internal audit discipline in the 3-LoD model is reviewed to thereby bridge the gap to the subsequent research question.

The third research question (RQ3) examines the value of internal audit practices that are related to different obtained interest groups. Herein, measures are identified that allow a conclusion to be drawn on the generation of value of internal audit activities for the financial institution. Moreover, the required set-up and the ability to shape the perception of internal audit are evaluated in the context of the 3-LoD model. The 3-LoD model is used to streamline the relevance of effective internal audit activities in the first and second line. Moreover, inferences of supportive internal audit practices towards the lines of defense, management body, governance and regulatory supervision findings are drawn. On the basis of the findings, hypotheses are generated.

The combination of the results obtained in RQ1, RQ2, and RQ3 will support the derivation of an answer to the main research question (MRQ). The objective of the research is to evaluate the need for a strong internal audit function covering all aspects of a financial institution and thereby outlining its own effectiveness to create institutional value.

The research is largely interpretivist, which indicates that the majority of the methods will be of qualitative nature. This is where empirical qualitative exploration comes in. The subject matter of the qualitative research paradigm is the motivation for novel questions, and ideas, and breaking down complex phenomena by translating this into a research strategy.

The aim is to describe the field as thoroughly as possible in order to uncover previously unknown interrelationships and provide an initial orientation (Mayring 2015, p. 36). The research design is centered on a qualitative content analysis following the approach of Philipp Mayring and applying the "Grounded Theory" by Anselm Strauss and Juliet Corbin to systematically collect and evaluate data.

In the context of the 3-LoD model, the internal audit discipline is evaluated by applying an exploratory research approach that revolves around finding new knowledge, conducting expert interviews, and generating hypotheses.

In the course of the research, the existing theoretical knowledge (current state) is connected to the assessment of the effectiveness (state of the art) and perceived value (future state) of the internal audit function in the 3-LoD model. The real value of the research is derived from the analysis of the gathered data and the interviewees' perspectives.

#### 1.4 STRUCTURE OF THE RESEARCH

The structure of research to conduct the investigation, summarize the findings and results in order to address the research questions are provided in the present chapter. In the following the structure of the research is described. The figure below provides the corresponding overview:

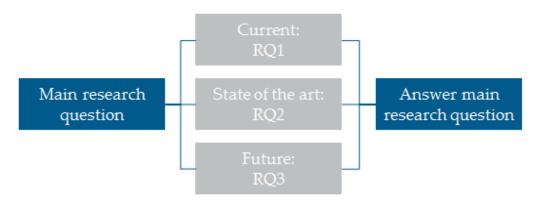


Figure 2: Structure of the Research

The first chapter centers on the motivation, the research description and its structure. Following this introduction, chapter two analyzes the overall current state of the internal audit discipline by addressing the RQ1. The conceptual foundation in form of cooperating business lines, interacting in risk management, the relevance for internal governance and the role of the management body, regulatory supervision bodies imposing requirements, and the role of external audit with regard to the internal audit discipline are presented. Moreover, the definition of the 3-LoD and current trends in the field are analyzed while focusing on the internal audit discipline. The results are summarized in an own chapter.

The state of the art regarding the internal audit's discipline is analyzed within the third chapter. It is of particular importance for the investigation to understand what the present influencing factors on the internal audit discipline are and consequently affect the future state of the discipline. The conduction of a qualitative content analysis creates knowledge and understanding of the state of the art of the internal audit discipline. The subchapters of the third chapter are named accordingly to the steps that need to be undertaken to conduct a qualitative content analysis according to Philipp Mayring. The corresponding analysis contributes to evolve an answer for the RQ2. To wrap up the findings of analysis, the results are consolidated in a separate subchapter.

The fourth chapter addresses the future state of the internal audit discipline in order to address the RQ3. The formulation of scientifically relevant questions to be addressed to experts in form of interviews serve to answer the RQ3. Expert interviews are carried out to understand the measurement and generation of value

by the internal audit discipline in the 3-LoD model. The results are analysed in a comparative qualitative content analysis (see RQ2 and RQ3). Statements in form of hypotheses are generated as a result of the expert interviews. The results are presented in a consolidated form at the end of chapter four.

Chapter five provides a conclusion and outlook including suggestions for future research. The essential function of the research is the development of theories, context, and hypotheses in order to answer the MRQ. The chapter consolidates the results of the undertaken research to fill the theoretical and practical research gap. It seeks to outline how internal audit needs to evolve to be effective and generate value for the financial institution.

# 2 CURRENT STATE OF INTERNAL AUDIT: CONCEPTUAL FOUNDATION

The chapter presents an overall overview on the conceptual foundation of the internal audit discipline. It lays the basis for the subsequent steps of this research. It is crucial to define the subject of research to retrieve an understanding on the factors that influence and at the same time shape the internal audit discipline.

In the present chapter a definition of the single lines of defense that cooperate with internal audit as the third line within the 3-LoD model are presented. Above all, the 3-LoD model is analyzed in the context of the so-called "COSO" framework which stands for the identification, respondents, and assessment of risks. On this basis, the importance of risk management in a financial institution is further evaluated. The internal and external bodies of relevance for the 3-LoD model are analyzed in this context. Internal bodies and themes with which internal audit deals are highlighted in form of the management body and internal governance. The regulatory supervision body and the external audit function are referred to as external bodies. Furthermore, the regulatory supervision bodies and the need for supervisory practices are outlined. Additionally, the collaborative relationship between internal audit and external audit is emphasized.

The results on the current state of the internal audit discipline are consolidated at the end of the chapter. A conclusion is given by putting the results into the context of this thesis by answering the research question RQ1 "What is the current state of internal audit as a discipline?"

#### 2.1 DEFINING INTERNAL AUDIT

It is of importance to understand what the discipline of internal audit is about. Therefore, the activities and responsibilities of the discipline are defined to build a bridge to its professional relationship.

The internal audit discipline is not a modern invention. According to the historian, Richard Brown (1905), internal audit is described as follows:

"The origin of auditing goes back to times scarcely less remote than that of accounting. Whenever the advance of civilization brought about the necessity of one man being entrusted to some extent with the property of another, the advisability of some kind of check upon the fidelity of the former would become apparent." (Eulerich 2015, p. 37; originally cited by Mautz and Sharaf 1961)

Henri Fayol (1841 - 1925) described the significance of control functions as one of five functions of the organizational management issues (Pryor and Taneja 2010, p. 490). His contribution to management theory includes elements of management, general principles of management and a definition of management classifying activities. He is known for the five elements of management which consist of planning, organizing, coordinating, commanding and controlling. Fayol's "control by management" is to be understood as a synonym for the so-called internal control, whose appropriateness and effectiveness of processes is independently evaluated. Under the umbrella of the principal-agent theory, the control by management is delegated from the management body acting as the principal to an agent that empowers him to act on behalf of him (Namazi 2013, p. 41). Both are mutually constitutive.

The delegation of control from the management to the single business lines to execute their business and the corresponding reviews by internal audit share similarities with the principal-agent theory. When adapting the principal-agent theory on the internal audit discipline, the function supports the principal by reducing information asymmetries on the behalf of the agents (Anderson et al. 1993; DeFond 1992; Ettredge et al. 2000; Sarens and Abdolmohammadi 2011; quoted by Eulerich 2013, p. 57). The strength of this role lies in its nature of internal audit as it is independent and objective (The Institute of Internal Auditors 2019b). It is in the position to assess all the facts and information in the best possible way.

In diverse cultural and legal environments, internal auditing is conducted for organizations varying in size, structure, complexity, and persons (The Institute of Internal Auditors 2016a, p. 1). Internal audits can be conducted in all fields of interest such as financial accounts, inspections for compliance enclosing regulations for safety, health, environment and many more. According to Cason et al. (2016, p. 2), an increase in the visibility of actions correlates with improving compliance since individuals are motivated by their public image.

The internal audit function differs according to the industry, the regulatory interaction, applicable laws, organization's risks, and its culture. The following citation underlines that the current status of internal audit is constantly evolving and changing through adaptation to the financial institution's needs, business, new products, and its objectives.

"The demand for internal auditors with financial services knowledge and experience is growing rapidly, propelled by regulatory pressures to appropriately staff internal audit programs with the right volume and caliber of resources. This has led many internal audit activities within the highly regulated financial services industry to increase their staff in accordance with the new global operating environment and in terms of quality and quantity." (The Institute of Internal Auditors 2019a, p. 2)

However, the establishment of an internal audit function is not only important for larger or medium-sized companies but also relevant for smaller companies to ensure the effectiveness of risk management and governance (The Institute of Internal Auditors 2013a, p. 5).

The decision on how internal audit should be organized depends on the nature of the organization itself (European Confederation of the Institute of Internal Audit 2009, p. 24). The degrees of the organization's heterogeneity, business or product diversification, group structure as well as the degree of internationalization need to be taken into consideration to determine the intensity of internal audit activities. According to Anton van Wyk, who is the Global Institute of Internal Auditors Chair, the management body is forced to reconsider the role and the assigned importance to internal audit (quoted by PwC 2015, p. 4). This is in line with an increased risk sensitivity.

In the financial sector, an institution under supervision of the regulatory supervision body should have a transparent, clear and documented decision-making process that includes responsibilities and authority (European Banking Authority 2017, p. 32). Moreover, the management is responsible for the adequate and effective establishment and monitoring of the internal control framework (European Banking Authority 2017, p. 32). The task of the management body is to oversee the business lines which includes the control functions e.g. the risk management, compliance, and the internal audit functions.

The need to set-up an internal audit function is often determined by regulatory supervision requirements which are announced by the responsible authorities at national and international level. There are many regulators on the European level that shape and impact internal audit practices such as the "European Banking Authority" (EBA), "European Central Bank" (ECB), "European Securities and Markets Authority" (ESMA), "European Insurance and Occupational Pensions Authority" (EIOPA), "Federation of European Risk Management Associations" (FERMA), "European Organization of Supreme Audit Institutions" (EUROSAI) and "European Confederation of Directors Associations" (ecoDA) as well as "The International Professional Practices Framework" (IPPF). The central task of the "European Confederation of Institutes of Internal Auditing" is to represent the interests of the internal audit profession towards the organizations in the European Union.

The IPPF is a standard framework on how to practice internal audit (The Institute of Internal Auditors 2019b). The standard partly contains mandatory elements. These deal with the definition of internal audit practice (independent, objective, advisory has to be designed to improve, and add value to the organization), the core principles (operate effectively), the code of ethics (integrity, confidentiality, competency, and objectivity) and the international standards (attribute and performance standards). The corresponding framework represents a demanding authoritative guidance which is promulgated by the so-called "The Institute of Internal Auditors" for the entire internal audit professionals' worldwide (The Institute of Internal Auditors 2019a, p. 2). It contains standards that deal e.g. with the purpose, responsibility, authority, and the nature of the work of internal audit. These guide the internal audit practice by stating that the activities must evaluate and contribute to risk management, improve the organization governance, and its control processes (The Institute of Internal Auditors 2019a, p. 28). In the context of the present thesis, there are two standards (2000 and 2100), that the researcher considers the most relevant to evaluate the state of the art of internal audit (chapter 3) and to thereof derive the future state of internal audit discipline(chapter 4).

The researcher associates standard 2000 with the examination of the state of the art of the discipline. Hereafter, the chief audit executive or Chief Internal Auditor respectively is required to effectively manage the activities of internal audit to ensure an added value is generated for the organization (The Institute of Internal Auditors 2017a, p. 73). The supportive interpretation of the standard further states, that internal audit is managed effectively, when it enhances governance, processes, risk management, and considers the organization's objectives and risks.

The evaluation of the future state of the internal audit discipline is related to the Standard 2100 by the researcher. The corresponding standard states that the activities of internal audit have to improve the control processes, risk management and governance by making use of risk-based approach (p. 102). Moreover, the standard outlines that the value and creditability are enhanced when auditors consider future impact and offer new insights.

The organization and management of internal audit can be adapted to the single corporate business and may vary from sector to sector. According to The Institute of Internal Auditors, internal audit is

"[...] independent, [provides] objective assurance and consulting activity designed to add value and improve an organization's operations. It helps the organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control and governance processes." (The Institute of Internal Auditors 2020a)

Hereafter, internal audit should cover the entire business organization and thereby identify weaknesses, risks, and potential for improvement so that an added value for the overall organization is created. A risk-oriented internal audit process demands the definition of the object including the survey of all activities and processes of the organization (European Confederation of the Institute of Internal Audit 2009, p. 32). On a yearly basis, the risk relevance of the objects has to be assessed by internal audit. Therefore, internal audit has to set-up a risk-orientated audit plan including a multi-annual plan to cover the organization's activities landscape also called the audit universe (The Institute of Internal Auditors 2021). The corresponding audit plan requires an approval by the management body, which is composed of on-schedule audits and if necessary, of special or project-accompanying examinations respectively inspections.

Practical representative examples for internal audit activities are the assessment of the appropriateness and effectiveness of the implemented risk

management, the internal governance regulations, the internal controls, and the achievements relating to assessment results of the business lines (Chartered Institute of Internal Auditors 2021). Moreover, the management body is provided with assurance based on internal audit's objectivity (The Institute of Internal Auditors 2013a, p. 5). The following workflow diagram displays an example for a risk-orientated audit plan:

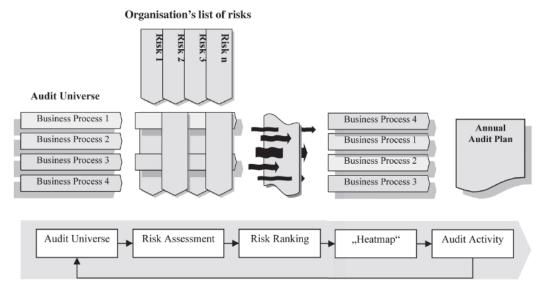


Figure 3: Audit Plan (European Confederation of the Institute of Internal Audit 2009, p. 32)

The audit plan represents the master plan for the year. Depending on the business, there are different risks which arise from processes, the environment or from information for decision-making. The corresponding risk map is outlined in the figure below and emphasizes how manifold risks can be:

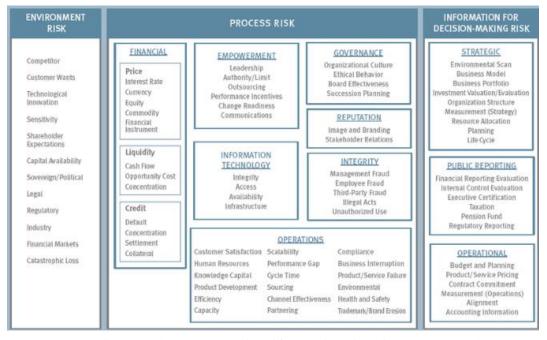


Figure 4: Risk Universe (Protiviti 2006; adapted from Eppler and Aeschimann 2008, p. 10)

Based on a risk-orientated audit plan, the results of the single assessments include an assurance on the found results. Findings are addressed to the audited department, the management body, and the audit committee (European Banking Authority 2018, p.16). The latter is responsible to review and oversee the independence of internal audit and enhances the transparency of operations. An audit committee is considered essential for monitoring the internal audit function and to improve supervision efficiency. In the following, an overview of a representative internal audit practice is illustrated.

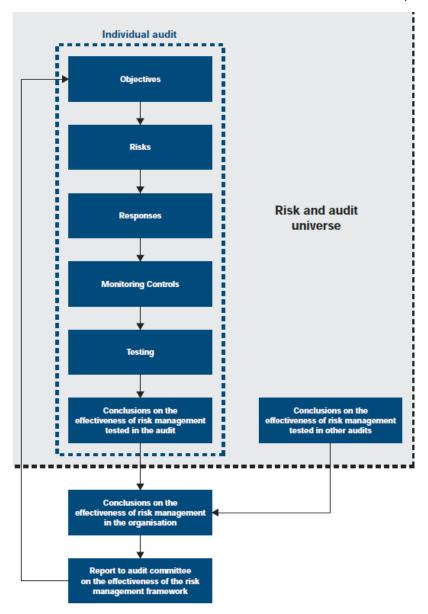


Figure 5: Individual Assessment (Chartered Institute of Internal Auditors 2014)

The example illustrates an internal audit assessment embedded in the audit universe. Generally, the single internal audit assessments are composed of successive phases which are composed of a planning, fieldwork, conclusion and follow-up processes. In the beginning, the task of internal audit is to determine the objective of the examination and identify the corresponding risks in the field to be audited. After assessing the risks, an exchange regarding the topic or department

under inspection takes place and the undertaken monitoring respectively controls are reviewed to evaluate their appropriateness and effectiveness. Dependent on the type of activities, a testing of the implemented controls may be conducted to examine whether everything was done accordingly to the internal requirements. As a result, internal audit draws a conclusion on the appropriateness and effectiveness of the risk management in place. Subsequently, an action plan is developed and implemented (Chartered Institute of Internal Auditors 2020, p. 2). In the aftermath, the task of internal audit is to carry out follow-up activities on the defected results and if applicable the reports include statements of the audited department itself.

Internal audit interacts with various interest groups and is an integral part of an organization. Thus, internal audit represents the window into the entire organization (European Confederation of the Institute of Internal Auditors 2009, p. 43). Therefore, it is of importance to understand the professional relationships internal audit shares with internal actors (single lines of defense, 3-LoD, "COSO" framework, risk management, governance, and the management body) and external actors (regulatory supervision body and external audit) which are analyzed in greater detail in the subsequent chapter.

# 2.2 UNDERSTANDING THE PROFESSIONAL RELATIONSHIP OF THE INTERNAL AUDIT DISCIPLINE

In the past years, the regulatory density has increased in the financial industry (Federal Ministry of Finance 2019). Since the financial crisis, the political and social debates concentrated on measures to stabilize and regulate financial markets. This has created new functions and reporting requirement through which internal audit gained importance (Otetea et al. 2013, 689).

Internal audit enters various relationships when practicing activities. The corresponding relationships are maintained inside and outside of a financial institution. The researcher subsumes these as internal and external actors which are e.g. the single lines of defense, management body, regulatory supervision body, and external audit. This requires strategic considerations in the acting environment of internal audit. An alignment of all business lines contributes to the generation and protection of an organization's value (The Institute of Internal Auditors 2020b,

p. 3). Key factors for a successful alignment of the business activities are communication and cooperation. By this, transparency and reliability of information is achieved to make risk-based decision.

Due to regulation requirements, amongst others, financial institutions need to ensure that risks are controlled according to their internal policies. Hence, a sufficient flexibility is required of the internal audit discipline to allow risks to evolve in accordance with the development of the business. Thus, it is of importance to understand the professional relationships internal audit maintains and to carve these out in the subsequent chapters.

#### 2.2.1 Classifying: Single Lines of Defense

Changes in the market and increasing competition has forced organizations to adequately organize the diverse and complex risks (Luburic et al. 2015, p. 243). The business lines that organize risks and make up the 3-LoD are classified in the present subchapter. Each line has an integral part with corresponding responsibilities to effectively manage risks. In the following, a scheme of the single involved lines in the 3-LoD model is presented.

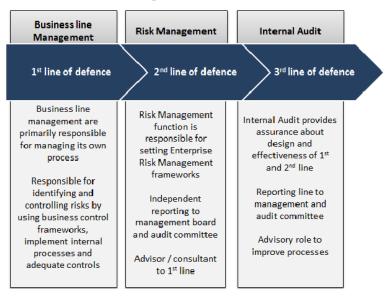


Figure 6: Example for Single Lines Responsibilities (Luburic et al. 2015, p. 244)

The single business lines outlined in the figure representatively illustrate the set-up of a 3-LoD model. The first line is complemented by the second line of

defense and followed by the independent third line. Basically, the 3-LoD model organizes the actors and components of the internal control and the overall control system. The responsibilities of each participant within the group are outlined in the following (Anderson and Eubanks 2015, p. 2):

- 1st Line: Own and manage risk and control. The first line creates and manages the risk.
- 2<sup>nd</sup> Line: Monitor risks and control. The second line supports the management by monitoring alongside with the first line to ensure that risks are effectively managed.
- 3<sup>rd</sup> Line: Provide independent assurance. The third line assures the consistency of the first and second line to the management body.

The standardization of risks, terminology and categories for the set-up of the 3-LoD model is an essential step which needs to be individually taken by the single institution in the financial sector. The main effort is the coordination of the standards and categories between the actors and their different backgrounds of experience. It is immanent that there are interfaces between the single lines as no line can perform its activities isolated without exchanging information on risk issues. The relation of the 3-LoD with risk management is illustrated below:

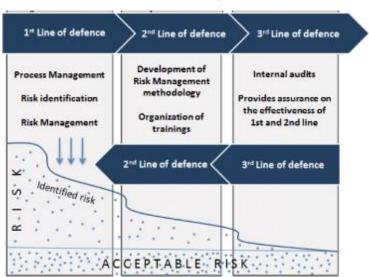


Figure 7: Risk Management among the Single Lines (Luburic et al. 2015, p. 247)

Interaction with each other, the exchange of information on risk issues and communication are connecting elements which make up the effectiveness of the 3-

LoD model. In the course of the further analysis, the single lines are presented to gain an understanding what relevance and impact their activities have for the third line of defense. Henceforth, the first line of defense is operational risk and the business operations. Hereafter, the task of operational management is to maintain effective controls in order to execute risk in their daily business (The Institute of Internal Auditors 2013a, p. 3). The corresponding business lines identify, assess, control and mitigate risks. Thereby, they guide the implementation and development of internal procedures. As a result, operational management ensures that its activities are consistent with the financial institution's objectives.

Under the guidance of operational management, controls are designed in the processes and into the systems. Thus, the first business line which is operational management owns the risk whereby it incurs the risk through conducting its activities and manages them at the same time (European Central Bank 2015). The second line is the risk management function. It is responsible to further identify, measure, monitor, and report risks for the financial institution's entirety. The compliance function is also considered as a second line of defense. The first and second lines operate independently from each other. The third line is internal audit and conducts risk-based assessments. As a result, the management body is provided with assurance regarding the overall governance framework which includes the effectiveness of the internal control framework.

Commonly, the second line is composed of a risk management function, a compliance function as well as a controllership function (The Institute of Internal Auditors 2013a, p. 4). The task of the risk management function is to monitor the implementation of risk management practices and to define target exposure and risk-related reporting within the financial institution. This is expressed in greater detail by the following citation.

"For example, controls for preventing antitrust law violation may be implemented within the First and Second Line of Defence. Moreover, integrating antitrust risk management into existing risk management structures establishes synergies by preventing redundancies. Using economic expertise to assess risks of antitrust law violations thoroughly also helps to concentrate mitigating measures in segments where misconduct is most likely to occur. This establishes an efficient allocation of resources." (Scheld et al. 2015, p. 29)

The compliance function monitors the various risks related applicable laws as well as regulations and the controlling responsibilities of the first line of defense. Financial risks and reporting issues are monitored by the controllership function. Compliance risks require that internal audit is informed regarding regulatory activities. Thus, this allows internal audit to demonstrate the kind of value it brings to the stakeholders (The Institute of Internal Auditors 2013b, 8). Internal audit's consciousness of regulatory activities enables it to demonstrate foresight in terms of potential compliance risks

The prerequisite for a functioning cooperation is a clear and unambiguous definition of the terms and responsibilities of the second and third line of defense (The Institute of Internal Auditors 2016b, p. 8). This is necessary to avoid duplication of work, to comply with professional standards and to use scarce resources effectively within the financial institution.

In practice, financial institutions often make use of vertical synchronization of the compliance and risk function through a Chief Risk Officer or by implementing a risk management board. Commonly, the activities of the various risk functions consolidate their risk awareness in a mutual report for the management body.

There are trends indicating that supervisory regulators are performing more examination on financial institutions' surveillance lines that are allocated in the so-called second line of defense in the financial industry (Institute of Internal Auditors 2019, p. 4). Compliance and risk management functions represent the corresponding surveillance lines as these functions are working directly with the business units.

The third line is internal audit which is objective and considered as an independent line (The Institute of Internal Auditors 2019b). The independence of internal audit makes it very unique as it needs to comply and apply very specific regulations. In the literature - as a differentiation from the external audit - the term internal audit is usually used as the examining body, although independent of the object of examination (process-independence). The auditing work is usually carried out by internal employees within the own financial institution. In addition to the main operating business lines, internal audit is part of the internal monitoring system, and must also incorporate the processes of the other monitoring functions (in addition to risk management, e.g. compliance, controlling or quality

management) audit (The Institute of Internal Auditors 2019b). Moreover, internal audit has to integrate the controls in place into its auditing activities (audit universe) (European Confederation of the Institute of Internal Audit 2009, p. 32).

On a yearly basis, the risk situation is assessed by internal audit following the institutional risk inventory. As a result, the identified and impact weighted risks are allocated in the audit universe by labeling them with a time tag according to the risk cycle. It is of great importance for internal audit to focus on what internal audit needs and have an according strategic plan complementing the internal audit's universe plan (PwC 2015, p. 19).

On the basis of the introduced single lines of defense, the 3-LoD model and its relevance is further examined in the subsequent chapter.

## 2.2.2 Sharing: Three Lines of Defense Model

Thirty years ago, organizations had a silo approach to risks (Lundqvist 2014, p. 1). In practice this means that control functions identified and mitigated risks within their own business and according to their risk appetite but not across areas or functions.

According to the motto "sharing is caring", the contribution of the 3-LoD model to ensure risk transparency within the financial sector is examined in the following chapter. The 3-LoD model is to be understood as blueprint or as a template of how to think about control functions rather than being an end-all solution. The model is a vehicle to share information among the single lines and allocates responsibilities (Anderson and Eubanks 2015, p. 2).

Before the financial crisis, unnamed versions of the 3-LoD were in place and utilized to manage risks. Early forms varied regarding the degree of responsibilities and roles as well as the separation of the single involved lines. The model's name in order to organize the different business lines is quite new even though it has been established for a long time. Before the 3-LoD firstly appeared in the financial industry, the model was already in use by the military, in sports and other areas (Dentons 2020, p. 2). The model provides a focal point to define and structure roles which is considered of particular importance in financial institutions. By this, the financial institution is enabled to better manage and perform its activities. Responsibilities are clearly assigned to activities and roles. Thus, the regulatory

supervision body is thereby in the position to identify risks for the financial institution in question.

Relevant reference tools that deal with the design of risk management and indirectly represent the unnamed-beginning of the 3-LoD model are "The Core Principles for Effective Banking Supervision" and the "Core Principles Methodology" of Basel II by the Basel Committee in 2006 (Bank for International Settlements 2011, p. 1).

The origin of the 3-LoD model is cloudy and somewhat unclear. The archival literature sources agree that the 3-LoD model was first established after the financial crisis. However, there is no consensus on the immediately preceding time. The dotcom bubble is believed to be a source of the 3-LoD emergence in the late 1990s (Dupree 2020). The Dodd-Frank Wall Street Reform and Consumer Protection Act was enacted in 2010 and led to the creation of the 3-LoD (Bank for International Settlements 2015, p. 11). Herein, the model was introduced as a requirement for regulated institutions in the financial sector.

In 2010, the Federation of the European Risk Management Associations and the European Confederation of Institutes of Internal Accounting published a "Guidance on the 8th EU Company Law Directive" for boards and audit committees to enhance the understanding of internal audit, internal control, and risk management (Federation of the European Risk Management Associations and the European Confederation of Institutes of Internal Accounting 2010). The corresponding guidance introduced the lines of defense and the 3-LoD model.

Firstly, the 3-LoD model was mentioned as a framework by the "Basel Committee on Banking Supervision" and presented in their "Principles of Sound Management of Operational Risk" in 2011 (p. 3). According to the corresponding principles, the 3-LoD model was introduced for sound operational management, risk management, compliance, and to have an independent review of their activities (Bank for International Settlements 2011, p. 3).

In 2012, the "Financial Stability Board" reported to the G20 that the implementation of the 3-LoD model has to consider the scope of operational risk (p. 18). Moreover, it was noted that responsibilities need to be assigned to the second line and that the third line has to be empowered to take the oversight approach (p. 11). In 2013, a 3-LoD model was developed by The Institute of Internal

Auditors to "make banking resolution credible" (Bank for International Settlement 2015, p. 4).

Thus, the 3-LoD model is a more recent comprehensive framework for organizing effective governance to identify and manage corporate risks. The model assigns responsibilities regarding control as well as risk, and how these can be coordinated across a financial institution. Above all financial institutions continuously face a volatile technical and regulatory environment, new risks emerge and extend the complexity to identify risks (Dentons 2020, p. 4). In less regulated industries there is more cloudiness about what tasks are allocated where. Nowadays, the approach is fairly standardized although certain aspects remain open to debate and leave room for interpretation left to the single financial institution. The 3-LoD approach is already established in a range of organizational environments. Conclusively, the 3-LoD model is an approach where the entire business organization and its aspects are included.

The objective of organizations is to achieve continuous enhancement regarding the business performance (The Institute of Internal Auditors 2013a, p. 3). This includes a proactive approach to the single business lines such as risk management, fraud protection and the feasibility to identify critical issues for the business management. However, there is no perfect world in which a well-established 3-LoD model mitigates the entire risks.

"In a perfect world, perhaps only one line of defense would be needed to assure effective risk management. In the real world, however, a single line of defense often can prove inadequate." (The Institute of Internal Auditors 2013a p. 4)

The 3-LoD model contributes to an effective way to clarify roles and duties, and thereby enhancing communication among the single lines (Dentons 2020, p. 3). However, the single functions share similarities as their stakeholders, the faced risks and control issues are partially identical. The differences enable them to manage risks effectively and work efficiently. Thus, the approach of the model can vary based on the various business characteristics.

At the point of this research, there is no state of the art review on the 3-LoD model available. The 3-LoD is to be understood as an approach to identify and implement changes where necessary, and to analyze their significance for the financial institution. According to the "Global Internal Audit Common Body of

Knowledge" report from "The IIA Research Foundation", 55% of the respondents from publicly traded organizations, 43% from public sector, 41% from non-profit-organizations and 40% of privately held companies around the world state that they use the 3-LoD model (Internal Auditor 2015, p. 7). Due to the intense regulatory requirements in the financial industry, 78% of the financial institutions respondents use the model. The key of all the involved functions is to ensure that they are operating in concert to avoid gaps and achieve business objectives. Unfortunately, there is no more recent data available on the presented numbers. The cursory review of the available literature allows the conclusion that more organizations are making use of the 3-LoD as it was the case in 2015.

Organizations – whether they are financial institutions or not - vary in their risk situations and are unique. Hence, there is no right or wrong way to coordinate the 3-LoD. The alignment of risk management structures and processes, and the framework across the 3-LoD can be very advantageous (PwC 2015, p. 14). A representative set-up of the single lines is outlined below:

Manageme	Assurance		
1st Line of Defense	2nd Line of Defense	3rd Line of Defense	
Operating Management	Limited Independence Reports Primarily to Management	Internal Audit Greater Independence Reports to Governing Body	

Figure 8: Groups 3-LoD Model (Anderson and Eubanks 2015, p. 10)

The assignment of responsibilities according to the financial institution's risk and the need of control are interdependent of the groups in the model. A functioning internal control system, risk management structure, and internal audit function prevent risks that could jeopardize the achievement of the business objectives (The Institute of Internal Auditors 2013a, p. 3 and Anderson and Eubanks 2015, p. 3). This makes a significant contribution to the future success of the financial institution. All parties strive to achieve their objectives through the effective management of risks and serve the identical stakeholder, which is the management body (European Banking Authority 2017, p. 32).

The integration of the 3-LoD in order to exploit common synergies and reduce liability risks positively contributes to a sustainable corporate development and creates a scope for devision-making bodies within an organisation. In the

following, the set-up of the 3-LoD model is described more closely including further actors that also shape the model:

	Governing Body / Board / Audit Committee							
Senior Management								
o * o * o * o * o * o * o * o * o * o *		0 0 0 0 0 0	****		ı			
1st Line o	f Defense	2nd Line of Defense	3rd Line of Defense		Exa	20		
Management Internal Control Controls Measures		Financial Control			External Audit	Regulator		
		Security			Aud	ator		
	Risk Management		Internal					
	Quality Audit							
		Inspection						
		Compliance						

Figure 9: 3-LoD Model (Anderson and Eubanks 2015, p. 2)

The above figure highlights internal and external actors which are placed inside and outside the 3-LoD model. The efficiency of risk management and the corresponding information is more consistently presented to the stakeholder when the lines are aligned.

A coordination between the single lines leads to knowledge sharing and produces information to effectively manage risks in a financial institution and any other organization (Luburic et al. 2015, p. 246). The 3-LoD faces a delicate balance between the roles, expectations and the responsibilities in each line.

Internal actors are the management body and the governing body. The management body, which is illustrated above as the senior management has an integral measure in the model as it is responsible for the selection, development and the evaluation of the internal control system (European Banking Authority 2017, p. 32). The management body represents the tone at the top and creates an ethical atmosphere (Gunz and Thorne 2014, p. 1). The commitment and the tone at the top of the management body is crucial for the success of the model. However, the 3-LoD model does not include the governing bodies or the management body. These groups are considered as stakeholders served by the three lines. In their context, the internal lines provide their stakeholders with a certain confidence that the organization or financial institution is operating appropriately.

External actors are located outside the organization (see figure 9). A further safeguard represents the external line of defense represented by external audit and the regulator (Bank for International Settlements 2015, p. 1). In practice, these external bodies are often interpreted as the fourth line of defense (p. 13). The external audit is carried out by third parties. Nonetheless, internal and external lines overlap to ensure that an oversight is in place at all levels to make a valuable contribution to the entire framework. This enables a vertical and horizontal oversight of the financial institution's activities.

In practice, organizations and financial institutions partially make their understanding and use of the 3-LoD model transparent to the public. Among others, representative examples for established 3-LoD models are available in the annual reports and on the websites of Volkswagen, Zurich Insurance and UBS.

Volkswagen reports on its risk management and internal control system on its website (Volkswagen 2017). It is further stated that Volkswagen has a 3-LoD model which is based on the "COSO" framework to protect the company from significant risk occurrence. The understanding is briefly pictured as follows:



Figure 10: 3-LoD Model at Volkswagen (2017)

Following the excerpt from the annual report 2019, UBS also describes its risk appetite principles and risk governance framework on the website (UBS Group AG 2019a). According to the company's own information, the established risk governance framework operates along the 3-LoD (UBS Group AG 2019b, p. 109). Hereafter, the following 3-LoD approach is applied:

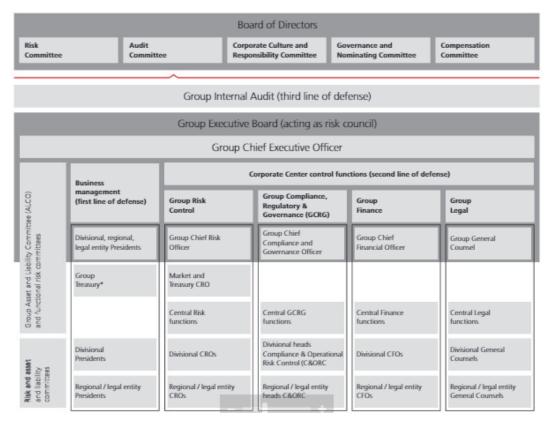


Figure 11: 3-LoD Model at UBS Group AG (2019b, p. 109)

Another example for a 3-LoD model in use is provided by the Zurich Insurance Group. According to the website, Zurich makes use of the model in its approach to enterprise risk management and governance (Zurich Insurance Group Ltd 2019). Their objective is to identify, assess, own, manage, and monitor the established governance structure. Zurich's established 3-LoD model is illustrated in the following:

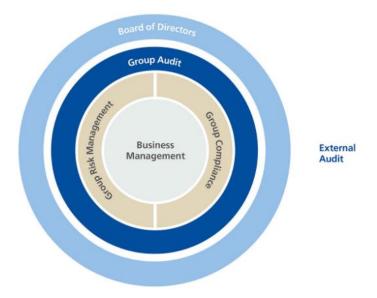


Figure 12: 3-LoD Model at Zurich Insurance Group Ltd (2019)

From three presented 3-LoD approaches, it becomes evident that there is no one size fits all solution. Each company has adopted a model that is perceived adequate to its risk management and governance approach.

As already stated in the Volkswagen example, the 3-LoD model is based on the "COSO" framework. In the following chapter, the theme-related "COSO" framework is outlined which contributes to the risk management which is embedded in the 3-LoD model.

#### 2.2.3 Unifying: COSO Framework

The following chapter centers on the "COSO" framework which contributes to the unification of a risk management picture and thereby improves the ability to manage the corresponding risks. It bridges the gap coming from a structure-orientated 3-LoD model and results in a process-orientated risk management framework in which internal audit plays an important role.

The so-called "COSO" framework is a model that can adopted to organize, structure, categorize, and manage the above-named risks. "COSO" is an enterprise risk framework which was established by "Committee of Sponsoring Organizations of the Treadway Commission" (The Committee of Sponsoring Organizations of the Treadway Commission 2020). The Committee was founded in

1985. It is supported by "Institute of Internal Auditors", "American Institute of Certified Public Accountants", "Financial Executives", "Institute of Management Accountants" and "American Accounting Association". The first framework was established in 1992 and lastly reviewed 2017. The "COSO" framework provides guidance and suggestions for investors, corporations etc. regarding the organization's efforts to evaluate and improve the legal and regulatory frameworks for corporate governance (European Confederation of the Institute of Internal Audit 2009, p. 9). It sets out the responsibilities and rights of corporate governance of the involved organization organs and its stakeholders. "COSO" summarizes the principles, factors and components necessary to effectively manage the business risks. External auditors expect to find especially financial institutions to adopt the "COSO" framework. Almost every external auditing company has adopted the "COSO" principles and applies a conformingly risk-orientated approach to the financial statement (European Confederation of the Institute of Internal Auditor 2009, p. 27).

Generally, there are three basic risks that need to be further differentiated before the connection between the 3-LoD and the risk framework is further developed. Hereof, the current state of the internal audit discipline is further carved out (Peemoeller 2015, p. 66). These basic risks are:

- Upstream risk: It involves the risk that an organization does not realize, i.e. new legal and regulatory requirements affecting the business.
- Downstream risk: This risk results thereof that the organization does not comply with existing laws, rules, and regulations. Furthermore, required steps to comply with external regulation or law are not considered.
- Regulatory risk: The corresponding risk results if announced supervisory trends of authorities are not recognized or dealt with proactively by the organization.

Risks can either be accepted or mitigated to an acceptable point by the organization (Anderson and Eubanks 2015, p. 1). The illustration below provides an overview of the "COSO" framework in form of a cube or dice:



Figure 13: COSO Cube (Thabit et al. 2019, p.5)

The presented "COSO"-dice outlines that clear responsibilities are to be defined to address risk control and coordinate it in order to fill existing gaps and avoid duplication of effort. Factors determining the extent of the implementation of the "COSO" framework are size, internationalization, group structure, management culture, risk appetite, legal requirements demand consideration (European Confederation of the Institute of Internal Auditors 2009, p. 27).

Each of these roles and functions acting have a unique perspective and skill while serving the organization or financial institution. The "COSO" framework place a central role in the so-called enterprise risk management (Anderson and Eubanks 2015, p. 3; Thabit et al. 2019, p. 4). The relevance is enfolded through the fact that the achievement of objectives involves taking and managing risks as well as pursing growth by embracing opportunities to the advance of the business (Anderson and Eubanks 2015, p. 3). Failure to manage and control the corresponding risks prevents organizations and financial institutions from the accomplishment of its objectives. The figure below illustrates the interplay of a representative risk management approach:



Figure 14: Enterprise Risk Management (COSO 2017, p. 6)

The displayed illustration consists of five interrelated dimensions (COSO 2017, p. 6). Hereafter, the governance represents the tone reinforcing the oversight responsibility in terms of business culture. The strategic planning process consisting of an aligned strategy including the risk appetite which serves as a basis for the identification, respondents and assessment of risks. The Institute of Internal Auditors defines the level of risk the willingness to accept it which is expressed as its risk appetite (2009, p. 7). The risk appetite, risk management, and its alignment to the business culture management are expressed in the established corporate governance framework.

The performance of risk management is the sum of the risks impacting the organization's achievement of its objectives (COSO 2017, p. 7). The corresponding results are reported to the key risk stakeholders (see figure 7 in chapter 2.2.1.).

How well the single business risk management activities are functioning has to be constantly reviewed in order to identify which adjustments are needed. This has to be undertaken by the risk owners that are responsible for the risk management in order to reduce the risks to an acceptable level. In the figure below, the tasks assigned to the above described headlines are presented:



Figure 15: Associated Risks with Strategy (COSO 2017, p. 7)

The figure illustrates that duties related to control and risk management are increasingly split across the organization. The same applies to financial institutions. Thus, every organization needs to define responsibilities related to control, risk and governance to minimize gaps, and unnecessary duplication or lack of assurance (Anderson and Eubanks 2015, p. 14). Consequently, when focusing on the 3-LoD, this implies that the lines of defense need to be appropriately coordinated to deliver positive assurance. The 3-LoD model contributes to the "COSO" framework by clarifying roles and duties, and thereby enhancing communication among the single lines of defense.

The 3-LoD model assigns responsibilities regarding control and risk, and these can be coordinated across an organization and financial institution through the adoption of the "COSO" framework (p. 1). Functions can vary depending on the individual organization as they may be combined or split across the 3-LoD. It is the duty and responsibility of the 3-LoD model to ensure that risks and controls are appropriately managed by considering the institution's structure regardless of its complexity or size. Independently from the institution's size, the 3-LoD model addresses responsibilities as demanded in the "COSO" framework (p. 10). The 3-LoD describes how they are to be coordinated within the financial institution. The model clarifies the relationship as well as the differences in responsibilities and roles. It is to be understood as a blueprint to monitor activities and reach institution's assurance. It is more likely that organization achieve their overall objectives, when each role within the wider governance framework of the 3-LoD performs its assigned function effectively.

In the twenty-first century, it is common to find diverse business units within an organization of enterprise risk management: experts, compliance officers,

internal auditors, quality inspectors, control professionals, fraud investigators working together to support the organization to manage its risks (The Institute of Internal Auditors 2013a, p. 1).

In order to establish a connection to the subject of this thesis, a focus is laid on the internal audit discipline in the following. The illustration below relates the "COSO" framework to the internal audit function:

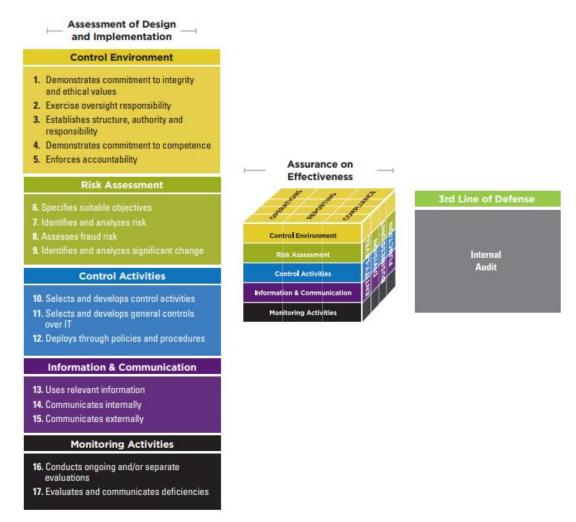


Figure 16: COSO and Internal Audit (Anderson and Eubanks 2015, p. 8)

The "COSO" framework is a tool for internal audit to assess the effectiveness of established enterprise risk framework (Anderson and Eubanks 2015, p. 8). The high level of objectivity and independence distinguishes internal audit from the other business lines. The main difference to the other lines of defense is that internal

41

audit is not a participant of the business operations and therefore is not responsible for the design or implementation of controls. Internal audit is the only discipline in the 3-LoD model that is in the position to provide objective assurance to the management body.

In the following, the need to collect and analyze information regarding risks to conduct sensible internal audit activities is outlined by focusing on the subject of risk management.

#### 2.2.4 Performing: Risk Management

Performing risk management requires an interplay of activities of the 3-LoD and the operationalization of the "COSO" framework in which internal audit maintains independence. Risk management is performed appropriately when it results in the mitigation and particular acceptance of risks an organization faces.

A financial institution has to make arrangements for its structure and processes according to the type, scope, complexity, and risk content of its business activities. The sharing and use of information generally follow two logical approaches: detecting risks (front-to-end) or processing risks (back-to-end). The illustration below displays a schematic overview of a risk assessment matrix:

Risk Assessment Matrix		Frequent: Continuous, regular, or inevitable occurrences	Likely: Several or numerous occurrences	Occasional: Sporadic or intermittent occurrences	Seldom: Infrequent occurrences	Unlikely: Possible occurrences but improbable
Severity (expected consequence)		A	В	С	D	E
Catastrophic: Mission failure, unit readiness eliminated; death, unacceptable loss or damage	1	EH	EH	н	н	М
Critical: Significantly degraded unit readiness or mission capability; severe injury, illness, loss or damage	Ш	EH	н	н	м	L
Moderate: Somewhat degraded unit readiness or mission capability, minor injury, illness, loss, or damage	III	н	м	М	L	L
Negligible: Little or no impact to unit readiness or mission capability; minimal injury, loss, or damage	IV	М	L	L	L	L

Legend: EH - Extremely High Risk H - High Risk M - Medium Risk L - Low Risk

Figure 17: Schematic Overview of a Risk Assessment Matrix (Levinson 2017)

The methodological difference between internal audit and risk management is that the one involves a quantified assessment of risk potentials (see figure above), whereas the other one focuses on the actual weak points or possible optimization

potentials (The Institute of Internal Auditors 2020a). Internal audit and risk management are therefore equally called upon to have an effect throughout the financial institution, taking into account their respective importance. There are also differences in the planning and execution of work processes.

Risk management, apart from ad-hoc reports, is a cyclical process in which a risk inventory is usually carried out at least once a year, followed by a risk assessment (European Central Bank 2019). The internal audit function bases its auditing activities on a risk-oriented plan drawn up at least once a year, which can be supplemented by unplanned audits that may be necessary in certain circumstances (European Confederation of the Institute of Internal Audit 2009, p. 32). Both areas must consider the increasing uncertainty and complexity of business decisions. Furthermore, the risk management department also works on a project-related basis when its expertise is required, for example, in the assessment of major corporate investments and acquisitions. In the processing of risk control and improvement measures, be it to reduce the identified risks or to remedy deficiencies, there are common features in the follow-up.

Risk management has to set-up an appropriate risk management, control processes and implement a risk-controlling (Anderson and Eubanks 2015, p. 2). The internal audit function has to be risk-oriented and independent of the processes itself (The Institute of Internal Auditors 2019b). Internal audit assesses the appropriateness and the effectiveness of the established risk management in general and of the internal control system in particular. Besides, internal audit practices concentrate on the entire business activities and processes whether they are outsourced or insourced.

Often financial institutions face the challenge that policies and procedures are in place, but its operationalization is lacking. This may be the case, when the risk monitoring function is responsible for the compliance review and the operational business management is not aware of its own risk management responsibility due to inadequate skills or acceptance (Scheld et al. 2015, p. 21). Consequently, the so-called second line of defense understands itself as a change manager for the first line of defense.

An applicable implementation to control risk (CR) and detect risk (DR) in the 3-LoD model is illustrated below.

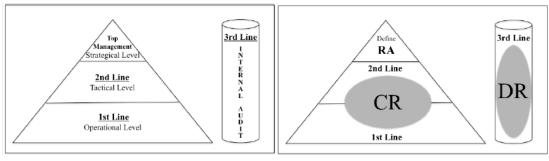


Figure 18: Management of Risk in the 3-LoD (Scheld et al. 2015, p. 21)

On the left side of the figure the 3-LoD is displayed. On the right-hand the risks that fit into the 3-LoD model are shown. A closely interlinked cooperation of the first and second lines is necessary to create a retained organization. This contributes to the achievement of the control objectives and enable effective risk management. In the case that risk management is not effective or fails. The corresponding risk is to be understood as a residual risk (RR) of law infringements and is defined by Scheld et al. (2015, p. 16) as:

$$RR = IR1 \cdot IR2 \cdot CR \cdot DR$$

IR expresses inherent risk which occurs when the preventive system of measures is absent. IR1 reflects the appropriateness of the business environment for infringements and IR2 describes triggers for non-compliant behavior. Typical factors that facilitate IR1 are market concentration, cartels, participants, probability of external detection, efforts of authorities as well as the homogeneity of products.

The probability of changes in the business environment is expressed by IR2. The corresponding environmental changes may apply to the overall financial industry in the nearer future as there is a detectable market concentration on the rise in retail banking environments and the banking sector itself. However, the suitability for collusion does not mean that collusive behavior will occur. Hence, triggers could be changes in competition or profits, business culture and single motivation (examples herefore are the LIBOR and EURIBOR cartel) or information regarding the legal environment (Lombard cartel).

CR describes anti-competitive behavior despite all the compliance activities in place within the financial institution. Internal control systems as well as risk management for identifying IR1 and IR2 are essential. CR will increase if the implemented controls are not appropriate.

DR represents the presence and occurrence of internal audit activities. It stands for the risk that internal audit will not detect non-compliant behavior. CR and DR are comparable risks as both factors are dependent on the availability of resources executing monitoring activities and assessments. When resources are allocated properly, an organization is to be understood as successful. Consequently, a successful organization decreased DR vice versa. The expected costs of non-compliance (EC) can be determined by combining RR and the costs of non-compliant behavior (CN) with its probability (p) that e.g. a cartel is detected.

EC = CN  $\cdot$  RR  $\cdot$  p = (value of fines + damages + litigation costs + additional costs)  $\cdot$  IR1  $\cdot$  IR2  $\cdot$  CR  $\cdot$  DR  $\cdot$  p

The definition of a so-called risk appetite is a dynamic process of an organization and forms the basis for the overall risk situation (see chapter 2.2.3). It goes hand in hand with the management of the factor CR and DR which has an influence on RR and EC. Thus, to effectively manage CR and DR, a governance as well as a risk and compliance structure is necessary to ensure its coordination within the 3-LoD model. An internal control system lowers the occurrence of infringements and thereby the risk CR.

The first and second lines together represent the internal control system (Anderson and Eubanks 2015, p. 2). As a result, the management of CR is the responsibility of the first and second line of defense within the 3-LoD model (Scheld et al. 2015, p. 23). Meanwhile, the third line of defense has a consulting and an internal assurance function. Internal audit is not responsible for the implementation of controls or for designing controls as it is independent (The Institute of Internal Auditors 2019b). In its function as third line, it evaluates the processes and the undertaken controls by the first and second lines. It is its task to review their planning, documentation, supervision and to point out potential improvements to increase the controls effectiveness. Hence, the risk of infringements and that a risk is (not) detected reflects (in)effectiveness of the internal audit function executing its activities. Consequently, the establishment of a professional internal audit function should be the priority as it is essential for the efficiency and the effectiveness of the overall governance of risks (Anderson and Eubanks 2015, p. 3). The risk management system is intended to identify, evaluate, and manage possible risks within the organization and financial institution (Scheld et al. 2015, p. 22). The control system is ideally implemented according to the business specifications to improve a standardization of the processes in place and avoid errors. As a result, it is recommendable that business activities concerning antitrust risks should be implemented in the following eight components of the "COSO" dice.

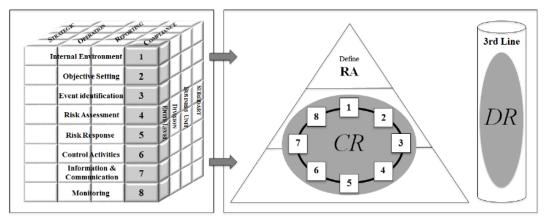


Figure 19: Control Management with COSO (Scheld et al. 2015, p. 22)

The "COSO" framework is presented in a cube consisting of the four objectives which are strategic, operations, reporting and compliance. These objectives are displayed on the top of the cube (see chapter 2.2.3.). Compared to the presented "COSO" cube in the previous chapter, the displayed dice is more detailed. Yet, the idea to structure, organize and mitigate risks remains the same. Hereafter, the following eight components need to be considered to achieve the financial institution's objectives:

"Internal environment, objective setting, event identification, risks assessment, risk response, control activities, information and communication, monitoring." (Scheld et al. 2015, p. 22)

Thus, the implementation of "COSO" leads to the control of risk (CR) and the detection of risks (DR) in each line of defense and business unit. The exposed positioning of third line of defense shows the relevance of internal audit in detecting risks. However, most important is the tone at the top which is an essential signal to all employees within the financial institution (European Banking Authority 2017, p. 34). The encouragement of compliant behavior decreases the overall risk.

By aligning the structures of "COSO" and the activities of the 3-LoD, risks can be controlled (CR) and managed in an efficient way (Scheld et al. 2015, p. 27). The model enables the financial institution to reach compliance with the regulations and laws.

Based on past supervisory procedures, it can be assumed that the "European Banking Authority" will increase regulatory requirements with a special focus on the 3-LoD functions in accordance with solvency regulations. Thus, this increases the relevance of the 3-LoD model for financial institutions and thus assigns an even more important role to internal audit. In order to better mirror the corresponding relevance of the internal audit discipline, the aspects of governance and management are examined in the following chapter in more detail.

#### 2.2.5 Measuring: Governance and Management

Partially, this chapter is a repetition of the previous presented content on the relevance of a governance framework and its importance for risk management expressed in the 3-LoD and "COSO" framework. However, a complementary perspective on the relevance of internal governance and the management body's responsibility is taken as these roles were not yet themed in great detail. Both roles enfold relevance for the later analysis of the state of the art of the internal audit discipline. Thus, the bridge of governance to the requirements of the regulatory supervision body is undertaken to gain a deeper understanding what internal governance and the role of the management body are about.

Internal audit has to make a statement on the measures taken to implement and live a good corporate governance which is an allocated responsibility of the management body (The Institute of Internal Auditors 2019a). In the literature, there is debate taking place on what the best measure for a meaningful governance could be (Court et al. 2002, p. 1). However, it is believed that there is no right or wrong way to develop measures for key governance processes and to set appropriate indicators to track the results. The management body who has a control function and the corresponding responsibility, is therefore interested to have a good corporate governance implemented in order to build trust for internal and external interest groups (European Central Bank 2017, p. 32). As the tone at the top, it is a

47

major interest of the management body to measure the quality of governance within the financial institution (p. 34).

Latter term has been discussed as frequently in economics, business and politics in recent years (Westhausen 2015, p. 13). The term "governance" is often not translated in national languages and represents a generally accepted term. Besides the lack of translation, there is no legally binding definition of the term. It is understood as a system for corporate management and control. There is a broad spectrum of opinions and definitions of the term corporate governance with a number of different theoretical approaches.

Generally, the belief, values, knowledge and understanding of risk shared by a group of people with a common purpose within an organization describes the risk culture (The Institute of Risk Management 2012, p. 6). Risks need to be taken by all organizations to achieve their objectives. This involves ethical principles and a consistent tone at the top from the management body (European Banking Authority 2017, p. 34). Risk information at all levels encourages risk event reporting and thereby contributes to compliant behavior (Scheld et al. 2015, p. 27). Accordingly, for the research objective of interest, it should be noted that sound corporate governance is subsumed with predefined responsibilities, roles, procedures, and a well-structured financial institution (Dentons 2020, p. 2). This makes clear that good corporate governance and the 3-LoD model are intertwined as the one supports the other. An element of an effective internal audit function lays according to Eulerich et al (2013) in the corporate governance system which becomes especially prevalent in the case of internal audit findings. Hereafter, the value of the 3-LoD lies in its positive relationships which are reflected in the internal control system, risk management, and governance processes (Eulerich et al. 2013, p. 69).

To bridge the gap from the issue of good corporate governance to the 3-LoD, the "European Banking Authority" defined the general function of internal governance. The understanding has been put down in guidelines. Hereafter, the "European Banking Authority" demands in its guidelines on internal governance that financial institutions should develop and maintain a culture encouraging a positive attitude towards compliance and risk as well as a comprehensive internal control system (European Banking Authority 2017, p. 41). Thus, it can be stated that an increasing interest of the regulatory supervision body in a financial institution's

risk culture leads to an increasing relevance of the internal audit discipline itself. Conformingly, the Institute of Internal Auditors require in its so-called standard 2110 the following:

"The internal audit activity must assess and make appropriate recommendations to improve the organization's governance processes for:

- Making strategic and operational decisions.
- Overseeing risk management and control.
- Promoting appropriate ethics and values within the organization.
- Ensuring effective organizational performance management and accountability.
- Communicating risk and control information to appropriate areas of the organization.
- Coordinating the activities of, and communicating information among, the board, external and internal auditors, other assurance providers, and management." (The Institute of Internal Auditors 2019a)

The management body represents the tone at the top. It is his responsibility to set and communicate the core values, business expectations, and thereby create a risk culture (European Banking Authority 2017, p. 34). The management body has to set and enforce a risk culture and align it with the strategy of the financial institution, the business, and the corporate governance. On an ongoing basis, the management body has to consider the set-up risk profile, his governance arrangements and encourage, monitor, and assess the established risk culture in relation to the institution's financial stability. Then, the task of the key function holders is to appropriately communicate the core values towards the employees. Conclusively, the employees are required to act compliant with the regulation and the applicable laws. Every financial institution has a risk culture.

There are two general types of risk culture, one that is either undermining or one that is supporting the long-term success. Risk culture enables and rewards groups of individuals for taking the right risks. Subsequently, collapses or business scandals are a product of an inappropriate risk culture. Examples for an inappropriate risk cultures are several banks that have quite recently been subject to the violation of antitrust laws: In 2013, Deutsche Bank was fined to pay 466 million Euros for their participation in the Euro interest rate derivatives cartel (Scheld et al. 2015, pp. 1). This was the fourth largest fine in the past period between

1969 and 2016. The sixth largest fine amounting 446 million Euros was imposed on another bank, named Société Générale, allocated to the same cartel. The European Commission imposed a total fine of 1.94 billion Euros on the cartel and remains the third largest fine (European Commission 2013).

Further prominent examples for scandals are Enron, World-Com, Parmalat, Wirecard, and Siemens. In addition many more examples have forced supervisory authorities and regulators to take new measures, and have massively impacted the regulatory environment with i.e. the Sarbanes-Oxley Act or the Accounting Law-Modernization Act which impacted the relevance of operational business, risk management, and internal audit which make up the 3-LoD within the banking sector. The economic, technological, and political developments changed the general conditions just as rapidly as continuously and presented them with new challenges again and again. However, one thing is certain: confidence in the capital markets is settling like a mosaic from the trust in each individual financial institution and applies to stock listed companies and to any other organization. This is due to the fact that rules are inadequate, misapplied or misunderstood. The understanding is often the missing link to balance risk and successful decisionmaking. It is the management body that has to guide the financial institution with its structure, formulate its limitations and evolution (European Banking Authority 2017, p. 29). Subsequently, the management body has to ensure that financial institution's structure is efficient and appropriate in its complexity. In case, a management body has not established internal audit activities, it should explain this to the stakeholders and shareholders regarding how adequate assurance will be obtained in terms of control structures, risk management, and governance.

In practice, the "European Banking Authority" expects that the financial institution's business lines show responsibility in their business activities. This includes risk management and having controls in the appropriate places in order to be compliant with the external and internal requirements. All principles that are concerned with the setting of objectives, strategy, risk management, internal control system, reporting, and business activities in line with the responsibilities need to be part of internal governance (European Banking Authority 2017, p. 7). Internal governance encompasses business continuity management, information technology systems and arrangements that deal with outsourcing procedures. In total, the need is underlined to set standards with which financial institutions are

required to comply. In the subsequent chapter, light is shed on the regulatory supervision body.

# 2.2.6 Interacting: Regulatory Supervision Body

Legislators introduce national laws and directives that i.e. affect corporate governance and make governance the central task of financial institutions (European Banking Authority 2017, p. 41). The so-called regulatory supervision bodies respectively regulators represent external bodies and are positioned outside the financial institution (Bank for International Settlements 2015, p. 15). In regulated industries or sectors, they play a central role in the control structure and overall governance framework of financial institutions. Thus, they are considered as additional lines of defense or even the fourth lines of defense (see chapter 2.2.2). In the following, the raison d'être of regulatory supervision bodies and their function are explained in more detail.

Firstly, it is the overall political goal to ensure that systemic crisis is prevented which explains the raison d'être of regulatory supervision bodies (European Central Bank 2018b). In general, the government determines the appropriate level of regulation or deregulation in the industry, profession or sector (Parker and Kirkpatrick 2012, p. 9). Hereafter, market failure is corrected through regulation and intended to add value to growth and economic efficiency. Typically, the regulatory supervision body is the supervising entity that codifies and enforces regulations. Moreover, the corresponding body provides protection to the stakeholders. In specific cases, the regulatory supervision body is in the position to perform certain investigations or reviews and can sanction business proceedings (European Central Bank 2018a, p. 2). There is no unique definition in place regarding the concept. It is left to the national interpretation and individual structure of the financial institutions. There is detectable interaction between the regulatory supervision body and the institutions under supervision (Bank for International Settlements 2015, p. 1; The Institute of Internal Auditors 2013, p. 6).

In the economic system, financial institutions such as banks, insurances or financial service providers play a crucial role as they act as intermediaries between the market participants, other financial institutions and customers (Scheld et al. 2015, p. 5). On a global basis, financial institutions are highly regulated and subject

to systemic risks (The Institute of Internal Auditors 2019a, p. 8). Thus, there is a noticeable interdependency between the stability of financial institutions and the market. In times of a financial market crisis regulation is not a static condition but is subject to a permanent adjustment process.

"The financial and economic crisis of the past few years has shown how rapidly financial stability in [...] Europe can be jeopardised if institutions do not have robust risk management systems in place which identify critical developments and enable institutions to react promptly." (Hofer and Bothe 2012)

The financial crisis revealed weaknesses at all levels – international and national. The impact was perceived by the customers, business partners, employers, employees, shareholders, regulators and society. Many international supervisory standard-settings as well as national or local regulators increased their requirements on financial institutions after the global financial crisis (The Institute of Internal Auditors 2019a, p.30). Since then, it was the supervisors' objective to correct the internal control weaknesses and poor corporate governance which were perceived as the cause and thereby continuously set today's regulatory environment. The primary aim is to prevent financial market players from making mistakes. The European Union strives to encourage competition of financial institutions and sanctions infringements of competition law (European Commission 2013).

In the literature, there are opposing theories regarding the effects of market and its necessity for competition to ensure stability: the competition-fragility hypothesis (Allen und Gale 2004) and the competition-stability hypothesis (Boyd and De Nicoló 2005). The competition-fragility hypothesis deals with competitive markets and the increase of banks risk appetite which endangers the overall stability. The competition-stability hypothesis suggests that systemic risks are lower in competitive markets and leads to more stability. However, the banking sector has increasingly been concentrated, which suggests that there is a weak competition in place (European Central Bank 2016, p. 3).

The importance of compliance and a corresponding behavior has especially grown in banks as prosecution has begun to be more extensive (European Central Bank 2020). Moral economic behavior is increasingly demanded by the society. Thus, there is a demand for financial institutions to apply effective compliance

structures und to establish appropriate processes. Therefore, corporate defense demands an integrated framework as governance goes beyond the focus of internal controls, risk management, and compliance.

Regulation proposals that i.e. deal with internal governance or internal controls are either instigated by the "European Banking Authority", the "Basel Committee on Banking Supervision" or the "Committee of Banking Supervisors". The "European Banking Authority" is mandated to draw up guidelines for authorities, which specify the corresponding regulation in order to achieve supervisory convergence across the European Union (European Banking Authority 2014, p. 9 and p. 10).

The "Basel Committee on Banking Supervision" created the so-called "Framework for Internal Control Systems in Banking organizations" in 1998 which have been amended on an ongoing basis. The framework describes necessity and importance of internal control systems as an essential management element as is considered as the big bang of regulating internal control systems.

The quantitative rules that govern the capital adequacy (Pillar I) likewise include a more quality-based "Supervisory Review Process" (Pillar II). The latter was additionally incorporated in the "EU Banking Directive". Pillar II requires financial institutions to establish an adequate management, monitoring, and control process referred to as robust governance arrangements. Furthermore, strategies and processes need to ensure that material risks are entirely covered by internal capital "Internal Capital Adequacy Assessment Process" (ICAAP). Hereafter, the risk management processes have to reflect the adherence of sound banking practices and regulatory provisions (Bank for International Settlements 2012, p. 8). The regulatory supervision body checks the quality of these processes on a regular and ad hoc basis.

In accordance with the Directive 2013/36 EU, the objective of the corresponding mandate is to improve the quality and the consistency of regulatory supervision practices. There are significant variations at national level, and it is the attempt of the authorities respectively the committees to harmonize the current detectable differences. Their guidelines and frameworks are to be understood as guiding and not as limiting or restricting regulatory supervision at national level. The premise is that they are in accordance with the national legislation. They are to be applied by translating them into practice. The regulatory environment keeps on

changing (Wiesemann 2014). New legal provisions require financial institutions to reform their procedures and structures in cycles which appear to increase in pace.

The "European Banking Authority" aims to achieve the maximum possible harmonization, increase supervisory convergence and prevent regulatory arbitrage opportunities (European Banking Authority 2017, p. 59). This is to be reached by common procedures and practices to reduce the compliance burden on financial institutions and thereby contribute to cooperation among the competent authorities. The guidelines on common procedures and methodologies for the supervisory review and evaluation process – called "Supervisory Review and Evaluation Process" (SREP) – represent the view of the "European Banking Authority" on findings from conducted regulatory supervision activities performed on financial institutions. Findings of performed regulatory supervision processes contributed to the introduction of the SREP framework to introduce a comprehensive supervisory overview. It is to be understood as a summary of the assessments. It is the regulatory supervision body's view of the financial institution's risks and capabilities. It represents the basis for measuring the institution's performance and to enter into a dialogue.

"The common SREP framework introduced in these guidelines is built around:

- a. business model analysis;
- b. assessment of internal governance and institution-wide control arrangements;
- c. assessment of risk to capital and adequacy of capital to cover these risks; and
- $d.\ assessment\ of\ risks\ to\ liquidity\ and\ adequacy\ of\ liquidity\ resources\ to\ cover\ these\ risks.''$

(European Banking Authority 2014, p. 7)

It is expected of the financial institutions and their authorities to comply with the guidelines. Primary law is developed and enacted in form of edicts, directives, rulings or recommendations by the European authorities (European Confederation of the Institute of Internal Audit 2009, p. 14 and p. 15). For the European member states edicts are binding and do not require a conversion into national laws whereas directives need to be transferred into national law. Member states can individually transfer the directive according to their targets. Single member states can be subject of rulings which are only binding for them.

In recent years, progress has been made regarding frameworks, development of rules, standards and processes to manage risks in financial institutions. Hence,

the media regularly reveals that the corresponding principles are not sufficient to manage failure or success of companies (see Enron, World-Com, Parmalat, Wirecard, and Siemens in chapter 2.2.5). Hence, a significant level of law standardization has taken place across the countries of the European Union. Nevertheless, differences still remain which most probably have its origin in the differences in national attitude.

The "European Commission" requires the adoption of national measures in order to achieve transparency in markets, ensure stability in financial markets and its products in Europe (European Confederation of the Institute of Internal Audit 2009, p. 13). The financial condition of individual financial institutions is examined by supervisory regulators in order to evaluate their compliance with laws and regulations, including consumer protections laws (The Institute of Internal Auditors 2019a, p. 4).

The European Monetary Union serves as an instance for the reduction of national barriers by introducing an integrated financial market. Thus, it can be assumed that the European Union perceives competition among financial institutions as a positive effect that overweighs the negative aspects. The risk profile has changed in the past years. A more volatile and dynamic environment is in place which is characterized by continuously changing regulations by the regulatory supervision bodies. However, an increasing regulatory complexity represents an area of concern to the regulated financial institutions (PwC's State of the Internal Audit Profession Study 2015, p. 4). Yet, it is crucial for the financial system to function properly and build trust in their reliability as they are contributing to the entire economy (European Banking Authority 2017, p. 58). Hence, an effective internal governance is fundamental. Weak corporate governance results in imprudent risk-taking and results in failure of financial institutions. This may lead to systemic problems in single countries of the European Union or even globally.

Shareholders commonly demand from a financial institution to defend their interests and ensure sustainability. Thus, the need for regulation in the financial industry is more than ever present. Yet, banks are not the only players with responsibility. Rating agencies and those hedge funds that specifically pursue financial market destabilization play a significant role. The credit industry plays a macroeconomic and global economic role in such a way that it is capable to make

a profit from speculating on it. Hence, the decision-making and management processes are of improvable quality as they represent a main cause of the global financial and economic crisis. Since financial institutions have become very complex, there are diverse requirements for i.e. risk management in place that demand an intense use of resources throughout Europe. They are prompted by international developments and by regional factors. Likewise, problems arising in other financial institutions can present a reason to follow-up on certain issues.

The interaction and cooperation among the regulatory supervision body, the internal audit function, and other actors in the 3-LoD is a prerequisite each financial institution faces. On the one hand, regulatory supervision bodies are the standard setter of requirements, and on the other hand, they assess the 3-LoD and the functionality of the single lines with regard to the set requirements (The Institute of Internal Auditors 2013a, p. 6). The internal audit function is in this concept a part of the monitoring system and it is suggested to directly link it to the management body or its audit committee (Standard 1111 of the IPPF; The Institute of Internal Auditors 2017a, p. 16). There is a need for a holistic perspective to focus on more self-defense from potential hazards (fraud, reputation damage etc.). Thus, it is sensible to put the functionality to the test and to consistently counter undesirable developments and distortions of all kinds without delay, which is amongst other lines the task of internal audit. Consequently, it is of critical importance that the regulatory supervision bodies respectively the regulators can rely on the work and insight of internal auditors (The Institute of Internal Auditors 2019a, p. 6).

## 2.2.7 Collaborating: External Audit

External and internal auditors have different tasks, but they have amongst other things one responsibility in common: they ensure that regulations – whether they internal or external imposed – are appropriately applied to protect the public (The Institute of Internal Auditors 2020c). Thus, a collaboration of external and internal auditors leads to an accuracy of financial reports and in consequence contributes to efficient and effective audits. In practice, collaboration between the regulatory supervision bodies, external auditors and internal auditors is common.

At the highest level of collaboration, internal audit and external audit cooperate and exchange information within statutory and fiscal boundaries and

under mutual responsibility as areas are largely interlinked (The Institute of Internal Auditors 2020c). Hereafter,

"[...] the most important role of both internal and external auditors is to provide assurance with respect to controls and the financial statements; when done effectively, the audit findings can support the organization's efforts to anticipate potential issues and eliminate surprises." (quoted by KPMG 2017, p. 6)

Yet, the task of external audit pays particular attention to the assessment of historical financial information, while the work of the internal audit function often is to a greater extent related to future-oriented questions - such as those concerning increases in efficiency (The Institute of Internal Auditors 2017b, p. 3). The internationalization of business activities, the complexity of corporate planning, monitoring, and control has increased and in the course of this also the relevance of internal audit. The principles of internal audit are based on the characteristics of independence and objectivity (The Institute of Internal Auditors 2020a). Internal audit and external audit can draw from their respective areas of expertise, perspectives, orientations, and thereby contribute the most comprehensive picture possible of the risks and opportunities, controls or other relevant topics to the financial institution. Both audit practices share similarities in the applied methodologies, and which leads to the conclusion that cooperation between internal and external audit is recommendable (European Confederation of the Institute of Internal Audit 2009, p. 25).

When dealing with the advantages of cooperation between internal audit and external audit, audit activities can be carried out resulting in a substitutive and a complementary effect (p. 50). The corresponding differentiation is made in the relationship between internal and external audit on a regular basis in international studies and in the literature. The cooperation is perceived substitutive, if it leads to an increase in efficiency of monitoring activities and results in the reduction of audit procedures.

The task of 3-LoD is to ensure that governmental regulatory requirements are appropriately compliant with the internal regulations of the financial institution (Cason et al. 2016, p. 1). In this context it is not unusual that the external auditor sends its reports to the supervising authority in order to wield parts of the supervisory entity's authority.

#### 2.3 CONSOLIDATING THE CURRENT STATE OF INTERNAL AUDIT

The subsequent chapter consolidates the findings on the current state of the internal audit discipline to then provide an answer to the research question RQ1.

It is the objective of chapter two to reveal the meaningful relationships of the internal audit discipline by 1) defining its duties and responsibilities in order to 2) understand the professional relationship of the internal audit discipline. In greater detail, the 3) single lines are classified that cooperate with internal audit to thereof subsume the 4) 3-LoD model in which information is shared in order to coordinate the activities of the single lines. Moreover, the 5) relevance of the "COSO" framework is put into context by describing the importance of 6) performing risk management and connecting it to the internal audit discipline. The role of 7) governance as a measure which is an allocated responsibility of the management body is presented. An overview on the interaction of the 8) regulatory supervision body and its impact on a financial institution's activities is given. 9) External and internal audit have similar tasks and are considered as collaborating disciplines as they both contribute to efficient and effective audits. In the following, the findings are consolidated:

- 1) <u>Defining internal audit</u>: It is of importance to understand what the discipline of internal audit is about. The discipline's independence, objectivity, assurance and advisory activities are designed to improve and add value to the organization's operations. The role and responsibilities of the discipline are defined to build a bridge to its professional relationship. The current status of internal audit is constantly evolving and changing through adaptation to the organization's needs, business, and its objectives. The internal audit function faces a competitive environment and changing markets. An increasing regulatory complexity is as an area of concern and an opportunity at the same time.
- 2) <u>Understanding relationships:</u> In the past years, the regulatory density has increased in the overall financial sector and its institutions. This has created new functions and reporting requirement through which internal audit gained importance. Internal audit entails many interfaces with internal and external actors that are placed inside as well as outside the

- financial institution. Thus, it is of importance to understand the professional relationships internal audit maintains which are carved out subsequently in 3) to 9).
- 3) Classifying lines: The single lines of defense that make up the 3-LoD are classified in order to structure and evaluate responsibilities necessary for the effective management of risks. Each of the lines plays a distinct role to the reduction of risk. The model contains the operational controls (first line), risk management as well as compliance (second line), and the internal audit function (third line). In practice, there are detectable variations regarding the interdependencies between the first line and the second line. Furthermore, the second and third line share similarities regarding their assessment tasks.
- 4) Sharing 3-LoD: According to the motto "sharing is caring", the 3-LoD model contributes to risk transparency in the financial institution. The 3-LoD model is vehicle to share information among the single lines in order to ensure an appropriate coverage of risk issues and thereby contributes to the coordination of the responsibilities. As a result, potential duplication efforts are minimized. It is advisable to the individual financial institution to understand the 3-LoD model as a template of how to think about control functions rather than being an end-all solution. The 3-LoD model is required to be in the position to perform the intellectual adjustment process, i.e. identify and implement changes where necessary, and to analyze their significance. Therefore, the single lines have to view their financial institution from different perspectives and constantly question established approaches.
- 5) <u>Unifying "COSO":</u> The "COSO" framework contributes to the unification of a risk management picture and thereby improves the financial institution's ability to manage the corresponding risks. It bridges the gap coming from a structure-orientated 3-LoD model and results in a process-orientated risk management framework in which internal audit plays an important role. An integrative approach across the 3-LoD is crucial to priorities risks that are associated with the control intensity and the estimation of risk occurrences, which is expressed in the "COSO" framework. In this respect, internal audit is to be perceived as a window

- into the entire organization and financial institution. Hereafter, internal audit activities reduce information asymmetries and contribute to the financial institution.
- 6) Performing risk management: The risk management processes are an interplay of activities of the 3-LoD in which internal audit maintains independence. Risk management is performed appropriately when it results in the mitigation and/or in the acceptance of risks a financial institution faces. A financial institution has to make arrangements for the organizational structure and processes according to the type, scope, complexity, and risk content of its business activities. Hereby, it has to set-up an appropriate risk management, control processes, implement a risk-controlling, and compliance function. The internal audit function has to be risk-oriented and independent of the processes itself. Internal audit assesses the effectiveness and appropriateness of risk management in general, and of the internal control system. Besides, internal audit practices concentrate on compliance activities and processes whether they are outsourced or insourced.
- 7) Measuring governance and management: Internal audit has to make a statement on the measures taken to implement and live a good corporate governance which is an allocated responsibility of the management body. In the literature, there is debate taking place on what the best measure for a meaningful governance could be. However, it is believed that there is no right or wrong way to develop measures for key governance processes and to set appropriate indicators to track the results. The management body who has a control function and the corresponding responsibility, is therefore interested to have a good corporate governance implemented in order to build trust for internal and external interest groups. Thus, it is a major interest of the management body to measure the quality of governance within the financial institution. The interest in internal governance cultures of institutions and its impact on management practices have dramatically increased in the financial sector since 2008. Potential changes in the regulatory supervision frameworks and within the competitive environment inevitably pose new challenges. The

- importance and the expectations placed on the internal audit discipline have increased especially in recent decades.
- 8) <u>Interacting regulatory supervision body:</u> There is detectable interaction between the regulatory supervision body and the financial institutions under supervision. Thus, the interaction and cooperation among the regulatory supervision body, the internal audit function as well as the other actors in the 3-LoD is a prerequisite each financial institution faces. According to the "European Banking Authority", a financial institution must have a proper business organization to ensure compliance with the legal requirements. Thus, the concept of the internal control system has increasingly found its way into the various national laws. A financial institution must have an adequate and effective risk management to ensure its risk-bearing capacity. This includes the establishment of internal control procedures with an internal control system. There has to be an appropriate organizational and operational structure with a clear definition of the corresponding responsibilities and processes for the identification, assessment, control, monitoring, and communication of risks.
- 9) Collaborating external audit: External and internal auditors have different tasks, but they have, amongst other things, one responsibility in common: they ensure that regulations whether they internal or external imposed are appropriately applied to protect the public. Thus, a collaboration of external and internal auditors leads to an accuracy of financial reports and in consequence contributes to effective audits. In practice, collaboration between the regulatory supervision bodies, external auditors, and internal auditors is common.

Based on the findings presented in 1) to 9) and by carving out the current state of the internal audit discipline, RQ1 "What is the current state of internal audit as a discipline?" is answered in the following: Internal audit is a key prerequisite to ensure that only justifiable and assessable risks are taken which overall contribute to potential crisis developments. A contributing and performing internal audit function requires a consistent, integral risk management system embedded in the 3-LoD model. This is to be based on the "COSO"-approach and aligned with an internal governance system.

Internal audit will always produce multiple findings. At the same time, it takes things to the next level to weigh, prioritize risks, and opportunities that are based on its in-depth knowledge of the financial institution, its controls, and processes. The audited lines and the management body have to translate the findings from internal audit into actionable information for the financial institution. Iinternal audit activities support the management body to take decisions based on transparent risk information and deliver guidance to the financial institution.

.

#### 3 STATE OF THE ART: REVIEW OF INTERNAL AUDIT

The conceptual foundation was laid in the chapter on the current state of the internal audit discipline.

The state of the art of the internal audit discipline is approached by conducting an analysis to reveal the best strategic fit of a research methodology. The analysis results in the conduction of a qualitative research by applying the Grounded Theory and carrying out a qualitative content analysis.

The chapters that refer to utilization of a content analysis are named according to Philipp Mayring's approach in order to provide guidance and clarity in the course of the analysis. The subsequent chapters give an overview on the applied research strategy and the approaches taken to identify the relevant fields by describing the establishment of a category system and the analysis of the literature. Code relationships with the internal audit discipline are developed to organize the data set. In the course of its activities, internal audit is exposed to internal (endogenous) and external (exogenous) actors that appear as interest groups and topics. An excursus on the 3-LoD model is presented. To wrap up the findings, theorizing is carried out that contributes to theory building. The found codes are brought together in designed conceptual maps. Based on this, an extended view is gained on the fields of relevance for the internal audit discipline to be effective.

The results on the state of the art of internal audit are consolidated at the end of the chapter. A conclusion is given by putting the results into the context of this thesis by answering the research question RQ2 "What are fields of relevance for internal audit in order for the discipline to be effective?".

## 3.1 EXPLAINING METHODOLOGIES: DATA RESEARCH STRATEGY

An extended review on the fields of relevance that influence the effectiveness of internal audit activities is not available at the time when this work was conducted. In the present chapter, the appropriateness of the research strategy is explained in greater detail. In order to choose the appropriate research approach

and its best strategic fit to answer the research question an analysis is conducted in the following. The explanatory investigation approach to answer the research question RQ2 is developed along the research methodology. According to Gläser and Grit the research question implicitly impacts the explanation strategy (Gläser and Grit 2010, p. 70). From the subsequent analysis, it will become evident how the fields of relevance for internal audit to be effective will be obtained. Overall, it is the goal to generate findings that have not yet been mentioned by developing evidence from the unexplored (or underexplored) and consequently shedding light to inconclusive results in previous research.

The review of methodologies focuses on two research approaches. Hereof, there are two possible ways to carry out research and center it around an applicable methodology: qualitative and quantitative research methodologies. The subsequent analysis carves out the difference between the two paradigms.

In the table below, a comparison of the two paradigms resulting in quantitative or/and qualitative research is provided:

Table 1: Research Methods (Market Connections 2020)

	Comparison of research methods		
Characteristics	Qualitative research	Quantative research	
Paradigm	Interpretative paradigm	Functionalist paradigm	
Objective	Insights into problem setting     Understanding the reason /     motivation     Reveal trends (ideas / opinion)	Measure incidents (views / opinions) within a sample or a population     Generalizing results from a sample to the population     Deep dive exploration in area of interest and sometimes followed by qualitative research	
Data collection	Semistructured	Structured	
Analysis	Non-statistical     Focus on words	Numbers and statistics     Benchmark for future studies	
Results	Exploratory nature     Findings do not result in generalization about the population under study     Development of initial understanding and basis for further decisions	Generalization about the population under study     Development of initial understanding and basis for further decisions	
Sample	Narrow or small	Large	

Parallelly, quantitative and qualitative research developed in empirical social research (Flick et al. 2004, p. 8). Moreover, they are two fundamental different concepts to conduct a research that have an effect on the data collection, analysis, sample and results. The functionalist paradigm pursues the goal to replicate results by testing theories and refinement (Shah and Corley 2006). Hereafter, the data is collected and examined in a way that another researcher will find similar results under similar conditions. Comparatively an interpretative paradigm is neither about theory-testing nor replication.

The related paradigm is based on the belief that a deeper understanding of a phenomenon is only possible through interpretations of those experiencing it. Both paradigms have their strengths and weaknesses, and each is more or less appropriate depending on the research question. The conclusion to choose an interpretative mechanism-oriented explanation strategy results in a decision against a functionalist statistical investigation. Yet, the interpretative qualitative methodology overcomes a key limitation of most functionalist quantitative research: the inability to build theory.

Based on the above research method analysis, there are two ways - qualitative and quantitative - to approach the research question RQ2. In recent years, mixed methods designs have been given great attention. These methods are characterized by a triangulation of qualitative and quantitative methods.

In order to better mirror the course of the investigation to apply a research method, the question of interest is analyzed, the analytical method is derived from this and the data handling based on the context is provided in the subsequent chapters. In addition, the supportive usage of a software is outlined.

## 3.1.1 Examining: Question of Interest

The question of interest aims to discover variables and relationships to understand a complex process, and thereby described the influences the research question deals with. The goal is to break down complex phenomena by translating this into an investigation methodology. When focusing on the research question RQ2: "What are fields of relevance for internal audit in order for the discipline to be effective?" it is considered as impossible to collect information on the context in

which the discipline of internal audit is mentioned in a standardized way due to the lack of data sources.

Thus, an analysis technique has to be adopted to provide the description of the experienced phenomenon. Most probably, a few use cases would possibly reveal a causal mechanism in these instances but would not allow generalization to cover the scope addressed in the research question. The investigation of a few cases will not enable the researcher to answer the question. The nature of such complex macro phenomena cannot be reconstructed by summing up individual data, but only by relating the individual descriptions to one another and interpreting them together. In order to better mirror the research question, light is shed on the research process. Hereafter,

"The process of building grounded theory consists of different phases, which include deciding on a research problem, framing the research question, data collection, data coding and analysis, and theory development [...]. A grounded theory project typically does not begin with a theory from which hypotheses are deducted, but with a field of study or a research question, and what is relevant to this question is allowed to emerge during the research process. Like other research projects, the process starts with identifying the research problem and the framing of a research question that demarcates the phenomenon to be studied." (Bitsch 2005, p. 77)

The essential function of the present question, which can conformingly be connected to qualitative research, is the discovery of connections. It is the objective to develop new and context-rich hypotheses, theories and reference frameworks (Gläser and Grit 2010, p. 22). A replication of results by testing theories and refinement is not applicable due to the lack of data to answer the research question RQ2. For this reason, the relation-oriented explanation strategy based on statistical tests cannot be used here. In order to obtain an answer to the research question RQ2, a qualitative content analysis has to be conducted.

Qualitative research demands inductive thinking, a certain methodological openness and a flexible approach. Most frequently, the discovery of a new phenomenon in the qualitative research data is linked to the development of theory (Flick et al. 2004, p. 8). Furthermore, qualitative research is characterized by a spectrum of methods that are composed of different approaches. These different approaches to qualitative research are displayed in the following table:

Table 2: Research Perspectives in Qualitative Research (Flick et al. 2004, p. 6)

	Research perspecitve		
Characteristics	Modes of access to subjective viewpoints	Description of process of creation	Hermeneutic analysis of underlying structures
Theoretical position	Symbolic interactionism     Phenomenology	Ethnomethodology     Constructivism	Psychoanalysis     Genetic structuralism
Methods of data collection	Semistructured interviews     Narrative interviews	<ul> <li>Focus groups ethnography</li> <li>Participant observation</li> <li>Recording of interactions</li> <li>Collection of documents</li> </ul>	Recording of interactions     Photography     Films
Methods of interpretation	Theoretical coding Qualitative content analysis Narrative analysis Hermeneutic procedures	Conversation analysis     Decourse analysis     Genre analysis     Document analysis	Objective hermeneutics     Deep structure hermeneutics     Hermeneutic sociology of knowledge
Fields of application	Biographical research     Analysis of everday knowledge	Analysis of life-works and organizations     Evaluation research     Cultural studies	Family research     Biographical research     Generation research     Gender research

The above table presents different options of how to conduct qualitative research. Yet, to answer the research question RQ2 not every in the table described mode of access to viewpoints, process of creation and underlying structure is suitable to carry out the qualitative research.

From a theoretical position, it is the objective of the present research to understand the phenomenon of interest. The research is not conducted in the fields of ethnomethodology, psychoanalysis or genetic structuralism. Firstly, the collection of data is considered as appropriate to obtain an answer to RQ2. In order to interpret the gathered data, a qualitative content analysis will provide insights on the fields of relevance for the internal audit discipline to be effective. This will form the basis for the later conduction of interviews (see chapter 4). The combination of archived data and interviews reduces possible distortions and consequently bias.

In order to cover all methodological approaches, an analysis of mixed-methods is undertaken to evaluate strategic fit of the method. Today, there are different types of triangulation discussed in the methodological literature (Patton 1990; Denzin 1978; Yin 2003; quoted by Bitsch 2005, p. 84). The major challenge of a mixed-method design is the "mixing of paradigms" as numerical data and texts

are combined (Greene 2007; Hesse-Biber 2019; Lieber and Weisner; quoted by Gubrium et al. 2012, p. 193).

A mixed-method is often applied by triangulating quantitative and qualitative data. Triangulation is an analysis technique that make use of different data collection methods (Nightingale 2020). However, the triangulation of qualitative and quantitative data is not considered applicable due to the lack of sources to answer the questions of interest (RQ2 and RQ3). In the literature, there is a discussion taking place that the purpose of triangulation does not necessarily require cross-validation of data with a different nature. In the present case, the data has to be gathered, developed and analyzed first to provide a basis to be in the position to answer the question of interest. Moreover, scientific relevant questions to study the research question RQ3 require a data basis which is set-up and developed when conducting research on the RQ2.

The literature considers the application of two methods that share the same paradigm – both qualitative or quantitative - also as a mixed-method approach (Gubrium et al. 2012, p. 202). Yet, this only applies when the data is of a different level of measurement (micro-macro) or of a different type. The objective is to capture different dimensions of the phenomenon.

In this light, the combination of qualitative data gathered from the literature and from interviews is considered as an applicable and appropriate mixed-method design as they are supplement types.

The strategic fit to make use of a qualitative data focused mixed-method design is given to firstly answer the research question RQ2 and in the course of the analysis also the research question RQ3 in chapter four.

# 3.1.2 Analyzing: Method

The analyzing method is central to discover useful information of which conclusions can be drawn related to the research question RQ2. It is the process of retrieving data to focus on knowledge discovery by dividing it in separate components for further individual examination.

The "Grounded Theory" is the most commonly found methodology to analyze data. The literature declares the "Grounded Theory" as the master metaphor of qualitative research (Bitsch 2005, p. 77). After this, it is increasingly

used sociology, social anthropology, rural sociology, psychology, educational research, marketing and consumer research, management and organizational research, and other social sciences and is expanding into further research areas for the purpose of building theory to explain a phenomenon (p. 80). However, it is hardly existent in the business management context and not existent to develop a conceptual understanding in conjunction with the internal audit function and issues surrounding the discipline. Yet, it has not been adopted to develop an understanding of the internal audit discipline and issues surrounding it.

In the following, it is subsumed how "Grounded Theory" can be applied to answer the research question. Hereafter, "Grounded Theory" is a data collection method to gather data. It relies on three data gathering techniques: analysis of (archived) information, interviews and observation (Marshall and Rossmann 2014; Shah and Corley 2006). Latter technique is not used in the field of management and therefore considered as not appropriate to answer the research question RQ2. The analysis of (archived) information will form the basis for the complementing interview technique. The interviews are considered as a tandem to the afore conducted analysis of the (archived) information. Moreover, it is often made use of so-called archival data in combination with observations and interviews (Shah and Corley 2006). Here, the goal is to better understand the phenomenon and the context in which it occurs.

Thus, in the following the "Grounded Theory" will be presented referring to the analysis of (archived) data, which will be the basis to conduct interviews (see chapter 4). This method, developed by Anselm Strauss and Juliet Corbin (Bryant and Charmaz 2007; Morse 2009; Yamazaki et al. 2009; quoted by Gubrium et al. 2012, p. 347) aims to carry out evaluations by means of analysis until no new insights can be gained from the data and a theory can be derived from it.

The "Grounded Theory" method supports the development of a fundamental qualitative research level to analyze relevant data. Primarily, it is a data analysis with implications to collect data that have remained unaddressed. It is used to construct a theoretical analysis from the gathered data through implicit guidelines and explicit analysis strategies.

The research question can be answered by inductively making use of the "Grounded Theory" in the beginning, organizing the qualitative data in a comparative way, followed by an iterative data collection and conclusively leading

to an interactive construction of theory. The data collection and its analysis are independent as the iterative process proceeds. In order to answer the research question RQ2 "What are fields of relevance for internal audit in order for the discipline to be effective?" the "Grounded Theory" method is applied to systematically collect and evaluate the data.

## 3.1.3 Handling: Data

The handling of data refers to the way how the collected data is further used, structured, and processed to develop an answer to the research question RQ2. The required information is of qualitative nature as the research data is available in form of literature which is referred to as archived information.

In the course of the further examination, a qualitative content analysis is considered as suitable, which has been already highlighted in the previous chapter. The corresponding qualitative content analysis is a text analysis method that has its origins in the field of empirical social research (Kuckartz 2019, p. 183). It is used to order and structure content and identify the fields of relevance. The method was primarily developed by Philipp Mayring and is a text analysis method in which "Grounded Theory" is very much represented. Philipp Mayring is considered as one of the main representatives of the method of qualitative content analysis.

According to the "Grounded Theory" approach, data is openly coded. Juliet Corbin declared the corresponding phase as a brainstorming phase in order to make use of the entire potentials and contained possibilities of the archived information (Corbin and Strauss 2008, p. 160). In the following, two figures are subsequentially presented which are linking integrated explanations of how to carry out a content analysis:

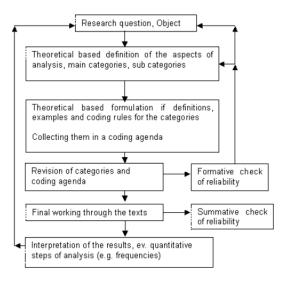


Figure 20: Step Model of Deductive Category Application (Mayring 2000, p. 14)

Conclusively, the following figure supplements the previous presented figure and visualize how to proceed:

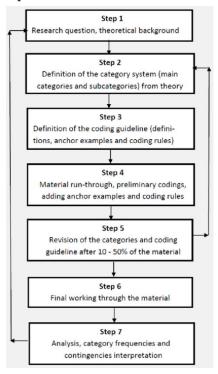


Figure 21: Description of Steps to Take (Mayring 2014, p. 80)

The single steps to carry out a qualitative content analysis are broken down into tasks. As previously stated (see chapter 3.1.1), the research question forms the starting point of the step model (step 1). In terms of contents, it is the objective to create an understanding of the phenomenon of interest expressed in the research question RQ2 by making use of codes that sum up a category system (step 2). The development of a category system is a process and nothing that happens before an analysis. Conclusively, a theoretically based definition takes place which results in the creation of main categories and subcategories.

There is a back and forward as the entire model follows an intuitive process that cannot be reduced to mechanical steps. In the course of the investigation, the content of the codes and the resulting categories become increasingly narrow.

In the further analysis, the collected data is broken apart and blocks of raw data serve as elaborating concepts to develop a coding system (Corbin and Strauss 2008, p. 195) (note: the coding system is named category system in the figure). The "Grounded Theory" coding involves a process consisting of at least two steps (Gubrium et al. 2012, p. 356):

- 1) open coding to initially make analytic decisions regarding the data, and
- 2) focused coding using the most frequent initial codes to organize and conceptualize the amount of data.

The collected data is first openly and then selectively coded. Hence, qualitative data requires a systematic organization by reallocating meaning and reviewing the category system. Thus, the descriptive qualitative data analysis is an iterative process with the aim of reclassifying codes into themes and thereby into categories. Hereafter, key steps are the creation of categories and the coding of the data (Kuckartz and Rädiker 2019). By this, code frequencies are determined. The phases require careful reflection in order to develop an effective category system that is compliant with the research question. The developed category system, the corresponding assumptions and the hypotheses regarding the relationships of the codes are independent results of the analysis process. In total, these analysis steps contribute to answer the research question.

As a result, an agenda of codes in form of a coding system is created. This step is followed by the definition of a coding guideline (step 3). This means that terms defined in the guideline are treated as codes. According to Philipp Mayring,

steps 3 and 4 are processes to carry out categorization. This phase operates in three stages which are provided below:

- 1) definition of the categories,
- 2) anchor samples and
- 3) coding rules.

Accordingly, the collection of data results in the analysis and refinement of main categories. Based on the definitions, examples for the established coding rules are gathered and attached with corresponding information to the coding agenda. The relevant coding agenda is derived from the research question RQ2 and has its origin in the literature study. As suggested by Philipp Mayring (2014)

"These structuring dimensions are then, as a rule, further subdivided, being resolved or split up into individual features or value. Subsequently, the dimensions and values are brought together to form a category system." (Mayring 2014, p. 95).

The categories require iterative revision in the course of the analysis to ensure their reliability. The terms found in the data in the form of so-called codes are classified into categories. After coding 10% to 50% of the material, a revision of the categories and coding guidelines is required as stated in step 5. This step is an iterative process to develop and validate the category system.

In step 6, it is worked through the material. When saturation is reached and the summative check allows appropriate conclusions to be drawn, no new knowledge is gained, and the final work to interpret the results takes place. Thus, the data are analyzed until a so-called category is saturated and no new information can be gathered for the constructed category system (Gubrium et al. 2012, p. 359). The contents of the categories increasingly concentrate in the course of the coding phase. Through theoretical sampling the categories are defined. This is considered as a prerequisite to connect the categories with one and another.

In practice, a line by line coding is conducted and the fields of relevance for the internal audit discipline to be practiced effectively are identified. Paraphrasing, generalization and reduction are applied to summarize the literature contents. The single sections are coded in form of tags and reviewed over time. Based on this step, an analysis of the category frequencies and interpretations is undertaken in the subsequent step 7.

Code frequencies result from the generated data basis. Based on this data, codes are configured to analyze the common occurrence of terms in a document. As a result of the qualitative content analysis, theory-building approaches can be derived thereof to identify the fields of relevance for the internal audit to be effective. The content analysis is characterized by the indirect relevance evaluation of text fragments, using a highly individualized analysis approach where no conscious selection of text codes is made.

The approach of Philipp Mayring to carry out a qualitative content analysis has been applied in various researches that can be related to the research question RQ2. In the following, a view examples of researches are listed:

- "The Generic Ecosystem and Innovation Patterns of the Digital Transformation in the Financial Industry" (Riasanow et al. 2018),
- "Exploring the association between content of internal audit disclosures and external audit fees: Evidence from Sweden" (Axén 2018), and
- "Compliance Incentives, Whistleblowing, and the Payment of Rewards for Information" (Teichmann and Falker 2020).

Conclusively, the answer to the research question RQ2 will be retrieved by conducting a qualitative content analysis. The insights gained in the qualitative content analysis are used to thereof derive starting points for effective internal audit's practice.

## 3.1.4 Supporting: Software

As there is a large amount of data to be analyzed, an analysis supporting tool is considered useful to conduct a qualitative content analysis.

For the operational activities, researchers often support the process the content analysis by making use of a so-called Qualitative Data Analysis (QDA) software. The most commonly found ones for category-based researches are MaxQDA, NVivo, Atlas.ti, CAQDAS.

The single software packages have their strengths and weaknesses but generally offer similar content. After testing the available demo versions, the researcher decided to work with the software provided by MaxQDA as it has been considered as the most user-friendly one.

In the following, the use of the software is generically described: With the aim of exploring the terms that occur in connection with internal audit, the data was processed with the support of the MaxQDA software and the document system it contains.

In order to analyze the terms mentioned in connection with internal audit, text segments were manually coded in the single documents. In the next step, the codes were transferred to a category system. The software in use automatically counts the code frequency in terms of how often the code is attached to text segments and the number of codings (Kuckartz 2010, p.11).

The software offers a code matrix browser which is very supportive to relate different aspects to the documents in order to keep track. The code matrix analysis involves coding and categorizing the data, with systematic searches to find usages of given keywords. The included matrix presents the frequency of codes across the collected qualitative data and where similar issues were discussed together.

### 3.2 UTILIZING CONTENT ANALYSIS

Published examples of qualitative data often do not adequately describe the process of the data investigation analysis and its design. It is often difficult to discern the development of the research and how the qualitative content analysis is conducted. Partially, it appears inconclusively how the so-called coding frames and codes are derived. Consequently, the consensus on analysis and its interpretation partly remains undescribed.

When applying the "Grounded Theory" in the present research, data is gathered on the basis of the relevant literature to obtain the corresponding information. The qualitative content analysis is conducted by applying Philipp Mayring's approach. The method demands a reviewing and refining process. Generally, qualitative data is coded by creating short labels that describe and distil the data by preserving their essence.

The evaluation consists of a theory-based categorization and the corresponding content analysis. This fulfils the criterion of deductive category definition (Mayring 2015, p. 85). The subsequent analysis process consists of deductive and inductive approaches which are outlined below and guide the course of the investigation process.

1) <u>Analyzing (literature):</u> reference is made to the existing data (literature) to set main and sub-categories which were gradually established;

2) <u>Using (code relationships with internal audit):</u> using the codes that were derived from a systematic analysis of the data.

The data analysis process follows the subsequent proceedings:

- 1) Organizing (data set): organizing the data set, importing the data and making decisions about transcribing text;
- 2) <u>Exploring (fields of relevance):</u> reading, viewing and initial coding;
- 3) <u>Deciding (excursus 3-LoD model):</u> which aspect of the research questions to focus on and which methods of analysis to apply;
- 4) <u>Theorizing (guided thinking):</u> coding, memorizing, dimensionalizing the data, and developing theory;
- 5) <u>Displaying (conceptual map of codes):</u> data with conceptual mapping.

The subchapters below are named according to Philipp Mayring's approach to carry out a qualitative content analysis in order to provide guidance and clarity in the course of the analysis.

# 3.2.1 Analyzing: Literature

It is the purpose to analyze the available data in form of literature to identify the fields of relevance for the internal audit discipline to be effective. Moreover, it the objective is to collect literature that reflects the subject field and to evaluate a range of different types of data sources.

The analysis of archived data follows the objective to select literature that contains rich information and contributes the most to answering the research question RQ2. The qualitative content analysis is applied as a methodology to systematically extract information from the available data. During the analysis process, selection of additional data takes place as new insights are gained on what is relevant and considered as typical for the research subject. In essence, there is a close relationship between the collection of data and the analysis of it (Bitsch 2005, p. 79). Both are intertwined and carried out in continuous alternation. The subsequent theory generation is based on the concepts and the categories which are developed out of the gathered data.

The data collection includes specialist articles in journal articles, books, web-based sources, and studies as well as regulatory requirements in German and English language. The language in which the documents are published does not play a role. The scope of the available data is large and fragmented. In terms of content, documents are examined that deal with regulatory requirements, tasks, responsibilities, and roles related to the internal audit discipline which form a prerequisite to practice internal audit within the 3-LoD. The background to the corresponding selection is that the internal audit function is embedded in the 3-LoD model in the financial industry. Thereby, the 3-LoD model helps to identify the processes and structures that enable the achievement of objectives with sound risk management and governance.

In core, the task of internal audit is to examine, review, and report on the aforementioned. As a result, the model illustrates the functionality and effectiveness of the control and monitoring systems in an organization and emphasizes, in particular, the independence of internal audit. Building upon the literature analysis, the single documents are analyzed word by word and line by line to identify code relationships with the key term "internal audit".

# 3.2.2 Using: Code Relationships with Internal Audit

The objective is to identify the use of the key term "internal audit" in conjunction with other code terms to thereof derive the fields of relevance for the internal audit discipline to be effective. The common understanding of the internal audit discipline is summarized within the conducted qualitative data codings. Conformingly to the "Grounded Theory", the data is firstly coded openly, in the next step axial and lastly selective (Strauss 1987; Strauss and Corbin 1990; quoted by Bitsch 2005, p. 79). During the early research analysis state, open coding refers to the identification and development of categories and further subcategories. Henceforth, the axial coding phase concentrates on the categories and subcategories in order to obtain interactions and cause-and-effect relationships. In the selective coding phase, the categories and subcategories are integrated to provide details on the context use of the key term "internal audit". In the following a representative research data set is presented:

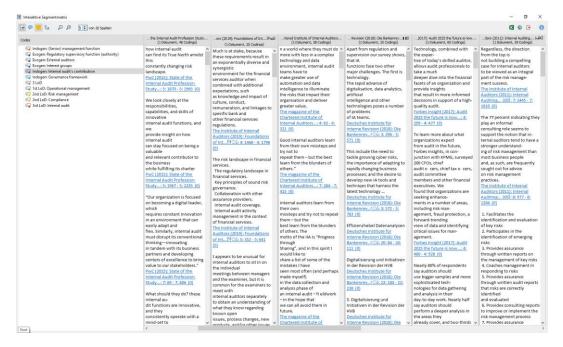


Figure 22: Coding Example for Internal Audit

The figure illustrates coded examples in form of text fragments in connection with the term "internal audit". The codes are captured right next to the text sections. In the content analysis, it turned out that the terms e.g. "internal audit", "internal auditor", "internal auditing", "third line of defense", "third line", and "internal supervision" are codes that are identified as a crucial concept term within the open coding phase.

Terms that appear in the same context as the above outlined key concept are coded line by line. As a result, different coded terms appear in individual lines and overlap in the sense of simultaneous mentions. From this, it can be concluded in which close or distant relationship the coded terms are related to the key term "internal audit". Based on the thematic framework, a coding system is established. The organization of the data set provides further insights on the collected data.

## 3.2.3 Organizing: Data Set

Organizing the data set is concerned with the identification of concepts and documents that relate to key code "internal audit" in accordance with the related themes. The goal is to thereof extract and evaluate information, derive findings, and generalize these across the data set. According to Krippendorff (2004, p. 113),

the researcher can answer the research question by analyzing all texts of a specific population e.g. for example of a given author's work, all newspaper issues within a particular period, all documents announced by a legal proceeding during a certain period.

The researcher has to ensure that there is no bias in the sampled texts to answer the research question. There are different applicable sampling methods ranging from random, systematic, stratified, cluster, snowball, relevance to varying probability sampling methods (Krippendorff 2004, pp. 114-115). Thus, the researcher has to make a choice to sample the information of interest accordingly. Therefore, the researcher adopts a sampling plan that includes a relevance sampling method within which each text has the same probability of being included in the content. Relevance sampling aims to select texts that contribute to answer the research question (p. 119).

Based on the relevance criteria, the literature focuses on the internal audit discipline and therewith related themes. A structured review of relevant archival information was conducted. Hereafter, the following input data was selected to conduct a qualitative content analysis: guidelines announced from regulatory supervision bodies, studies carried out by external auditing companies centering around the internal audit discipline, auditing standards and supervisory interpretations of representatives of the internal audit discipline by institutes like The Institute of Internal Auditors, and articles dealing with internal audit practices in ranked journals. The input data was announced or published between the years 2011 and 2019.

In total 20 documents were selected as entry data. These documents are composed of 10 to 200 pages. However, based on the number of pages no conclusion can be drawn about the number of codes.

When reviewing the current literature that center around qualitative content analysis, it becomes apparent that these are partially inconclusive about the single steps taken to achieve their results. In particular, the researchers do not state the number of codings, the process of refining and merging codes, carrying out reviews, and preserving the audit trail of the qualitative content analysis. The researchers have differing opinions on the number of codes which are to be chosen arbitrarily (Elliott 2018, p.2852). According to Elliott, who refers to figures that are gathered by Saldaña (2016), codes are to be grouped into five to seven major

concepts (Elliott 2018, p. 2852). In line with Saldaña's approach, Creswell (2015, p. 155) codes texts by making use of about 30 to 50 codes. Over time, redundant codes, that do not overlap, are reduced to 20 codes. The corresponding 20 codes are further broken down into five to seven major themes. These themes represent the findings of the qualitative report.

The bottom line is that there is no standardized or magic number to achieve a representative data set (Saldaña 2016, p. 25). Moreover, it is outlined that the choice of codes is a personal choice.

In a significant amount of time, the researcher manually coded 3.879 text segments to ensure the reliability and validity of the coded content. The researcher grouped these into nine major code concepts. A saturation of codes took place after half of the content was coded. Finally, the codings are selected as input data for the content analysis. For validation purposes, the selected segments are constantly reviewed in the course of the analysis to ensure that the code data is compliant to answer the research question RQ2.

At first glance, the collected data set made a very random impression for answering the second research question RQ2. Hence, the data is organized in a more and more logical and useful way over time. In the course of the coding phase, the focus on specific aspects and terms further narrowed. In the following steps, theory was developed on the basis of dimensionalizing the data. It appears that internal audit interacts with fields of relevance that are further considered as endogenous and exogenous actors representing interest groups and themes. Endogenous actors are placed within the financial institution and exogenous actors are considered to be outside the financial institution. These interest groups and themes stand in a relationship with the internal audit discipline which is embedded in the 3-LoD model. The terms are further analyzed in the context of the qualitative content analysis.

The segments interacting with the term "internal audit" are further interpreted by creating subcategories for the codes to address the corresponding issues related to the relevant terminology. Key words (sub-concepts) are selected for the data construct. The retained codes are organized as emerging sub-categories based on their commonness. Furthermore, the codes are related in the course of the analysis to other key concepts in form of a code relationship.

Within the scope of the qualitative content analysis, the most frequently coded terms are identified. A selection based on the inclusion and exclusion of codes is conducted. The frequency of a code allows drawing conclusions on the distribution of the single codes. The extracted codes are clustered in a category system and are constantly validated in the data material. The codings of all documents display the frequency of codes within the code system. In the next step, the code systems are consolidated through the merge of similar codes by creating a hierarchical code system of categories for future coding. From the analysis, it is evident that there are different fields of relevance for the internal audit discipline. The obtained frequency distribution is shown in the following figure below:

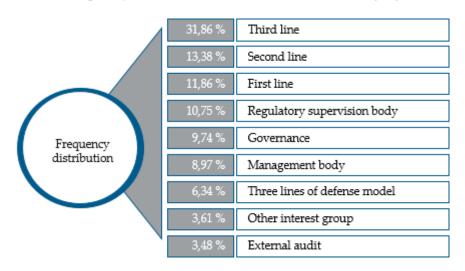


Figure 23: Code Frequencies

The frequency distribution presented in the figure contains endogenous and exogenous actors, and topics that are treated as interest groups and topics. The first three terms are considered as the financial institution's endogenous actors in the 3-LoD model. Here, the individual lines are to be understood as synonyms, behind which coded terms such as front office, back office, compliance, risk controlling, and internal audit are hidden. In the 3-LoD model, the regulatory supervision body and external audit form complementary external lines. The term governance stands for corporate governance, risk culture, and related terms that form an internal regulatory framework for the management body of a financial institution. Terms such as senior management and executive board are to be subsumed under management body. Furthermore, the 3-LoD model as a term is named as a

component in the analyzed segments. The other interest groups are characterized by representatives from outside the financial institution which appear as supervisory board members, investors, or journalists.

As a result of the frequency distribution, the relevance of the third line in the form of internal audit, and the subsequent second and first lines becomes apparent. The descending frequency distribution allows the conclusion to be drawn that the third line is responsible for monitoring the governance, quality and effectiveness of the activities of the business units to which the first and second line of defense belong, and therefore has the most frequent distribution among all documents.

It can be concluded from the further distribution of terms that prudential requirements of the regulatory supervision body play an essential role. Governance is considered to have a unifying role in this context. The management body is the designer of governance and the recipient and sender of information to the individual lines. As the "tone at the top", the management body must deal with the risk profile and governance on an ongoing basis and has to promote, monitor, and evaluate the risk culture regarding the financial stability of the institution.

The 3-LoD model itself is less represented in the texts analyzed than its actors. A possible reason for this finding is that the introduction of the terminology 3-LoD took place quite recent. External audit mainly plays a role in the context of its annual financial statement activities. The other interest groups are less frequently presented due to their heterogeneity. The results of the frequency distribution are included in the further considerations and form the basis for the formulation of starting points for the internal audit discipline to be effective.

## 3.2.4 Exploring: Fields of Relevance

The chapter with its subchapters explores the single identified fields of relevance that relate to the internal audit discipline. From the analysis, it is evident that there are different fields of relevance for the internal audit discipline. Its effectiveness is dependent on the extent of the different interacting fields which are subsequently named actors and interest groups. These actors that have a relationship with the key code and are coded according to the "Grounded Theory" by Anselm Strauss and Juliet Corbin.

There is a detectable relationship of the codes that are to be understood as endogenous and exogenous contextual actors. These are interpreted as interest groups and topics that maintain a relationship with the internal audit discipline. Endogenous actors are code characters that appear within the financial institution. In distinction, the exogenous actors are placed outside the financial institution and have a relation to the key code. The so-called endogenous and exogenous actors are one cell-objects composed of one string and one word. These contextual actors represent single pieces of information for further analysis within the investigation. They serve as memory stores for particular type of information and code conjunctions with the key code. In the course of the following analysis, the insights gained in the qualitative content analysis are used to derive starting points for effective internal audit's practice from.

## 3.2.4.1 Exogenous Interest Groups

The exogenous interest groups are positioned outside the financial institution and do not maintain a relationship with actors inside. The results of the qualitative content analysis confirm that an effectively perceived internal audit discipline depends on various interacting exogenous actors. Based on the identified interest groups and areas, the individual terms are examined more closely. Henceforth, it becomes apparent that certain terms occur with varying frequency in connection with the individual lines as displayed in the figure beneath:

	Exogen	Segment	%
Third line	Regulatory supervision body	223	35,45
	External audit	101	16,06
	Other interest groups	90	14,31
Second line	Regulatory supervision body	94	14,94
	Other interest groups	23	3,66
	External audit	5	0,79
First line	Regulatory supervision body	66	10,49
	Other interest groups	17	2,70
	External audit	10	1,59

Figure 24: Exogenous Code Relationships of Coded Terms

The figure visualizes which codes overlap how often in a selection of documents. The developed code relationship enables the analysis of associated codes. The code relationship analysis makes terms transparent that are in closer or farther relation to the coded terminology. As a result, the exogenous perception of the third line, internal audit, is essentially shaped by the regulatory supervision body, external audit, and, to a lesser extent, of other interest groups.

The term regulatory supervision body (35,45%) has a close conceptual relationship with internal audit. A concluding reason for the corresponding relationship is that the regulatory supervision body has high expectations regarding the duties and responsibilities of how to practice internal audit as a component of a financial institution's risk management. As the regulating and controlling unit, the regulatory supervision body represents an actor influencing the perception of the discipline of internal audit.

Internal audit is also in a conceptual relationship with the external audit function (16,06%). There are also other interest groups that are labelled accordingly. This means that although internal audit is an exclusive internal activity, its functionality is also of external interest to, for example, the supervisory board, investors, and journalists. They pursue internal audit activities as a separate field of interest and are considered as heterogenous group.

The regulatory supervision body sets the standard for internal audit practice and is simultaneously examined in a cycle by external audit regarding its functionality. Investors, journalists, and the Supervisory Board, among others, are interested in these results.

In order to establish a relationship to the discipline of internal audit with the 3-LoD model, the same pairs of terms were used for the first and second line. Both lines mentioned are in a conceptual relationship with the regulatory supervision body, which clearly shows that the requirements of the regulatory supervision body play a role in the financial institution's internal standards. The work of these lines also receives attention from other interest groups. External audit plays a subordinate role and, in a comparison of the lines, seems to be of greatest interest only to the internal audit department.

The thematically relation of the individual documents and the common appearance of coded terms are examined by means of a configuration. The goal is

to understand which terms are associated with internal audit as the third line of defense in order to develop starting points for the perception of the discipline to be practiced effectively. The analysis of the exogenous interest groups results in the following code configuration:

Third line	Regulat. sup. body	External audit	Other interest groups	Segment	%
-				852	56,91
-				196	13,09
	-			179	11,96
-		-		82	5,48
-			-	80	5,34
			-	38	2,54
		-		25	1,67
-		-		18	1,20
				Below 10	Below 1
				1.497	100

Figure 25: Simple Code Segments Configuration for Exogenous Actors

The analysis allows to identify suitable code combinations to carry out further analyses. The configuration of the found codes enables the examination of the co-occurrence of codes in segment of within a document or segment (MaxQDA 2020). The segment column indicates how often the respective combination of terms occurs within an analyzed document. The percentage column shows the corresponding relative frequency. The terms that are mentioned in conjunction with another exogenous term are subject of the analysis. However, terms that are mentioned by themselves without generating a context with another exogenous term are not of interest for the current evaluation.

In the dedicated analysis at document level, it becomes apparent for actors outside the financial institution that in 13,09% of the documents the terms regulatory supervision body (5,48% external audit and 5,34% other interest groups) and internal audit are mentioned together. Nevertheless, none of the analysed documents mentions all external interest groups.

The configuration of exogenous terms allows the conclusion that most of the documents concentrate on two coded terms and thus exhibit a very subject-specific thematic characteristic. This allows the interpretation that in the environment of internal audit, the focus is on the evaluation of a topic in a document. Conversely, this means that little attention is paid to an examination of causal relationships in connection with internal audit practice.

In the further course of the analysis, there is no significant attention paid to the exogeneous actors as these are interest groups that are located outside the financial institution. As the perception of exogenous interest groups cannot be directly influenced through internal activities of internal audit, there is no specific focus laid on them when developing the interview questions to conduct the interview study (see chapter 4). However, as the exogenous interest groups play a role in the internal institutional atmosphere, they are referenced in the context of the excursus on the 3-LoD model and in the interviews. An efficiently practiced internal audit discipline within the financial institution results in an efficiently perceived internal audit department by the actors placed outside the financial institution. Conclusively, there is a causal relationship between the endogenous and the exogenous actors.

Predominantly, it is of interest to obtain starting points for internal audit activities - which are executed within the financial institution - that contribute to the perception of effectiveness. The corresponding analysis is carried out in the following subchapter.

### 3.2.4.2 Endogenous Interest Groups

The endogenous actors maintain a relationship with the key code "internal audit". This means that the key code correlates with actors inside the financial institution. Thus, the perception of the effectiveness of the key code "internal audit" is determined within the financial institution. Endogenous actors are considered as opposite factors to the exogenous actors.

Conclusive to the exogenous interest groups, the results of the qualitative content analysis also confirm that the perception of the effectiveness of the internal audit discipline depends on several interacting endogenous actors. In the following, the identified interest groups and areas are examined more closely.

	Endogen	Segment	%
Third line	Governance	188	28,40
	Management body	174	26,28
Second line	Management body	81	12,24
	Governance	63	9,52
First line	Governance	82	12,39
	Management body	74	11,18

Figure 26: Endogenous Code Relationships of Coded Terms

As shown in the above figure, there are detectable code relationships between the internal audit discipline and one endogenous interest group, and one corresponding topic of interest, which are composed of the management body and internal governance. The figure highlights the interrelated code relationships. Conformingly, the endogenous perception of the internal audit discipline is in essence shaped by the management body and framed by internal governance.

The above presented code relationships show that the term governance (28.40%) is an endogenous interest topic. This allows the conclusion to be drawn, that internal regulations have the greatest influence on the perception of internal audit alongside with the management body (26,28%). In proportion to the size, the numbers express - segments and % - that both endogenous actors are the most relevant for the third line. Thus, it can be stated that governance regulations are increasingly moving into the focus of internal audit activities. In comparison, the management body has the greatest important for internal audit. Conclusively, the findings from the conducted qualitative content analysis suggest that beneficial effects of internal audit mainly arise from the interaction with the management body and the financial institution's internal governance framework.

The same pairs of terms were used for the first and second line. Both mentioned lines maintain a conceptual relationship with the management body and internal governance. The so-called second line shows a weaker relationship with the financial institution's internal terms; management body (12,24%) and governance (9,52%). This finding allows the conclusion to be drawn that the typical monitoring and steering tasks of the second line focus more on reporting to the management body and thus governance appears to be slightly less relevant. The first line shows a comparable distribution with reversed pairs of coded terms. Governance (12,39%) appears to be slightly more important than the management body (11,18%), although these figures almost form a union. The identified conceptual relationships of the first and second lines are taken into account in the further considerations of the 3-LoD model.

Third line	Governance	Management body	Segment	%
-			987	57,83
-	-		165	10,64
-		-	151	9,74
	-		140	9,03
		-	125	8,06
	-	-	50	3,22
-	-	-	23	1,48
			1.551	100,00

Figure 27: Simple Code Segments Configuration for Endogenous Actors

Congruent to the previous analysis of the exogenous actors, a simple code segment configuration is carried out for the endogenous actors. This analysis provides more information regarding the links between the coded segments.

In the following, the terms that are mentioned in conjunction with another endogenous coded term are further evaluated in order to derive knowledge generating information from it. The objective is to examine relationships, terms that are dealt with by themselves are not of interest for the present analysis and are not further addressed.

From the analysis of the pairs of terms shown in the above table, the terms governance in connection with internal audit are evidently mentioned in 10,64% of the documents. The words internal audit and management body are mentioned within a document with a share of 9,74%.

3,22% of the analyzed documents just deals with the relation between the management body and governance, so that no knowledge regarding internal audit can be derived from this fact. Only 1,48% of the documents deal with the entire analyzed endogenous actors.

The data allows the conclusion that more will be written in the future about the interaction of the management body, governance and internal audit than it is currently the case.

From the analysis, it is evident that there are different fields of relevance for the internal audit discipline. Its effectiveness is dependent on the extent of the different intersecting actors. After this, the perception of internal audit is shaped by the established governance and management body of a financial institution. These endogenous actors must therefore be interpreted as sources of influence on the discipline of internal audit and its perceived effectiveness. At the same time, internal audit supports the financial institution in achieving its objectives by using a systematic and targeted approach to assess the effectiveness and appropriateness of risk management, controls, and monitoring processes, and to help improve them. In order to deliver effective activities to the financial institution, an integrated approach of the internal audit activities is a prerequisite.

Conform to the findings regarding the exogenous interest groups, the literature is very subject-specific. Accordingly, this allows to conclude that an examination of causal relationships in connection with internal audit practice is currently rare. The configuration of the endogenous terms allows the conclusion that the analyzed documents in the context of internal audit concentrate on two coded terms: governance and management body.

The finding on the correlation of internal audit and the management body is to be explained with the need for institutional assurance. It is the core function of internal audit to give independent advice to the management body in terms of appropriate risk management and with regard to the improvement of business operations. It is internal audit's task to support the management body in unveiling

and controlling key risks. Moreover, this results in the assurance of an effective and appropriate internal control system. Accordingly, the management body of a financial institution can obtain an actual process-independent and therefore neutral perspective from internal audit which reports on the risk situation without conflicts of interest. Thus, internal audit contributes to the avoidance of critical developments and events within a financial institution. Hence, internal audit plays an integral part in supporting the management body to reduce bias by promoting an objective view on deep-rooted trustworthy decision's that are to be taken by the management body in terms of strategy, business and related issues. The findings on the relationship between internal audit and the management body allow to conclude that an effectively perceived internal audit discipline is shifting from a detective to a preventive perception.

Every financial institution has to define responsibilities in accordance with its need of control, risk awareness and governance. In order to assess the coded term governance and its impact on the perception of effectiveness of internal audit as well, conclusions are drawn in the following. There is a relationship resulting from the code segment configuration that allows the conclusion to be drawn that the effectiveness of internal audit is related to governance. This is in line with Decaux who found that internal audit is involved in governance related assurance services (2015, p. 8) While internal audit has the task to assess the established internal governance it is also a stakeholder and thereby an integral part of the institutional governance.

Governance provides structure to the achievement of the financial institution's objectives. Internal audit contributes to the corresponding achievement by assessing whether incentives are set appropriately throughout the single lines of defense. In the context of governance, the task of internal audit is to ensure that an appropriate risk management including controls is in place to address the financial institution's key risks. Thus, the quality of the established internal regulations has an impact on the perceived effectiveness of internal audit. Conclusively, an implemented good internal governance can be associated with the perception of an effective internal audit department.

To wrap up the findings, internal audit is to be considered as the eyes and ears of the management body and plays a crucial role in ensuring good internal governance. In other words, by providing assurance to the management body on

the implemented controls to address risks and the established internal governance, the internal audit function is perceived as effective by the endogenous interest group and topic. The results echo what Eulerich et al. (2013) stated: The financial institution's mission has to relate to the core competencies of internal audit, its scope of work, and mission to enfold effectiveness. These findings are taken into account to develop scientific relevant interview questions and the subsequent interview study (see chapter 4).

## 3.2.5 Deciding: Excursus 3-LoD Model

The present chapter is a subject-related addition to the afore analyzed exogenous and endogenous interest groups and topic. The 3-LoD model considers the financial institution's set-up in which internal audit is involved. Herein, it is dealt with the 3-LoD model in greater detail in which internal audit maintains its independence and at the same time is an essential part of it. It is the objective to compare the entire construct of the 3-LoD model players to then decide to draw conclusions on the role of internal audit.

In order to obtain a deeper understanding of the internal audit discipline and construct within it acts, the terms i.e. "Three Lines of Defense", "3-LoD", "TloD", "Three Lines model" are considered as representatives for the here analyzed 3-LoD model. The coded terms represent entry codes for the database. With the use of the Code-Relations-Browser in MaxQDA, the codes are visualized by displaying how often they overlap with the code "3-LoD model" in a selection of documents. Only code overlaps are shown, i.e. the two codes must both have been encoded on the same segment and overlap there.

The figure below is structured as follows: Codes form the columns and the rows. The symbols on the individual nodes show how many segments are coded with the code of the line and the code of the column (Kuckartz and Rädiker 2019, p. 157). The larger the symbol, the more segments exist. Moreover, the larger the symbol in the corresponding cell, the more overlaps are present in all documents. The codes associated with the 3-LoD model are outlined in the figure.

Codesystem	Three lines of defense model	Sum
Three lines of defense model		0
First line		82
Second line		64
Third line		86
Management body	-	42
Governance	-	38
Regulatory supervision body	•	17
Other interest groups		8
External auditor		11
Sum	348	348

Figure 28: Code Relations with the 3-LoD Model

The alignment of the codes that are mentioned in connection of the 3-LoD model are put into context. From internal audit's perspective an adequate collaboration within the 3-LoD model is required while maintaining the independence of internal audit at the same time to achieve the desired effectiveness. It becomes evident that the key code "internal audit" which appears as the third line shares the most links in form of relationships with the 3-LoD model. The key code relationship is closely followed by the first line. With some distance, the second line takes the third place. These code relations reveal that there is a close link between the single lines and that cooperation can be derived from it. The other codes can be disregarded as the level of distinctiveness appears comparably low. This is to be explained by the fact that the other codes are not part of the model.

In the early years of the 3-LoD model, other words such as "operational management", "risk management" or "compliance" have been used which explains the low presence of the 3-LoD code. Thus, it is of interest to capture these terms by solely focusing on these in conjunction with the third line. In order to further drill down the code relationships with internal audit, the code system was

reassembled by focusing on the first and second line. The key code "internal audit" which is of utmost interest is highlighted accordingly. The analysis in the figure below concludes where two or more codes are overlapping and collide.

Codesystem	First line	Second line	Sum
Three lines of defense model	-		146
First line			170
Second line			170
Third line			402
Management body	-	-	155
Governance	-	-	145
Regulatory supervision body	-		160
Other interest groups	•		40
External auditor			15
Sum	698	705	1.403

Figure 29: 3-LoD Model Code Relationships of the Lines

The most overlapping lines are the first, second and the third with a share of 56% in the overall analyzed documents. This findings emphasis that the lines are on the one hand subject to internal audit practices, and on the other hand it is likely that a collaboration takes place among the single lines. Latter will be subject to the interview study as the numbers do not provide proof on the assumption. This is to be considered as a potential starting point of internal audit practices to be perceived as effective.

Congruent to the above code relationship analysis, the endogenous relations are evaluated in combination with the entire coded terms. Analog, the found endogenous code relations are displayed in form of square symbols in the displayed figure below.

Codesystem	Management body	Governance	Sum
Three lines of defense model	-	-	80
First line			156
Second line			144
Third line			362
Management body		-	73
Governance	-		73
Regulatory supervision body			135
Other interest groups	•		63
External auditor			23
Sum	555	554	1.109

Figure 30: Endogenous Code Relationships in Combination with all Codes

Predominantly, the endogenous constructs appearing as the management body and governance are of interest to the single lines. This is underlined by the corresponding much greater symbol sizes compared to the other coded terms. The third line has the largest squares and conclusively has the most overlapping codes, and as a result the furthermost intensive relationship with the management body and governance. The corresponding finding is consistent to the analysis of the endogenous interest groups in conjunction with the internal audit discipline which is explained in the subchapter 3.2.4.2..

When it comes to exogenous interest groups that maintain a relationship with the endogenous actors, the relation between the regulatory supervision body and the single lines is more distinct in comparison to the other exogenous interest groups. The same applies to the management body. Apparently, the course lies in the supervisory frameworks that demand a collaboration of these actors. An explainable fact here for is that the European Banking Authority has published a supervisory framework in the form of guidelines for internal governance (European Banking Authority 2017, p. 8). According to these guidelines, an financial institution must define a so-called internal governance for an effective

implementation of regulatory requirements, in which the risk profile must be in line with the business model of the institution.

The corresponding guidelines are indirectly addressed to the management body. It is the management body that has to guide the financial institution's structure, formulate its limitations and guide its evolution (p. 29). Furthermore, a culture must be developed and maintained which encourages a positive attitude towards compliance and risk control within the financial institution, the establishment of stable, and comprehensive internal control system (p. 34).

In summary, internal audit shares the most relationships with the 3-LoD model. There is a close link between the single lines which allows the conclusion that cooperation can be derived from it. The endogenous constructs - management body and governance – are of the utmost interest to the single lines. Finally, coordination among the single lines fosters efficiency and effectiveness and has an effect on the perception of internal audit. A knowledge sharing environment has to be established to inform and assist every single line to accomplish their roles efficiently. This is to be considered as a starting point for the internal audit discipline to be perceived as effective.

## 3.2.6 Theorizing: Guided Thinking

The above analyses contribute to theory-building as it is more accurately in developing guided thinking. Based on the previous qualitative research, it is to be believed that internal audit is in a code relationship with endogenous and exogenous interest groups, i.e. presumably through the creation of institutional value by practicing internal audit activities and the achievement of institutional objectives. Within the qualitative content analysis critical issues for internal audit are a forward-trending proposition to effectively practice the discipline.

Following the assumption made in chapter 3.2.4.1. that an efficiently practiced internal audit discipline within the financial institution results in an efficiently perceived internal audit department by the actors placed outside the financial, the focus has to be laid on the endogenous actors. Hence in the following, the endogenous interest group and topic are subject to a dedicated analysis with primary reference to the internal audit discipline as the third line of defense, since

this interest group and topic can be addressed directly and represents starting points for internal audit activities.

The potential to shape the perception of the internal audit discipline becomes apparent when concentrating on the endogenous code relations "management body" and "governance" in combination with the term "internal audit". These actors support the following theory-building sentence: "The effectiveness of internal audit is related to the internal governance.". Furthermore, the theory of the perception of an effective "internal audit" relates to the term "management body". This allows the conclusion that "The effectiveness of internal audit is dependent upon the management body (tone at the top)". Henceforth, the findings suggest that the terms "governance" and "management body" are to be interpreted as impacting sources on an effectively perceived internal audit discipline. Congruent to the above developed sentences, the same is applicable to the conceptual relationship between internal audit and the 3-LoD model. Hereafter, "The effectiveness of internal audit is interconnected to the set-up of the 3-LoD".

Based on the above constructed theory-building, possible starting points for internal auditing are:

- 1) Contribution measure: Internal audit supports the management body in achieving the financial institution's objectives by using a systematic and goal-oriented approach to assess the effectiveness and appropriateness of risk management, controls, management and monitoring processes, and to contribute to their improvement. For the discipline of internal audit to have a positive impact on its perception of effectiveness, its activities must be aligned with the business requirements or business and risk strategy for which internal governance is central. The core competencies of internal audit, its scope of work and its mandate must be related to the business purpose. In order to make it clear whether, when and to what extent internal audit covers the achievement of the financial institution's objectives from the perspective of the management body, a benchmark or measure must be developed for the individual institution.
- 2) Valuable activities: By evaluation and improvement of suitable internal activities within the financial institution, internal audit generates added value by providing independent results and relevant information for the management body, for the regulatory supervision body, and for the

external audit function. If the management body considers units or topics to be particularly relevant to the achievement of institutional objectives, the activities of internal audit should focus more on these units or topics and anchor them in the audit universe. By identifying deviations or potentials for improvement, internal audit can act as an auditor and advisor to the endogenous interest group and topic, and thus contribute to the achievement of the financial institution's objectives. In other words, the perception of the internal audit function is related to its ability to align itself with the financial institution's strategic goals.

By concentrating on internal audit activities and carrying out supporting activities in the sense of advisory activities on i.e. internal governance arrangements of a financial institution, internal audit has an influence on its perception of effectiveness. The analyzed data suggest that the inclusion of audit activities on internal governance regulations in the multi-year audit plan has an impact on the perception of the internal audit discipline. For internal audit to be able to make an overall statement on the appropriateness and effectiveness of a financial institution's governance arrangements, the development of questions on governance arrangements in the form of (standard) audit programs represents a starting point.

3) 3-LoD model: A prerequisite for influencing the perception of the effectiveness of the internal audit discipline is a cooperative approach within the 3-LoD model, while at the same time maintaining the independence of the internal audit function. The single lines of defense are the most frequently named terms. Thus, it is assumed that the lines correlate with the 3-LoD model. The lines have to fulfill their roles and responsibilities with regard to the internal control system in order to create an institutional context for communication between the individual lines. This requires the creation of an environment for an exchange of knowledge in which each line is informed and supported in fulfilling its tasks. Internal audit should therefore follow the activities of the first and second lines in their entirety in order to help shape its own perception within the 3-LoD model.

In conclusion, the perception of internal audit depends on its ability to serve its interest group and topic. From the data collected, three starting points for internal audit practice are developed for the discipline to be perceived as effective:

1) a measure of contribution, 2) valuable activities, 3) the ability to shape the perception of internal audit within the 3-LoD model. The generated theories are to be explored in an interview study on the future of the internal audit discipline. The aim is to hereby carve out the issues related to the internal stakeholder (management body) and topic (governance) that internal audit needs to serve so its activities are perceived as effective within the 3-LoD.

# 3.2.7 Displaying: Conceptual Map of Codes

Concept mapping is a way to bring together the identified key concepts to contribute to theory-building and to answer the second research question RQ2. Hereafter, the conceptual map represents the defined code categories and translates the findings via visualisation. A map of codes is supportive to display the coded terms, understand the concepts and their relationships between them. It must be noted, that there is no right or wrong way to construct a concept map. The concept maps are based on the researcher's understanding. Accordingly, the conceptual map represents a user-created illustration which highlights the selected endogenous and exogenous categories in relation to the key code "internal audit".

Each map displays all the results by illustrating the contextual actors that have an impact on the perceived effectiveness of the internal audit function. The codes are connected to their textual segment codes with the highest number of occurrences. In total, the maps picture the studied fields of relevance for the key code "internal audit".

The concept map underlines the findings obtained in the qualitative content analysis (see exogenous interest groups in chapter 3.2.4.1, endogenous interest group in chapter 3.2.4.2. and 3-LoD model in chapter 3.2.3.4.3). The following figure visualizes the conceptual dimensions that canter around the key code "internal audit". It is considered as picturing the big bang of the established code categories affecting the effectiveness perception of internal audit.

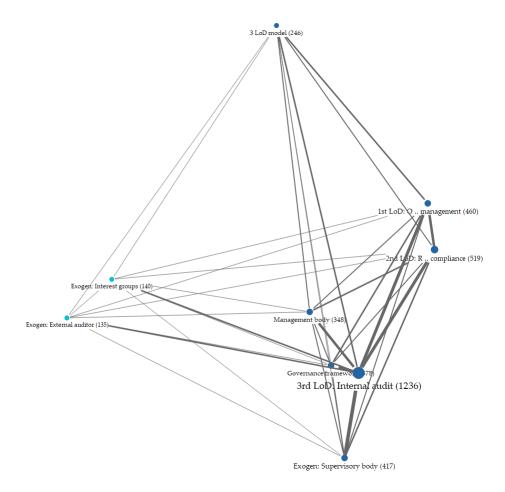


Figure 31: Conceptual Map Dimensions centering on the Term Internal Audit

In the above figure, the entire coded terms are brought together in a conceptual map deemed responsible for the perception of an effectively practiced internal audit discipline. The bigger the label, the closer is its relationship with the key code "internal audit". The numbers in brackets represent the frequency of the coded terms in the segments within the single analyzed documents. Thus, the relevance of the transition code criteria is indirectly determined via the frequency and order of occurrence based on the gathered data.

The regulatory supervision body (417) has the closest relation to internal audit compared to the other exogenous interest groups (external audit (135) and other interest groups (140)). The endogenous interest group and topic "management body (348)" and "governance (478)" maintain the closest relationship to internal audit (1236). In the figure, they are closely followed by the

first line (460) and second line (519) which have a slightly more distant relationship to internal audit. As stated in the excursus on the 3-LoD model (246), the name of the model has been established quite recent and is therefore not that present in the data. The relationship to the single lines embedded in the model is therefore the most distant. In order to visualize the codes that are referred to as the endogenous interest group and topic, a concept map on the findings is presented in the following figure.

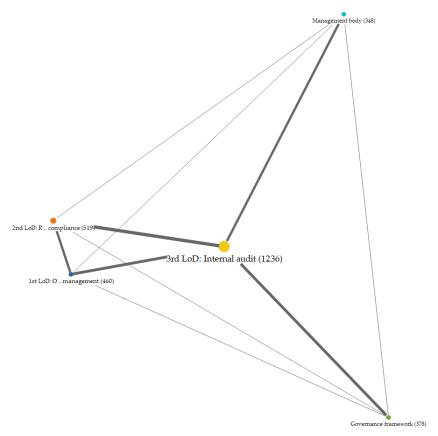


Figure 32: Complex Code Segment for Endogenous Interest Group

The figure shows how many segments have been found for the endogenous interest group and topic in the context of the internal audit discipline. This means for how many segments the set conditions apply. The relevance of the single lines is already described in the afore displayed figure and is therefore not mentioned again. The conceptual code relationship (see chapter 3.2.4.2) between the management body and internal audit pictures both as recipient and sender of information. The reason for this is the fact that independent advice on appropriate

risk management and business improvement is one of the core functions of internal audit. In this way, internal audit contributes to the prevention of critical developments and unintended events within a financial institution. As internal audit is a participant and at the same time a discipline that assesses the appropriateness of governance regulations, it also maintains a relationship with the coded term "governance". These visualized findings form starting points for internal audit activities (see chapter 3.2.6.). Subsequently, these conceptual relationships are evaluated in the interview study (see chapter 4) as they represent a primary reference to internal audit as the third line of defense.

The internal audit discipline is also exposed to exogenous interest groups even though its effectiveness origins through internal activities. In order to complete the concept maps, the exogenous relations with internal audit are visualized in the following figure:

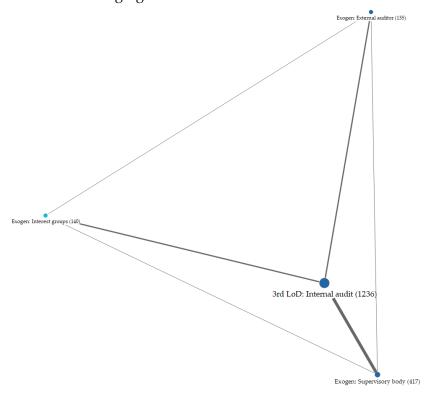


Figure 33: Complex Code Segment for Exogenous Interest Groups

Following the theory of heredity, an effectively practiced internal audit discipline within the financial institution results in an effectively perceived internal audit department by the actors placed outside the financial institution.

In summary, the perception of internal audit depends on its ability to serve its endogenous interest group and topic. Congruent to the findings from the conducted qualitative content analysis, the concept maps visualize that the perception of an effective internal audit discipline is primarily based on the extent of interaction with the management body and the financial institution's internal governance framework.

#### 3.3 CONSOLIDATING THE STATE OF THE ART OF INTERNAL AUDIT

The subsequent chapter consolidates the findings on the state of the art of the internal audit discipline.

The objective of chapter three is to explain the 1) research strategy by structurally 2) examining the question of interest (RQ2). Thereof the 3) method is analyzed in conjunction with the 4) handling of data. In addition, the usage of a 5) supporting software to conduct the qualitative content analysis is outlined. As many researches are inconclusive about the 6) utilization of a content analysis, the single steps are presented in detail: 7) analysis of the literature, 8) usage of code relationships in combination with the key term "internal audit", 9) organizing the data set, 10) exploring the fields of relevance, 11) its exogenous interest groups and correspondingly the 12) endogenous interest groups which results in the decision to conduct an 13) excursus on the 3-LoD model, 14) theorizing by developing guided thinking, and conclusively 15) displaying the conceptual map of codes.

- 4) Explaining research strategy: An extended review on the fields of relevance that impact the effectiveness of internal audit activities is not available at the time when this work was conducted. The objective is to choose the appropriate research approach and its best strategic fit to answer the research question RQ2. The appropriateness of the research strategy is explained by comparing the quantitative and qualitative research methodologies.
- 5) Examining question: The question of interest aims to discover variables and relationships to understand a complex process and thereby described the influences the research question deals with. The goal is to break down complex phenomena by translating this into an investigation methodology. From the analysis, it becomes evident how the fields of

- relevance for internal audit are to be obtained. As a result, a qualitative research is carried out to discover variables and relationships.
- 6) Analyzing method: The analyzing method is central to obtain information of which conclusions can be drawn related to the research question RQ2. The corresponding method analysis reflects the process of retrieving data to focus on knowledge discovery by dividing it in separate components for further individual examination. The most commonly found methodology is "Grounded Theory" which is analyzed in order to subsume how it can be applied to answer the research question.
- 7) Handling data: The handling of data refers to the way how the collected data is further used, structured and processed to obtain an answer to the research question RQ2. The required information is of qualitative nature as the research data is available in form of literature and archived information. As a result, a qualitative content analysis is considered as suitable in order to structure the content and identify the fields of relevance. The insights gained in the text analysis method are used to develop starting points for effective internal audit's practice.
- 8) <u>Supporting software:</u> As there is a large amount of data to be analyzed, an analysis supporting tool is considered useful to conduct a qualitative content analysis. Thus, the software MaxQDA is used for the process of carrying out a qualitative content analysis.
- 9) <u>Utilizing content analysis:</u> When applying the "Grounded Theory" in the present research, data is gathered on the basis of the relevant literature to obtain the corresponding information. In order to provide guidance and clarity, the subchapters that refer to the utilization of a content analysis are named according to Philipp Mayring's approach.
- 10) <u>Analyzing literature:</u> The purpose is to analyze the available data to identify the fields of relevance for the internal audit discipline to be effective. Moreover, literature data has to be collected that reflects the subject field.
- 11) <u>Using code relationships:</u> The objective is to identify the use of the key code "internal audit" in conjunction with other terms to thereof derive the fields of relevance for the internal audit discipline to be effective. The

common understanding of the internal audit discipline is summarized within the conducted qualitative data codings.

- 12) Organizing data: Organizing the data set is concerned with the identification of concepts and documents that relate to the key code "internal audit" in accordance with the related themes. The goal is to thereof extract and evaluate information, obtain findings and generalize these across the data set.
- 13) <u>Exploring fields:</u> From the analysis, it is evident that there are different fields of relevance that interact with the internal audit discipline. Its effectiveness is dependent on the extent of the different interacting fields which are subsequently named actors and interest groups.
- 14) Exogenous interest groups: The exogenous interest groups are positioned outside the financial institution and do not maintain a relationship with actors inside the financial institution. The results of the qualitative content analysis confirm that the perception of the effectiveness of the internal audit discipline depends on various interacting exogenous actors. The exogenous perception of the internal audit discipline is essentially shaped by the regulatory supervision body, external audit and, to a lesser extent, of other interest groups.
- 15) Endogenous interest groups: Endogenous actors are considered as opposite actors to the exogenous actors. Accordingly, the results of the qualitative content analysis also confirm that an effectively perceived internal audit discipline depends on several interacting endogenous actors. The findings from the conducted qualitative content analysis suggest that beneficial effects of internal audit mainly arise from the interaction with the management body and the financial institution's internal governance framework.
- 16) <u>Deciding 3-LoD model:</u> The excursus is a subject-related addition to the afore analyzed exogenous and endogenous interest groups and topic. Herein, the 3-Model is dealt with in greater detail in which internal audit maintains its independence. The objective is to compare the entire construct of the 3-LoD model players to then draw conclusions on the role of internal audit. Internal audit shares the most relationships with the 3-LoD model. There is a close link between the single lines which allows

the conclusion that cooperation can be derived from it. The endogenous constructs - management body and governance – are of utmost interest to the single lines. Finally, coordination among the single lines fosters efficiency and effectiveness and has an effect on the perception of internal audit.

- 17) Theorizing guided thinking: The conducted qualitative content analysis contributes to theory building as it is more accurately in developing guided thinking. Based on the previous qualitative research, it is believed that internal audit is in a code relationship with endogenous and exogenous interest groups, i.e. presumably through the creation of institutional value by practicing internal audit activities and the achievement of institutional objectives. From the data collected, three starting points for internal audit practice are developed for the discipline to be perceived as effective: 1) a measure of contribution, 2) valuable activities, 3) the ability to shape the perception of internal audit within the 3-LoD model.
- 18) Displaying map of codes: Concept mapping is a way to bring together the identified key concepts and to answer the second research question RQ2. Hereafter, the conceptual map represents the defined code categories and translates the findings via visualisation. In total, the maps picture the studied fields of relevance for internal audit. The maps illustrate the contextual actors that have an impact on the effectiveness of internal audit. The concept maps visualize that the perception of an effective internal audit discipline originates from the interaction with the management body and the financial institution's internal governance framework. The perceived effectiveness of the endogenous interest groups results in the conforming perception by the outside actors.

Based on the results presented in 1) to 15) and thereby consolidating the state of the art of the internal audit discipline, the research question RQ2 "What are fields of relevance for the internal audit discipline to be effective?" is answered in the following: The analysis concludes that the effectiveness of the internal audit discipline depends on various interacting actors which are considered as fields of relevance. These fields of relevance are placed inside as well as outside of a financial institution and are subsumed as endogenous and exogenous interest groups of the

internal audit discipline. The perception of an effectively practiced internal audit discipline depends on its ability to serve the corresponding interest groups. Hereafter, the endogenous perception is primarily shaped by internal governance, and the management body of a financial institution. The exogenous interest groups consist of the regulatory supervision body, external audit, and, to a lesser extent, of other interest groups (i.e. investors, journalists, and the Supervisory Board). Following the theory of heredity, an effectively practiced internal audit discipline within the financial institution results in an effectively perceived internal audit department by the actors outside the financial institution.

For the internal audit discipline to be effective, its activities need to be aligned to business requests and strategy or if it is the case to an unexpected occurrence of an event. In order to deliver effective activities to the financial institution, an integrated approach of the internal audit activities is a prerequisite.

To achieve the desired effectiveness, an adequate collaboration within the 3-LoD model is the basis. Three starting points for internal audit practice are developed for the discipline to be perceived as effective: 1) a measure of contribution, 2) valuable activities, 3) the ability to shape the perception of internal audit within the 3-LoD model. These corresponding points build the foundations to conduct an interview study in the subsequent chapter and to then proceed to the future state of internal audit.

#### 4 FUTURE STATE OF INTERNAL AUDIT

The chapter contributes to the development of the future state of the internal audit discipline. The findings of the pervious conducted qualitative research form the foundation to carry out interviews. The term occurrences in combination with the key term "internal audit" have been identified. Thereof starting points for effective internal audit practice are taken into account to formulate scientific relevant interview questions. The objective is to interview experts in order to validate, extend and deepen knowledge.

Congruent to the research on the state of the art of internal audit, the analysis of the expert interviews follows Philipp Mayring's approach of carrying out a qualitative content analysis. Hereafter, the chapters are named according to the approach and mirror the previous analysis proceedings. A comparison of the findings from the literature data and the interview data is undertaken. The interview data is further analyzed to gain an understanding on how internal audit needs to be practiced to generate value for the financial institution's interest groups. The corresponding results of the analysis enable conclusions to be drawn and to generate hypotheses as concept statements.

The results on the state of the art of internal audit are consolidated at the end of the chapter. A conclusion is given by putting the results into the context of this thesis by answering the research question RQ3 "How does internal audit need to be practiced to generate value for the institution's interest groups?".

#### 4.1 EXPLAINING METHODOLOGIES: INTERVIEW RESEARCH STRATEGY

As outlined in the chapter on the research question of interest in the previous section (see chapters 3.1.1 and 3.1.2), interviews are considered as a tandem to the afore conducted qualitative content analysis of the (archived) information at the macro level.

As a research method, the use of qualitative interviews was introduced by Glaser and Strauss in 1967 (Roberts 2020, p. 3186). Over the past decades, numerous books were published that focus on the use of interviews in qualitative research:

"The Ethnographic Interview" by Spradely (1979), "Research Interviewing: Context and Narrative" by Mishler (1986), "Interviewing" by Fielding" (2003). Gubrium et al. (2012) provide an overview of the methods in the book named "Handbook of interview research, the complexity of the craft" of which is continually made use in the thesis. Generally, the objective is to gain an understanding of the experience from a participant's perspective (Roberts 2020, p. 3187). The description of the experienced phenomena in the participant's words enables the researcher to understand a very specific detail.

The method to conduct interviews is a concentrated technique and considered as an efficient way to gather data than for instance quantitative surveys or participatory observations (Bogner et al. 2009, p. 2). The appropriateness to conduct interviews is underlined by the following citation:

"Individual interviews are the most commonly used data collection strategy in qualitative research." (Nunkoosing 2005; Sandelowski 2002; quoted by Gubrium at al. 2012, p. 244).

Commonly, the interviewer and the interviewee take on different roles. While the interviewer is the one asking questions, the interviewee takes on the role of answering the questions. Moreover, an interview is a sequence to gather information and is to be considered as a goal or task-orientated conversation (Gubrium et al. 2012, p. 231). There are different interview strategies and design available to gather different types of data. It is therefore examined which interview strategy is to be considered as appropriate to answer the research question RQ3 which is located at the micro level of the auditing function. Basically, interviews can be conducted in different ways: unstructured (Kvale 1996; Roulston 2010; Rubin and Rubin 1995), long (McCracken 1988), narrative (Kvale 2007) or openended (Johnson and Weller 2002). There are different interview methods that vary in their characteristics, approaches to set-up an interview, and the way questions are generated. An overview of the interview methods is given below:

Table 3: Excerpt of Interview Characteristics (Gubrium et al. 2012, p. 195)

	Type of interviews				
Characteristics	Unstructured (narrative) interviews	Guided interviews	Focus groups interviews	Semistructured interviews	Quantitative questionnaires (closed-ended)
Domain	Not known	Partially known	Partially known	Known	Known
Direction of inquiry	Inductive	Inductive	Usually inductive	Deductive or inductive	Deductive
Approach	Investigator learns about phenomena during the course of the inquiry / Investigator assumes listing mode	Investigator guides the order and direction of the interview but not the specific content	Interviewer develops questions designed to simulate conversation among participants, thereby eliciting the necessary data	Investigator knows the questions that need to be asked but not all possible responses	Investigator knows that questions and responses are necessary
Questions	Not planning in advance but developing during the course of the inquiry	Broad questions (6-10) developed to guide the course (but not the content) of the interview	Questions and prompts planned in advance	Question stems (and sometimes prompts) planned in advance	Questions and response choices planned in advance
Responses	"Long responses" conducted with minimal interruption / Interviews not equivalent	Interviewer guides particpants' "long responses" / Interview only partly equivalent	Discussion among particpants with facilitator prompts to elicit various perspectives / Group interviews only partly equivalent	Unscripted (free) responses to set openended questions / All respondents are asked the same questions	All respondents are asked the same questions in the same order / Participant selects responses
Sample	Sample changes according to the informational needs of the emerging analysis	Sample characteristics identified	Sample characteristics identified	Sample characteristics identified	Sample randomly selected from the selected population

The above table shows an excerpt of the major types of interviews. From the displayed interview types, the most applicable one will be derived from the presented characteristics. Overall, it becomes evident that there are different ways to carry out an interview. Essentially, interviews differ in their characteristics which require different inquiries, approaches, questions leading to particular responses and samples. Depending on which characteristic is applicable, the procedures to conduct an interview vary. From the approach selected, the researcher is required to have different theoretical backgrounds. These range from the researcher learning about the phenomena to knowing the questions and necessary responses. Deducting this to the interview style, the background of the researcher influences whether the interview is carried out unstructured, guided, with focus groups, semistructured or in form of questionnaires.

As a result, the inquiry of interest is approached through inductive or deductive proceedings as the domain is not known, partially known or known. This impacts the questions and to what extent the planning of these is required in advance. In consequence, the responses vary from being long to just offering response choices which is also dependent on the ability of the researcher to guide the responses. The relevant samples are deducted from the identified characteristics. Correspondingly to the described applicable interview

characteristics., the fit of the strategies that go hand in hand with the interview design are presented in table below:

Table 4: Excerpt Strategy Fit in Interview Design (Gubrium et al. 2012, p. 200)

	Fit of strategies in different types of interviews				
Aspects	Unstructured (narrative) interviews	Guided interviews	Focus groups interviews	Semistructured interviews	Quantitative questionnaires (closed-ended)
Themed	Yes	Yes	yes	yes	N/A
Category formation	Yes	Yes	Yes	Yes	N/A
Saturated	Yes	Yes	no	Yes	N/A
Count	No	No	No	Yes	Yes
Same questions asked all of participants	No	No	No	Yes	Yes
Sample representative					
of phenomenon	Yes	Yes	yes	yes	yes
of population	No	No	No	no	Yes

Note: "Yes" and "No" represent a clear fit; "yes" and "no" in small letters are cases in which there are exemptions

Bearing in mind the selected approach to adopt a qualitative-qualitative mixed-method design and to conduct interviews (see chapter 3.1.1 and 3.1.2), it is apparent that a quantitative questionnaire is not applicable as the answers are mainly limited to yes and no. Moreover, a contextualization of the literature study findings cannot be undertaken with the use of a quantitative questionnaire. Also, a survey interviewing in form of questionnaires does not allow the respondents to give insights on their story as mostly fixed-response questions (e.g. multiple choice, yes or no answers or Likert scale questions) are in use. Questions centering on "Wquestions" allow the interviewees more freedom to reply and explain their experience (Gubrium et al. 2012, p.238).

Comparing the design described above, it is conclusive that only qualitative interview strategies apply. The relevant interview aspects range from unstructured, guided interviews, focus groups to semistructured interviews.

The pros and cons of the interview ranges need to be analyzed in more detail. The objective is to find the best strategic fit to the research question RQ3: Coming from the interest to study, describe and explore a phenomenon, and the motivation to compare data through a repeating qualitative content analysis, the possibility to theme the interview proceedings and form categories is a prerequisite. In

comparison to the available aspects, there is no moment of saturation obtainable when interviewing focus groups. Only the semistructured interview design enables the researcher to ask the same questions to all of the interview participants and conducting corresponding counts. A population is not appropriate when conducting qualitative research.

#### 4.1.1 Examining: Question of Interest

When focusing on the research question RQ3: "How does internal audit need to be practiced to generate value for the institution's interest groups?" it is considered as appropriate to conduct interviews (see chapters 3.1.1, 3.1.2 and 4.1) to complement the findings on the afore conducted qualitative content analysis. The aim of the interview study is to provide useful information for practicing effective internal audit activities (see chapter 3.2.6) and to understand what value is associated with the corresponding activities. Consequently, the goal is to examine the question of interest and to thereof derive the adequacy of the interview design that needs to be adopted. Interviews enhance the findings from the literature and the corresponding qualitative content analysis. The research question investigates how internal audit creates value within financial institutions based on the analysis of its effectiveness (see RQ2 and consolidated findings in chapter 3.3.). Interviews support the learning about what institutions expect from internal audit and how the discipline needs to be practiced to generate value. Accordingly, an interview design needs to be used to obtain a description of the experienced phenomenon. The nature of a micro phenomenon has to be related to the individual descriptions and require interpretation.

Based on the previous research on the state of the art of internal audit, the researcher has explored the fields of relevance and knows the questions that need to be asked. Following the strategic fit of the different types of interviews, the semistructured interview represents the most appropriate method as it enables the researcher to ask the same questions to all of the interview participants and to conduct corresponding counts. Semistructured interviews are used when there is objective knowledge about a phenomenon or experience and subjective knowledge is lacking (Morse and Field 1995; Richards and Morse 2007; quoted by McIntosh and Morse 2015, p. 1). Hereafter, an analysis of the objective knowledge generates

the framework to develop interview questions. Moreover, the use of semistructured interviews allows the researcher to explore the interviewee's horizons (Bitsch 2005, p. 80) and to cover all essential topics (Flick 2009, p. 164). Experts are considered as representatives of a subject of interest and seen as "crystallization points" for an extensive circle of players (Bogner et al. 2009, p. 2). Interviews with experts offer the advantage of a high density of collectable data and insider knowledge (p. 8), which for example cannot be captured by purely observing outsiders.

The results serve as a practical guide to set-up a value delivering internal audit function. A modern internal audit department has become an important component of good corporate governance, generating long-term added value and reducing business risk. For this reason, the adequate implementation of value generating audit activities is of enormous importance. The learning from the interview research contributes to the value proposition of internal audit practice in conjunction with financial institution's interest groups.

#### 4.1.2 Analyzing: Method

When focusing on the qualitative interview method, which is applied in the present chapter, questions need to be understood as the grand tour of the topic of interest (Spradley 1979; quoted by Gubrium et al. 2012, p. 194). The semistructured interview technique is considered as the appropriate approach as the participant can answer freely. Expert interviews enable the chance of uncovering trends and relations that were neither expected nor hypothesized.

In the investigation phase, the gathered data allows the researcher to discover theoretical concepts (Anselm Strauss; quoted by Flick et al. 2004, p. 17). The development of these theoretical concepts are grounded in the data.

From the afore conducted qualitative content analysis, the researcher developed theoretical concepts which were discovered in the data. These need to be proven in the subsequent interview data. The researcher is in the position to formulate scientific relevant questions that are based on the code frequency (3.2.3), the code relationships between the internal audit discipline and its interest groups (see chapters 3.2.4 and 3.2.5), and the theoretical concepts (see chapters 3.2.6 and 3.2.7). The questions for the interviews are formulated based on the iteratively

constructed theory to study the individual expert experience (see chapter 3.2.6). The issues of generating appropriate questions to interview the identified experts, is explained in greater detail in an own chapter (see chapter 4.2.2). The researcher knows the questions that need to be asked but cannot anticipate all possible responses i.e. what is not relevant and the limits of the topic - but cannot anticipate all answers (Gubrium et al. 2012, p. 197).

Generally, the interview questions concentrate on a specific topic and particularly focuses on the single interview participant. The approach gives the interview participant the freedom to provide their story with minimal interruptions. Conformingly, this goes hand in hand with the method of "Grounded Theory" which demands that sufficiently general interview questions are to be formulated in order to cover a wide range of the expert's experience (Gubrium et al. 2012, p. 351). The "Grounded Theory" method supports the construction of theory. Hereafter, framing questions in the sense of interview questions support the exploration of experts' knowledge and their experience.

"Grounded theory interviews, whether individual or focus group interviews, are used to tell a collective story, not an individual tale given in a single interview. The power of grounded theory lies in piecing together a theoretical narrative that has interpretative power." (Gubrium et al. 2012, p. 361)

When it comes to theorizing, the expert interviews support the generation of hypotheses that cannot be set-up purely theoretically (Bogner et al. 2009, p. 64). The identification of an adequate sample size is addressed in a separate chapter (see chapter 4.2.1). Hypotheses represent the outcome of the interviews and are formulated as explanatory statements (see chapter 4.2.6).

## 4.1.3 Handling: Data

The goal is to gather data on the experiences of the interviewees expressing their perception on the questioned issue. In qualitative research, interviews with individual participants are the most commonly found data collection strategy (Nunkoosing 2005; Sandelowski 2002; quoted by Gubrium at al. 2012, p. 244). Generally, interview experts that have knowledge can provide a perspective on their area of focus. The thereby collected in-depth data is connected to the purpose and research question.

The objective of the interviews is to see through the participants' eyes by letting them explain their experiences. This process makes two kinds of data available through the interviewer's questions: reconstructions of experiences and reflected understanding (Philipps and Mrowczynski 2019). The researcher has to ensure that the interview questions are not biased and are asked in a neutral form (Turner 2010, p. 759). The main challenge is developing the data-collection approach and making the decision how to introduce what the interview is 'about' without influencing the participants' experiences and conceptions of the topic. Nonetheless, there is a detectable trade-off between benefits and limitations. On the one hand, the individual participant has knowledge about the area of focus and is in the position to provide a relevant perspective on it. On the other hand, individual interviews are biased by their truth that leads to the withholding of information or certain description that are required as relevant.

The collected data will be analyzed using content analysis (Gubrium et al. 2012, p. 297; Mayring 2015, p. 85 and see chapter 3.2). Following the afore adopted method to answer the research question RQ2, categories are developed, and the previously defined scheme is applied. The interviews are coded line-by-line to study the experts experience, preserve processes and illustrate meanings in order to make a comparison of the data (Gubrium et al. 2012, p. 356).

Based on the previous qualitative categorization research, it is to be believed that an effective internal audit function supports the financial institution in the achievement of its goals. The aim of the interview study is to provide useful information for practicing effective internal audit activities (see chapter 3.2.6) and to learn what value is subsumed with the corresponding activities (see chapters 3.2.4 and 3.2.5).

## 4.2 UTILIZING CONTENT ANALYSIS

Interviews, open questions, and metaphors are qualitative data which are expressed in words (Bengtsson 2016). Statistical analysis does not give meaning to this kind of data. Thus, other analysis methods need to be applied like content analysis. Thus, the approach of Philipp Mayring's is applied to carry out a qualitative content analysis. The methodology is applied to analyze the findings from the interviews in order to validate the content. In chapter 3.2, the steps taken

are explained. A category formation which is required when conducting a content analysis is applicable. Furthermore, a saturation and a count of the data to be obtained is realizable.

The structure of the chapter and the proceedings are congruent to chapter three. The interviews are transcribed and imported into MaxQDA in order to analyze the codings.

#### 4.2.1 Analyzing: Interview

The purpose is to conduct interviews and analyze the responses to understand how internal audit needs to be practiced to generate value for the afore identified interest groups. In order to explore and compare the interview data, the participant will be asked the same questions.

The conduction of interviews with a homogenous group enables the researcher to understand common experience and perceptions (Guest et al. 2006, p. 79). In order to underline the previous statement related to homogenous group, Sim (1998, p. 348) clarifies that the confidence of members of an individual group to express their experience and give themselves a voice depends on the level of homogeneity. The latter is determined by the groups level of education, common experience, and their social background.

Thus, the participants of interest to carry out interviews with are a homogenous group of individuals working in a bank sharing a comparable hierarchical position. Accordingly, this indicates that their level of education, knowledge and experience are comparable. The researcher identified the corresponding group which is composed of experienced internal auditors in senior management level and are considered as experts in their field by the researcher. All of the respondents have a management role in internal audit.

The decision to conduct interviews in a bank is based on the fact that they are highly regulated; i.e. the "European Banking Authority" has announced guidelines on internal governance (2017, p. 41). Moreover, the importance of compliance and a corresponding behavior has especially grown in banks as prosecution has begun to be more extensive (European Central Bank 2020). Thus, the researcher expects banks to have a mature model of the 3-LoD established and assumes to achieve the most relevant findings.

There is a range of numbers in discussion regarding the appropriate sample size of interview participants. The composition and sample size in qualitative interviews are discussed in great length in the literature resulting in different recommendations on the makeup and the sample participants. Hereafter, Guest et al. suggests that a homogenous group of 6 to 12 interviews is needed to reach saturation and to achieve the research objective (2006, p. 79). It is assumed that there is thematic redundancy after 6 participants. Creswell and Poth (2018, p. 150) suggests interviewing between 20 and 30 participants and Boyd (2001) proposes to interview 2 to 10. These differences make it difficult to predetermine an appropriate sample size.

Thus, researchers have shifted from predetermined numbers of participants to a focus on the research process as an emerging source throughout the research leading to the final number of participants (Gubrium et al. 2012, pp. 243 to 245). It is more common to apply the approach of theoretical saturation. Yet, the main deficiency is a common description on how the level of saturation can be measured. Consequently, interviews are conducted until the researcher reaches certainty of the answer (Gubrium et al. 2012, p. 202) and thereby experiences saturation. Glaser and Strauss label this situation as theoretical saturation (2006, p. 61). Hereafter, a saturation of knowledge is achieved when the analysis of a category leads to no new information.

In the subsequent chapter, light is shed on the development of interview questions. The interview questions represent the initial starting point and the prerequisite to collect data.

### 4.2.2 Using: Interview Questions

The starting points presented in the course of the analysis of the "State of the Art: Review of Internal Audit" require individual interpretation to be filled with life. Many observations have been made from the results of the composed content analysis in the previous chapter. However, the findings rise various questions when considering the contents separately. The objective is to enhance the findings that are derived from the scientific analysis part with practitioner views. The answer to research question RQ2 forms the basis to develop relevant questions for the expert interviews.

From the data collected, three starting points for the internal audit discipline have been developed for the discipline to be effective: 1) a measure of contribution, 2) valuable activities, 3) the ability to shape the perception of internal audit within the 3-LoD model. As stated in the chapter on theorizing (see chapter 3.2.6), the generated theories are to be explored in an interview study on the future of the internal audit discipline. Consequently, the goal is to ask scientific relevant questions which are obtained from the findings of the research question RQ2.

"An interview question can be evaluated with respect to both a thematic and a dynamic dimension: thematically with regard to producing knowledge and dynamically with regard to the interpersonal relationship in the interview. A good interview question should contribute thematically to knowledge production and dynamically to promoting a good interview interaction." (Brinkmann and Kvale 2015, p. 157)

In reference to the above citation, dimensions need to be adapted that combine (thematic) theoretical constructs with (dynamic) measures. Subsequently, these corresponding dimensions are adapted from a research conducted by Eulerich et al. (2013, p. 62) on the self-perception of the internal audit function within the corporate governance system. In the corresponding research, hypotheses were concretized and categorized.

The aim of the research is to generate hypotheses when it comes to theorizing and the constructs serve as a basis to develop interview questions. Congruent to the research of Eulerich et al., there are three dimensions to categorize the constructs. In the following, the dimensions are described in greater detail:

- 1) Profession and organization: The internal audit discipline is composed of a practical component (i.e. professional ethics as laid down in the internal audit framework named the IPPF; see chapter 2.1) and a structural component (organization). In the subsequent development of the interview questions, this dimension is connected to the first finding "1) a measure of contribution".
- 2) Cooperation: The internal audit discipline maintains relationships (cooperation) with other stakeholders. Based on the findings of research question RQ2, it is of interest to draw conclusions on the relationship between the management body and the internal audit discipline. The corresponding relationship is based on the internal governance

- arrangements. Consequently, this dimension is connected to "2) valuable activities".
- 3) Output: Activities of the internal audit discipline generate benefits and results in achievements (output). Congruent to Eulerich et al. this dimension is linked to the 3-LoD model. It is of interest to question the experts about "3) the ability to shape the perception of internal audit within the 3-LoD model".

Based on the above dimensions, it is of interest to develop questions centering around the internal audit function that result in an understanding of (1) measures or indicators regarding its contribution that enable the evaluation of its activities. The second dimension underlines that cooperation is of importance. Conclusively, questions need to be asked that concentrate on (2) the relationship between internal audit and the management body as these interact within internal governance arrangements. As the latter influences the output of internal audit activities, questions focusing on the set-up of the (3) 3-LoD and the perception of internal audit are addressed.

The interview questions need to align with the above dimensions that the researcher wants to explore (Roberts 2020, p. 3192). An open ended, broad, and nonjudgmental formulation of questions invites the interviewee to provide details of the topic under exploration (Charmaz 2004; quoted by Roberts 2020, p. 3192). The existing literature on conducting qualitative research interviews provides guidance but do not offer systematic frameworks regarding the number and the individual development of interview questions.

According to numerous authors (DiCicco-Bloom and Crabtree 2006; Rubin and Rubin 2012; Seidman 2013; quoted by Roberts 2020, p. 3193), the initial question should be broad as it enables the interviewee to answer free and share the own experience. The subsequent main questions should align to the research question and introduce the main focus of the interview study.

The table below displays the corresponding interview questions that relate to the three adopted dimensions from Eulerich et al. (2013, p. 62) research:

Table 5: Interview Questions

Number	Description	Main question	Subquestions derived from the main question
1	Profession Organization		1a: Which qualitative and quantitative measures exist to evaluate the effectiveness of internal audit activities?  1b: What contribution does internal audit make to the institution?
2	Cooperation	What is the most valuable activity of internal audit?	2a: What is the most valuable activity of internal audit for the management body?
			2b: What role does internal audit play in the context of governance?
3 0	Output	-	3a: What is an appropriate set-up of the 3-LoD for internal audit to maintain its independence?
			3b: What kind of possibilities does internal audit have to shape its perception?

As outlined in the above table, main questions based on the dimensions are formulated that originate from the findings of the second research question RQ2. These form the basis to thereof break down the essence of the main question and translate them into subquestions that will serve as an interview guideline.

The subquestions contribute to the generation of knowledge to answer the third research question RQ3. To underline the expert knowledge, the interviewees are asked to give personal details on their experience regarding their role within the internal audit department in order to highlight their expert opinion.

The questions surrounding the organization and profession deal with the nature of the internal audit discipline in a financial institution (Eulerich et al. 2013, p. 62). The corresponding questions introduce the focus of the interview study (Roberts 2020, p. 3193). These questions aim at the internal mechanism to evaluate the activities within the financial institution and internal audit's contribution to it.

The questions subsumed in the second dimension emphasize the mechanism that relate the management body to the discipline of internal audit. The relationship is embedded in the governance arrangements that are assessed by internal audit. The questions align to the value of internal audit activities and introduce the main focus of the interview study. Overall, the questions provide the opportunity to describe valuable activities of internal audit.

The third dimension deals with the set-up of the 3-LoD which enables the internal audit discipline to take the opportunity to shape its perception. The main scope of the questions is to find an answer on the general tendency and trends respectively impacting the perception of the internal audit discipline.

## 4.2.3 Organizing: Interview Data

Referring to the afore conducted organization of the data set, the interview data consists of expert knowledge that relate to key code "internal audit". The aim of the qualitative content analysis is to identify text fragments with rich information, extract its contents and to thereof derive findings, and generalize these across the interview data.

In total, the interview data is composed of eleven experts in order to provide an adequate qualitative view. Four of the experts are female and seven are male. All of the experts are experienced internal auditors in senior management level. Six of the experts are managers (responsible for one team composed of in average 10 people), four are heads of department (responsible for two teams consisting of in average 20 people), and one is the Chief Internal Auditor of department (responsible for the department). The manager reports to the head of the department. The head of department reports to the Chief Internal Auditor. The Chief Internal Auditor has overall responsibility. In average they are 47 years old and have been working in an internal audit department for 9,6 years in 1,5 financial institutions. The interviews lasted sixty minutes on average.

According to Guest et al. (2006, p. 79), a homogenous group of six to twelve interviews is needed to reach saturation and to achieve the research objective. A saturation of codes took place after carrying out half of the interviews. The researcher's observation confirms the Guest et al. statement that there is a thematic redundancy after six interviewees (see chapter 4.2.1).

The questions were provided to the experts in advance to offer the opportunity for preparation. Approximately 768 text segments were coded. The codings represent input data for the qualitative content analysis. Congruent to the description of the seven steps to take (Philipp Mayring 2014, p. 80), the selected segments are reviewed to ensure that the code data is in accordance with the extended view to answer the research question RQ3.

The frequencies of the single terms and the hierarchy that relate to the interview questions are provided in the applicable chapter, in which the codes are explored in detail. In order to underline and analyze the experts' level of agreement, the number of experts is referred to where relevant.

# 4.2.4 Exploring: Dimensions

The interview questions are generated on the basis of the conducted qualitative content analysis. The objective is to explore the dimensions that center around the profession and organization, cooperation, and the output of internal audit activities. The chapter with its subchapters sheds light on the experience of the interviewed experts in the corresponding dimensions. It is of interest to gather insights on the generated value of internal audit for the financial institution's interest groups. In the course of the following analysis, the knowledge gained in the interviews and the qualitative content analysis are used to build theory to practice internal audit in a way that value is generated.

The qualitative content analysis provides valuable insights into understanding the interviewees' experience. The corresponding need for the comprehension of experts is in line with Alves et al (2016) and Becker (2018) who suggested a need for more qualitative research to understand consumers. Hereafter, the understanding of what the consumers do, and their beliefs is the essence. In the present research, the investigated consumers are replaced by experts. "Grounded Theory" is used to formulate theory through the experts' experienced reality (Collis and Hussey 2003, quoted by Pisano et al. 2011, p. 348).

The theorization brings meaning to the discovered terms that the experts perceive as relevant to measure the contribution of internal audit (profession and organization dimension), by providing valuable activities (cooperation dimension) while at the same time being an essential part of the 3-LoD (output dimension).

#### 4.2.4.1 Profession and Organization: Measurable Contribution

The subordinate question (1) "What are activities of internal audit that represent a measurable contribution to the institution?" consists of a practical component (profession) and a structural component (organization) (see chapter 4.2.2). Therefore, it is subdivided in two subquestions. The findings from the conducted

interviews are firstly analyzed on a meta-level, broken down to the single question to then thereof draw conclusions on the dimension under investigation.

First and foremost, internal audit activities have to focus on the business activities of the financial institution to develop relevance and effectiveness (The Institute of Internal Auditors 2020a). The definition of an appropriate metric to assess the appropriateness and effectiveness of internal audit activities is ambiguous in order to judge their contribution.

In its role as an independent function, internal audit does not productively generate measurable business (The Institute of Internal Auditors 2019b). It is the only unit in a financial institution that reviews every activity and thus covers a wide area. All other business lines have their special aspects and interests. Consequently, the work of internal audit is multifaceted.

Congruent to the analysis carried (see chapter 3.2.3), the terms are coded that are mentioned most frequently in the interviews. The codings are conducted per single question, consolidated and brought together throughout the interview data to thereof derive an answer to the question of interest. Conclusively, the development of the code hierarchy is based on the single question.

From the analysis, it is evident that there are different internal audit activities that represent a measurable contribution to the financial institution. The related frequency distribution of terms mentioned in conjunction with the subordinate question is displayed below:

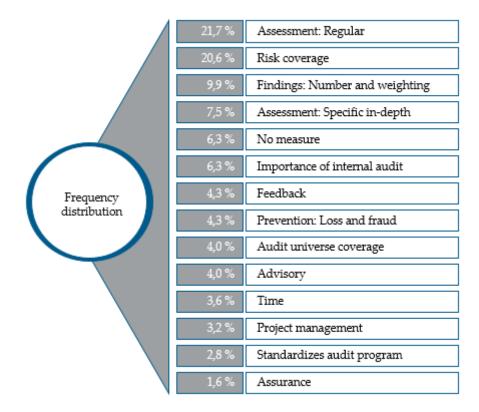


Figure 34: Code Frequencies relating to Profession and Organization

At first glance, the frequency distribution in the above figure does not provide insights to answer the subordinate question. Thus, the subquestions (1a and b) that relate to the term frequency have to be analyzed in more detail to interpret the findings.

The first subquestion (1a) "What qualitative and quantitative measures exist to evaluate the effectiveness of internal audit activities?" aims to find out how a financial institution can measure the effectiveness of internal audit activities.

In the course of the further analysis, light is shed on contributing internal audit activities. The objective is to relate the answers (1a) to the subsequent question (1b) "What contribution does internal audit make to the institution?" in order to answer the subordinate question (1).

To accomplish the goal to conduct effective internal audit activities, the experts are asked to provide measures (1a). Generally, the experts agree that there is no unique or appropriate single measure for the effectiveness of activities.

The experts consider the following measures as applicable to thereof derive conclusions on the measurement of effective internal audit activities. Hereafter, the first column shows the named measures with its classification. Moreover, the number of experts with its percentage size are provided:

Table 6: Level of Agreement of the Interview Experts on Measurands

Measurands	Classification	Number of experts	%
Risk coverage	Quantitative	8	73
Findings: Number and weighting	Quantitative	8	73
No measure	n/a	7	64
Importance of internal audit	Qualitative	6	55
Feedback	Qualitative	4	36
Audit universe coverage	Quantitative	4	36
Standard audit program	Quantitative	4	36
Time	Quantitative	3	27
Prevention: Loss and fraud	Quantitative	3	27

When comparing the level of agreement with the frequency distribution of the mentioned terms, the picture is partly different. While the level of agreement results from the number of interviewed experts, the frequency distribution of the mentioned terms reflects the counts of words and provides a more detailed view on their relevance. The following measurands were named in descending frequency:

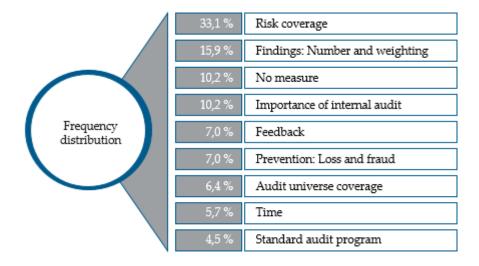


Figure 35: Code Frequencies of Measurands relating to Profession

The first five terms out of the nine codes are identical to the numbers of experts that agreed on the measurands (see afore-displayed table in comparison to the above figure). It can be concluded that in these cases the experts talk more about the measurands that they perceive as effective to evaluate the internal audit activities. In the course of the analysis, light is shed on the level of agreement and the code frequency. Subsequently, the results are explained in more detail by following the descending frequency of codes: (1) risk coverage, (2) findings, (3) no measure, (4) importance of internal audit, and (5) feedback, (6) prevention: loss and fraud, (7) audit universe coverage, (8) time, and (9) standard audit program.

(1) Risk coverage and the count of (2) findings in relation to their weighting are mentioned most frequently. These represent countable and thereby quantitative measurands. According to eight experts, the aim is to achieve a high level of risk coverage through internal audit activities that result in findings.

Due to the nature of internal audit not generating business, seven experts stated that there is no applicable measurand (3) although they outlined possible measurands in the aftermath. Firstly, they assume that there is no adequate quantitative or qualitative measurand to describe the size or amount to monitor the effective internal audit activities. In the course of the interview, they then defined measures to obtain information on the effectiveness.

Seven experts stated that the (4) importance of internal audit is a qualitative measurand. They relate it to the perceived standing of internal audit within the

financial institution, the professional expertise of the internal auditors serving as an indicator for well-resourced and high-quality assessments.

In the interviews, six experts outline that a (5) structured feedback serves as an indicator to measure effective internal audit activities. In practice, this means that, regardless of the results of the internal audit assessment, the satisfaction of the audited business line needs to be queried at a specific time of the audit. This enables to measure the relationship between the internal audit department and the audited units operating in the first and/or second line. The feedback provides insights on the satisfaction factor which requires further operationalization into qualitative and quantitative feedback measurands. From this, it can be deduced whether the first and second line are satisfied with the work of the internal audit department and whether the relationship is based on partnership in the sense of a relationship of trust. The experts outline that the corresponding knowledge represents input data to better understand how the internal audit department is perceived by others.

Only three experts state that they consider (6) the prevention of loss and fraud as a measurand to determine the effectiveness of internal audit activities. At the same time, these experts provide a comparable detailed description which results in a higher code frequency (7%). This allows the conclusion to be drawn that these three experts attach more value to this term than the other experts. They consider the prevention of loss and fraud as an enabling factor for the internal audit department to make the identified and mitigated risks transparent that are revealed in the assessments. Moreover, they highlight that in these cases, audit activities can be used to demonstrate the probability of the occurrence of loss and/or fraud. From the researcher's perspective, it remains an open question whether these three experts are on the wrong track or the other eight experts have not yet thought about it. This inconclusive finding represents an opportunity for further investigation by other researchers. Reference is made for potential followed up research in an own chapter within the conclusion (see chapter 5.2).

The (7) audit universe includes all existing objects that need to be audited in the financial institution. Four experts consider it appropriate to measure the effectiveness of the internal audit department by comparing the (6,4%) audit universe with the audited processes, departments, subject, and areas respectively. This allows to make a statement on the completeness of the assessment coverage in relation to the institutional structure. In other words, the experts summarize that

in their eyes the internal audit department works properly when the risk management has been fully audited.

In accordance with the coverage, the measure (8) "time" takes the same line (5,7%). Three experts consider it as a classic quantitative measure to obtain information on the performance of internal audit activities in terms of resource consumption, fulfillment of the audit plan and the level of completion of the single planned assessments over a year span.

Finally, the usage of (9) standardized audit programs is mentioned by four experts with a frequency of 4,5% in the answers. These audit programs are of interest when assessing the internal control system in the business lines. The experts perceive it as important to cover topics by making use of standardized audit programs in order to ensure comparability of the single assessments. The structured identification of gaps between external and internal requirements puts the first and second line in the position to close these.

Besides the measurability of the internal audit activities to determine the effectiveness, it is of interest to investigate the experts view on the contribution of the internal audit department (see question 1b). The experts agree that the contribution of internal audit is the sum of the provided activities to the financial institution. Hereafter, some activities are perceived as more contributing as others. The level of agreement on the mentioned terms is provided below:

Table 7. I one	1 of Agreement	of the Inter	rniozn Exnorts	on Contribution
Tuble 7. Level	ı on Ayreemeni	. OI THE THIE	view Experts	Ori Coriir iouilori

Contribution	Number of experts	%
Assessment: regular	9	82
Advisory	7	64
Project management	6	55
Assessment: specific in-depth	6	55
Assurance	3	27

Congruent to the findings on the measurands, the level of agreement of the interviewed experts deviates in parts from the statistics of the mentioned terms. The following figure illustrates the most frequent terms which are associated with contributing internal audit activities:

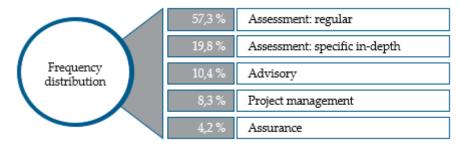


Figure 36: Code Frequencies of Contribution relating to Organization

Internal audit's task is to create transparency towards the management body regarding the risk situation (The Institute of Internal Auditors 2020a). According to the interviewed experts, internal audit activities that contribute to the transparency of risks are: (1) assessment: regular, (2) assessment: specific in-depth, (3) advisory, (4) project management, and (5) assurance.

Overall, nine experts experience (1) regularly conducted assessments (57,3 %) as the most contributing activity of the internal audit department. Due to potential bias of the interviewees, the researcher assumes that six experts felt the need to compare the regular assessment to the (2) specific in-depth assessment (19,8 %). At the same time, more importance was assigned to advisory. According to the experts, the effect of the investigative in-depth assessment is comparable lower as the incident has already taken place and the subject under investigation is not part of the audit universe. Yet, both types of audit assessments have the same objective and focus on the identification of structural deficits. Above all, the goal is to make these transparent to the management body:

"Assessment: regular": The regular assessment is conducted according to the cycle and as planned to cover the audit universe. Following a so-called risk cycle, some business line activities are audited more often and some less frequently over the time. In this context, the measurands "Time" and "Audit universe coverage" relate to "Assessment: regular". The internal audit department achieves a broad view on the risk situation and assesses the corresponding risks. In order to make assessments comparable, it seems obvious to make use of standard audit programs. This enables to also relate the measurand terms "Risk coverage" and "Standard audit program" to the "Assessment: regular". The contribution of internal audit is rather based on the broad effect of

auditing activities in all business lines. The thereof generated findings demand the audited departments in the first and second line to question their established or not yet (fully) established procedures. This enables the researcher to link the measurand "Finding: number and weighting" to the "Assessment: regular". To gain insights about the effectiveness of internal audit activities, it is important to obtain structured feedback which allows to establish a connection between "Feedback" and "Assessment: regular". Thus, the internal audit department has to determine meaningful feedback measures that it requires in order to understand how its activities are perceived. The experts believe that the feedback should be composed of quantitative and qualitative measures. Besides the commitment to gather ongoing feedback, they recommend providing the audited departments with a questionnaire at the end of an assessment.

2) "Assessment: specific in-depth": This assessment procedure is not comparable to a regularly conducted internal audit activities. The experts describe that the concrete analysis of a question or a subject is a contributing internal audit activity. Moreover, a much more differentiated analysis is carried out by the internal audit department. The corresponding audit assessment focuses on the design, its characteristics or on an incident occurred. This demands the internal audit department to keep pace with new developments that pose new risks the financial institution; i.e. individual data processing, artificial intelligence, IT requirements. According to the experts, other planned regular assessments are often postponed for the purpose of specific indepth assessment. In direct comparison to the regular assessment, the specific in-depth examination is not a cursory assessment and described as an expert analysis. Congruent to the regular assessment and for the same reasons, the measurands "Feedback" relates to specific in-depth assessments. The experts consider the findings from in-depth audits as very valuable for the financial institution and for the management body. Thus, the measurand "Finding: number and weighting" also relates to the "Assessment: specific in-depth".

Due to the nature of the specific in-depth assessment, the measurands concerned with "Time", "Audit universe coverage", and "Standard audit program" are considered less relevant by the researcher. The corresponding assessment is not a part of the audit universe as it takes place after incidents occurred or in-depth examinations are considered necessary by the management body or the internal audit department. Thus, the use of standard audit programs is not applicable as there is no structured investigation on for example the. internal control system. Moreover, a comparability to other assessments cannot be established as every one of them is unique with an own mission. Time consumption in terms of used resources is not a sensible measurand as the examination lasts for the time required to clarify all related risk issues.

Above all, assessment of the internal audit department contributes to the financial institution and its organization in the sense of identifying precautionary measures and by providing practical evidence of malfunctioning structures, controls, and thereby revealing problems. The results deliver evidence that internal audit activities provide proof whether and to what extent the financial institution is accomplishing its objectives. The degree to which these results are accepted and improve the business operations depends on the assigned importance to the internal audit department. Dependent on its assigned importance, the internal audit department can more or less contribute to the financial institution by highlighting the risk picture and providing impulses for optimization. The importance is independent from the "tone at the top" and the support of the management body finding the assessments relevant for the achievement of the financial institution's objectives.

Beside the above assessment types, internal audit conducts (3) advisory activities which are perceived by seven experts as a contributing activity (10,4%). The experts especially highlight in their explanation that the corresponding contribution originates from the specialist knowledge as well as internal audit's broad picture of the implemented risk management. From an independent point of view, internal audit can shed light on central questions such as: What are the risks? What is the main issue? What's it worth and how big is it? Representative examples for advisory activities that were mentioned in the interviews are the interpretation of regulatory requirements and its appropriate implementation in the first and

second line. Conclusively, the internal audit discipline supports the first and second line to establish precautionary measures. From the expert's perspective, the contribution is to bring auditing competence into the decision-making process and to be an advisor on an equal footing with the first and second line. Moreover, the experts believe that the advisory role will strengthen and develop into a partnership role to and of the management body. In order to gain knowledge on the perceived effectiveness of the provided advisory activities, a structured feedback on the experience of the first and second line can be carried out. By this, internal audit learns more about its standing and the assigned importance to its role within the financial institution.

The experts pronounce that the internal audit department also provides (4) project-related support. Herein, six experts state (8,3%) that project management support during an early stage prevents findings in the aftermath when the project is completed and i.e. products went live in the product or business line. In the context of projects, internal audit for example assesses the business case, planning, management of the resources and the development. The experts illuminate that the early involvement of internal audit provides the managers with a certain assurance. The support of internal audit to projects is comparable to the activities it provides in specific in-depth and regular assessment. The researcher thereof concludes that the same measurands apply to evaluate the effectiveness of the internal audit department. Thus, the measurands "Risk coverage", "Findings: number and weighting", "Importance of internal audit", "Feedback", "Prevention: Loss and fraud" and "Time" relate to "Project management". Exceptions are the measurands "Audit universe coverage" and "Standard audit program".

As projects take place for a defined period of time, they are not part of the financial institution's processes or structures and as result cannot be part of the audit universe. Due to the nature of projects that have the objective to establish processes for future products, a standard audit program is considered obsolete as at that point of time there are for example no implemented internal controls which neglects the use of a standard approach.

Furthermore, the internal audit department provides the management body with an independent (5) assurance on the risk situation. Three experts find that the credibility of internal audit is enhanced when new insights are presented, and the future impact is evaluated by providing relevant assurance to the financial

institution and its stakeholders (4,2 %). In line with the advisory activities, the same measurands can be adopted to evaluate the effectiveness of the internal audit department. Conclusively, the measurands "Feedback" and "Importance of internal audit" share the same relationship to "assurance".

The subordinate question "What are activities of internal audit that represent a measurable contribution to the institution?" is to be answered as follows: There is no unique or single activity that represents a measurable contribution to the financial institution. Regular and specific in-depth assessments, advisory activities, project management and assurance are activities that contribute to the financial institution. These activities relate to measurands that are of quantitative nature (risk coverage, findings (number and weighting), no measure, audit universe coverage, standard audit program, time, prevention (loss and fraud)) and qualitative nature (importance of internal audit and feedback). Dependent on the type of audit assessment these measurands provide insights to evaluate the effectiveness of internal audit activities and their contribution to the financial institution.

In conclusion, there are several qualitative and quantitative measurands that relate to multifold internal audit activities that the experts consider as contributing to the financial institution. The summarized findings in the answer to the subordinate question (1) serve as starting points when it comes to theorization and interpretation (see chapter 4.2.6).

### 4.2.4.2 Cooperation: Valuable Activity

The subordinate question (2) "What is the most valuable activity of internal audit?" deals with the relationship (cooperation) between the management body and the internal audit department. Both interact within the internal governance (see chapter 4.2.2). Therefore, the subordinate question is subdivided in two subquestions and brought together in the conclusion at the end of the present chapter. The gathered interview data is congruently handled as described in the previous chapter.

According to the standard framework for internal auditors (IPPF and see chapter 2.1), the activities of internal audit need to be designed to improve the business operations and add value to the organization (The Institute of Internal Auditors 2019b and The Institute of Internal Auditors 2020a). Thus, the objective is

to find out how the internal audit department improves the financial institution by adding value to it.

The activities of internal audit are defined with the approval of the audit plan by the management body and are further described in the applicable audit standard 2010 in the IPPF (European Confederation of the Institute of Internal Audit 2009, p. 32 and The Institute of Internal Auditors 2021). It is essential that the internal audit department provides sufficient, reliable, relevant, and useful information to the management. From that, the researcher concludes that by illuminating risks that have an impact on management decisions and the institutional set-up, internal audit delivers value to the financial institution. This gives rise to the first subquestion (2a) "What is the most valuable activity of internal audit for the management body?"

In the course of the further analysis, light is shed on the role of governance as it forms the interaction basis between the management body and the internal audit department. Every financial institution has to define responsibilities in accordance with its need for control, risk awareness, and governance. As corporate governance landscapes are changing rapidly, there is a demand for a corresponding framework which is to be assessed by internal audit to state whether it delivers transparency and accountability (Peters 2018, p. 3). In this context, the task of internal audit is to assess, evaluate, and summarize the found situation in the first and second line towards the audited department and the management body. According to the IPPF standard 2000 and its interpretation, internal audit is managed effectively, when it enhances governance, processes, risk management, and considers the financial institution's objectives and risks (The Institute of Internal Auditors 2017a, p. 73). As more high-profile scandals involving the corporate governance are taking place, there is a shout for internal auditors to audit the financial institution's framework by the policymakers and public. The scandals reach out from Lehman Brothers and are followed by the collapse of BHS and Carillion. This is further supported by a survey conducted in association with KPMG on how audit will be performed in 2025 (Forbes Insights 2017, p. 10). The corresponding survey revealed that it is the internal auditor's role to constructively point out challenges and problems which are inconsistent with the corporate view to the management.

Among other tasks, internal activities center around the monitoring and the safeguarding of internal governance arrangements. At the same time, the internal

audit department is part of the governance and the financial institution's culture. In the view of the foregoing, this leads to the subquestion (2b) "What role does internal audit play in the context of governance?" The objective is to relate the answers (2a and 2b) in order to answer the subordinate question (2).

As already described in the previous chapter, the informative value to provide an overview of all codes to the subordinate question is not given. Therefore, a hierarchy of codes with its frequencies is provided per subquestion. In line with the previous code frequencies, the hierarchy of codes is created on the basis of the answers to the subquestions. For readability purposes, the level of agreement amongst the experts is directly indicated in the text.

The related frequency distribution of terms mentioned in conjunction with the subquestion 2a is displayed below:

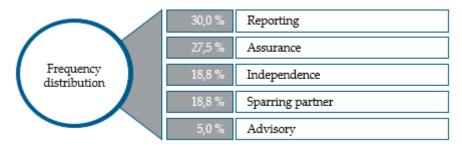


Figure 37: Code Frequencies of Cooperation relating to the Management Body

According to the experts, there is no specific single activity that is considered the most valuable. Yet, the importance of the single codes can be deduced from their counts and the developed hierarchy in the above figure. Hereafter, the reporting on the risk situation, internal audit's assurance and independence, the relevance of being a sparring partner, and providing advisory services are considered the most valuable activities for the management body. The experts subsume that a sparring partner is a partnership build on trust who questions existing practices, sounds ideas, and develops solutions.

The stated activities are composed of a mixture that in combination represent a value for the management body. This finding goes hand in hand with the conceptual code relationship (see chapters 3.2.4.2 and 3.2.7) between the management body and internal audit. Hereafter, the management body is a recipient and sender of information to the internal audit department.

As a result of the frequency distribution, the management body assigns different responsibilities to the internal audit department. Content assigned to these responsibilities are the provision of a second opinion, delivering positive assurance, assessing for example the internal governance arrangements, and achieving a level of compliance in the financial institution. Furthermore, the institutional compliance with external requirements – i.e. law and lawful regulations – can be measured through audit activities. In the following, the findings are explained in their descending code frequency taking into account the level of agreement of the experts: (1) reporting, (2) assurance, (3) independence, (4) sparring partner, and (5) advisory.

In a financial institution, the management body is the controller and therefore the most valuable activity of the internal audit department is (1) reporting to the management body. Nine experts are convinced that fast, direct, and unfiltered reporting (30,0%) is the most valuable activity of the internal audit department for the management body. They believe that formalized, transparent, and standardized reports are essential to add value and represent a communication instrument. Yet, these experts point out that the internal audit department can only deliver a value proposition if it is taken seriously by the management body. Thus, it is suggested that the management body should ask itself what kind of internal audit department it wants and what importance it assigns to it.

The relevance of (2) assurance (27,5 %) forms a coalition with the importance assigned to the reporting instrument of the internal audit department. Hereafter, internal audit activities that provide assurance to the audited department and the management body are considered comparably high and accordingly valuable by seven experts. These experts state that they consider a positive assurance as the most valuable activity of internal audit towards the management body. In this type of assurance, the internal audit department gives an opinion on for example a subject and states that risks are mitigated to an acceptable low level. For the sake of completeness, the negative assurance is used by internal audit in situations if a confirmation on for example the accuracy of the audited proceedings is not possible. The same applies to situations with a high-risk level in which the risks are not mitigated due to findings.

Seven experts believe that (3) independence is a valuable attribute (18,8 %) of the internal audit function. Accordingly, they agree that the review of the controls,

processes, and risk management are supportive and simultaneously valuable activities towards the management body. By this, the management body is provided with an independent opinion on the appropriateness and effectiveness of the established risk management. Yet, the internal audit department has to weigh against the interests and responsibilities of the audited business lines. In these instances, the internal audit department has to give an opinion if these are in the position to bear the risk, and where it is necessary to point out that risk management is being neglected.

The independence of the internal audit department alliances with its (4) sparring partner role. The code frequencies are identical (18,8 %) and the experts perceive the corresponding role and attribute as comparable valuable for the management body. Seven experts associate this role with providing a second opinion to the management body on for example institutional risk issues. This special role of the internal audit department is also reflected in its responsibility as it is obliged to inform the management body about risks. A relationship of trust between the management body and the internal audit department is a prerequisite for a successful cooperation. The experts assign a special value to the sparring partner role by clarifying that the internal audit department makes the financial institution fit and proper for a potential on-site inspection of the regulatory supervision body.

The (5) advisory role is comparably less (5,0 %) represented in the mentioned terms in conjunction with the internal audit discipline. Three experts felt that it is a valuable activity towards the management body. They outline that this rather consultative role enables transparency on how the financial institution compares to leading practices. From their perspective, these consulting activities need to be performed in collaboration with the management body. Accordingly, the experts believe that internal audit can assist the financial institution in an increasingly changing regulatory environment and generate added value. The interviewees are convinced that internal audit's advice enables the management body to better guide the financial institution. Moreover, the experts assume that the advisory role will increase to be more relevant in the future.

As stated earlier, the question that deals with the (2a) management body intersects with the (2b) role of internal audit in the governance context. It is

therefore necessary to carry out an investigation on this specificity by adopting the above analysis approach.

Congruent to the findings on the cooperation between the management body and the internal audit department, the related code frequencies to subquestion 2b are analyzed in the following:

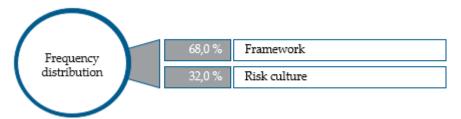


Figure 38: Code Frequencies of Cooperation relating to the Governance Context

The code hierarchy results in two codes that sum up the understanding of the experts on the role of internal audit in the governance context. The researcher therefore assumes that internal audit' role is of minor relevance to generate added value to the financial institution. It is concluded that it is more about what internal audit does and less about its own role within the governance arrangements. This finding is further substantiated with the afore analyzed independence of the internal audit.

Governance arrangements are written rules of procedures and result in an institutional framework (68 %). Nine experts indicate that the corresponding framework is in particular subject to regular and specific in-depth assessments of the internal audit department.

According to six experts, the risk culture (32 %) is part of the framework and is amongst others composed of the financial institution's risk appetite. In addition, the risk culture is subject to the management body's understanding. Ideally, the Chief Internal Auditor has the overall responsibility of the internal audit department and the management body share the same ideas on risk appetite and the corresponding risk culture.

The subordinate question (2) "What is the most valuable activity of internal audit?" is answered as follows: Analogous to the previous chapter, there is no unique or single activity that represents the greatest value or is considered the most valuable by the experts. Reporting, assurance, independence, taking on a sparring partner role, and advisory represent activities are considered the most valuable for

the management body. These activities go hand in hand with internal audit's responsibilities to provide a second opinion, deliver positive assurance, assess governance arrangements, and accomplishing a level of compliance in the financial institution. In the governance context, the management body intersects with the role of internal audit. Conclusively, internal audit plays a role in assessing the governance framework and the risk culture. Facts like proactive activities speak louder than words on internal audit's role as part of the institution's culture.

In total, internal audit takes on a valuable role to enhance risk management on behalf of the management body. The findings derived from the subordinate question (2) form the foundation to conduct theorization (see chapter 4.2.6).

# 4.2.4.3 Output: 3-LoD Model

The subordinate question (3) "What set-up does the 3-LoD require for internal audit to shape its own perception?" centers around the 3-LoD model and the ability of internal audit to shape its perception. The activities of the internal audit department generate benefits and results in achievements (output) for the financial institution (see chapter 4.2.2). Conform to the previous analyses, the subordinate question is substantiated in two subquestions. The data is handled in the exact same way as in the previous chapters (see chapters 4.2.4.1 and 4.2.4.2).

The internal audit department is an element of the 3-LoD model under investigation in the interview study. The model is a vehicle to share information among the single lines and allocates responsibilities (Anderson and Eubanks 2015, p. 2). Thus, the 3-LoD model is considered as an effective way to communicate risks through for example implemented internal controls and the established risk management of a financial institution. The internal audit discipline is embedded in the 3-LoD model and represents the third line. Its special significance lies in its objectivity and independence (The Institute of Internal Auditors 2019b). The relevance of internal audit as an independent line makes it very unique as it needs to comply and apply very specific regulations.

On the basis of the afore described, this leads to the subquestion (3a) "What is an appropriate set-up of the 3-LoD for internal audit to maintain its independence?" An appropriate set-up of the 3-LoD model forms a prerequisite to clearly define the roles of the involved players while maintaining internal audit's independence (3a).

Conclusively, the degree of maturity of the 3-LoD model relates to the (3b) ability of internal audit to shape its own perception.

The researcher interprets that the relationship between the single lines of defense with internal audit is a main driver to the perception of the third line. This interpretation is underlined by a study carried out by Sarens and De Beelde (2006) focusing on internal auditor's role in risk management:

"[...] internal auditors need to assume a "teaching role" vis-à-vis the different management levels to make them aware of their responsibilities in risk management. After this transition period, internal auditors will be able to focus more on their core activities." (Sarens and De Beelde 2006)

The survey reveals different perceptions about the role of internal audit in risk management. In line with the adopted approach, the objective is to investigate the perception of internal audit in the subquestion (3b) "What kind of possibilities does internal audit have to shape its perception?" Light is shed on the opportunities to shape internal audit's perception by performing activities in a specific way. Conform to the afore carried out analyses, the responses (3a and 3b) are consolidated to answer the subordinate question (3). Congruent to the previous chapters, a hierarchy of codes with its code frequencies are provided and further analyzed per subquestion. The related frequency distribution of terms mentioned in conjunction with the subquestion 3a are displayed below:

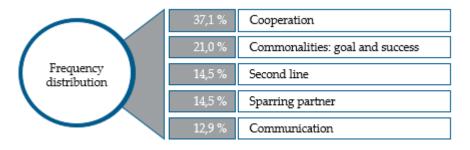


Figure 39: Code Frequencies of Output relating to the 3-LoD

In the interviews four experts were convinced that the currently established 3-LoD model bears room for improvement. Reference is made to the corresponding information in the course of the analysis to answer 3b. As stated earlier, the degree of maturity of the 3-LoD model relates to internal audit's (3b) ability to shape its perception within the financial institution.

According to the above figure, an appropriate set-up of the 3-LoD for internal audit to maintain its independence requires a level of cooperation, sharing commonalities with the first and second line of defense, intensifying exchange with the second line to avoid redundancies, the establishment of sparring partner roles, and a meaningful reporting. Details on the findings are analysed in a descending code frequency in conjunction with the level of agreement of the experts: (1) cooperation, (2) commonalities: goal and success, (3) second line, (4) sparring partner, and (5) communication.

Despite its independence, internal audit has to share information with the first and second line to successfully carry out relating activities. In total, seven experts are convinced that sharing information demands (1) cooperation. The 3-LoD model represents a classic approach to structure a financial institution and thereby determine the required level of cooperation (37,1%). With the participation of all lines and the management body, it is necessary to determine the appropriate measures of decentralized responsibilities and decision-making.

Consequently, common (2) goals and success are created through (1) cooperation within the 3-LoD. According to seven experts, the relationship of the participating lines is based on commonalities (21,0 %). A prerequisite for a sound implemented 3-LoD model is a common denominator in terms of risk culture and risk appetite between the management body, the first, second, and third line. Therefore, internal audit is required to be informed about the strategy and objectives of the first and second lines of defense, their main risks, established processes, and controls. In consequence, the task of internal audit is to then check upon the suitability of the corresponding internal guidelines while taking into account external requirements.

Five experts agree that (3) the second line of defense and the third line of defense can make use of synergies. An appropriate set-up of the 3-LoD requires clarification of responsibilities, interfaces, and boundaries among the second line (14,5 %) and the third line. Both lines share thematic similarities and have commonalities in their activities. According to the degree of clarified responsibilities, the results of both lines are more or less supportive for one and another. As a result, redundant activities are avoided and subsequently harmonized. The experts outline that it is important for the third line to be interlinked with the second line, and to exchange information. With the approval

of the audit plan by the management body, the second line gains transparency on the planned activities of the internal audit department and can take advantage of it to align its surveillance activities. According to the experts, the overall objective is that both lines do not review the same thing.

Three experts understand internal audit as a (4) sparring partner in the form of a personal trainer or trusted advisor of the first and second lines. They state that rights and duties need to be assigned to the sparring partner model (14,5 %) to successfully fulfil the role in the financial institution. The aim is to exchange information in an aggregated way as a single point of contact which is evaluated as important for example in the context of assessments. The experts are confident that the individual lines perceive it helpful to train together which consequently contributes to a sensibly designed 3-LoD model sharing common goals.

When comparing the frequency of the code "sparring partner" (14,5 %) to the subsequent code "communication" (12,9 %), it appears that three experts explained more to describe the relevance of the code as the four experts that assigned an importance to communication. In line with the other descending frequencies in relation to the level of agreement of the experts, the researcher expected to retrieve a reverse order on these two codes. This gives rise to the question what comes first. Is communication the result of performing a sparring partner role or does the implementation of a sparring partner result in more communication. This inconclusive finding represents an opportunity for further investigation by other researchers. Reference is made for potential followed up research in an own chapter within the conclusion (see chapter 5.2).

Four experts are convinced that the (5) communication (12,9 %), which they equate with the term reporting to the management body is a key interest of the internal audit department. Herein, information on the risks and internal controls are provided to the management body and the audited departments. Basically, the afore described content on the relevance of reporting in the chapter on valuable activities (see chapter 4.2.4.2) aligns with the importance of communication. The details provided by the experts are a repetition of information on the same issue. The researcher assumes that reporting to the management body is a valuable activity (30,0 %) and a prerequisite for communication (12,9 %) to appropriately set-up the 3-LoD model.

As pointed out in the beginning of the present chapter, the subquestions dealing with the (3a) set-up of the 3-LoD model and the (3b) ability of internal audit to shape its perception are based on each other. The degree of maturity of the 3-LoD impacts the outcome of internal audit's possibilities to be successful in shaping the perception. In reference to the above stated finding, four experts confirm that their currently experienced 3-LoD model has not reached maturity. The experts further explain that there are historically shaped structures in place that require a process of adaptation over a timespan. These responses indicate to the researcher that the 3-LoD model is still in a transition period. Sarens and De Beelde (2006) assign a teaching role to the internal audit department when the financial institution's awareness regarding the single roles and responsibilities are somewhat immaturely developed or require clarification. In line with the understanding of Sarens and De Beelde, the researcher evaluates the experts' responses as a limiting factor for internal audit's ability to shape its perception.

Analog to the findings focusing on the set-up of the 3-LoD, the possibilities of internal audit to shape its perception are analyzed in the mentioned code frequencies. The following figure displays the findings in a descending code frequency hierarchy:

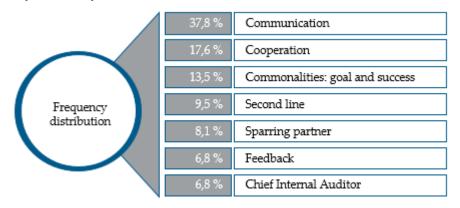


Figure 40: Code Frequencies of Output relating to the Perception of Internal Audit

It is noticeable that the results share some similarities to the previous explored dimensions (see chapters 4.2.4.1, 4.2.4.2, and the present chapter). Hereafter, internal audit has the possibility to shape its perception through proactive communication, close cooperation with the audited departments, sharing commonalities with the first and second lines of defense, especially looking for

close alliance with the second line, the establishment of a sparring partner model, and asking for structured feedback.

Conformingly, to the previous proceedings, the identified codes in the above figure are examined in a descending code frequency and in relation to the number of experts: (1) communication, (2) cooperation, (3) commonalities: goal and success, (4) second line, (5) sparring partner, and (6) feedback.

(1) Communication is mentioned the most frequent code (37,8 %). Nine experts explain that communication is crucial to not miss the essential issues which the first and second lines of defense face in their daily business. The researcher considers this finding as a follow-up to 3a and as a concretization of the relevance of communication. Moreover, communication is an umbrella term for reporting. The experts understand the ongoing communication in for example an assessment as a trigger to shape the perception of the internal audit department. Hereafter, the recognition is central that the internal audit department is required to talk to the first and second lines of defense and not about them. The experts emphasize the importance to understand the extent of contribution of the internal audit department to the 3-LoD model in order to be able to shape the own perception. Moreover, it is pointed out that the perception of internal audit is a marketing issue, but its activities do not represent a marketing instrument itself. A prerequisite for a positive image of internal audit center around the consistency of internal audit activities in the single lines of defense. This goes hand in hand with objective standards for findings and an equal weighting of these findings (see 1a in chapter 4.2.4.1) throughout the financial institution. One option to actively shape the perception of the internal audit department is a workshop on for example how an operational process can be structured in terms of resources and content. Moreover, conferences and roadshows provide an opportunity for the internal audit department to present itself and help shape its perception by repeatedly presenting its role to the first and second lines of defense.

Once again, (2) cooperation is considered central to shape the perception of the internal audit department. This finding goes hand in hand with the afore analyzed set-up of the 3-LoD (see 3a). According to seven experts, the outcome and closeness of cooperation (17,6 %) is very much dependent on the mixture of situations and how the internal audit department is set-up in a financial institution. Hence, different perceptions and a deviate understanding of roles and

responsibilities may result in dissonances and consequently to a loss of cooperation alliances in the long run. Intrinsically, the aim is to establish a constructive exchange of ideas on the conceptual approach of the single lines while maintaining the independence of the internal audit department. The experts are convinced that if the business lines feel that the internal audit department is working in favor and not against them, the internal audit department is in the position to shape and influence its perception in the 3-LoD model. As a result, the experts agree that it is important to create added value and to position oneself fairly and equally among the audited lines of defense. In conclusion, it is the working hypothesis that all lines of defense involved within the model become fitter by working together.

As a result from the afore carried out analysis, the finding on the (3) commonalties, which are composed of a common goal and shared success, match with the ability of internal audit to therewith shape its perception. For an appropriate set-up of the 3-LoD (3a), the experts stated that commonalities are of importance (21,0%). This finding is in line with the mentioned frequency in relation to the (3b) ability of internal audit to therewith take the opportunity to shape its perception (13,5 %). The outcome backs the approach to relate the subquestions (3a and 3b). In accordance with the corresponding findings, six experts believe that internal audit can shape its perceptions by not only criticizing the first and second lines of defense, but by helping to close the gaps between internal and external requirements. This requires confidence that internal audit's activities are carried out for the benefit of the first and second line. Moreover, a common goal serves the overall financial institution's objective. In addition, the perception of the internal audit department is shaped by a modern governance model implemented in the financial institution. The experts recommend that all lines within the 3-LoD model need to achieve a common understanding of concepts and terms. By this, internal audit ensures that it is understood in the same way as intended by the audited departments. As a result, this contributes to a relationship of trust within which the internal audit department adds value to the financial institution. It is assumed by the experts that a relationship based on commonalities results in the ability of internal audit to shape its own perception. In consequence, the researcher concludes that this will lead to a significant acceptance of internal audit within the financial institution.

Only two experts emphasize that a close alliance among the (4) second line of defense and the third line of defense enhances the risk management within the financial institution (9,5 %). The researcher regards this finding as a follow up on subquestion 3a as the second line of defense partially has comparable responsibilities to the third line of defense within the 3-LoD. Moreover, the focus of internal audit as the third line is determined to a not inconsiderable extent by the degree of maturity of the established risk management by the second line of defense. Thus, the experts perceive it easier to shape internal audit's perception when working with the second line as they face a similar dilemma. Both lines are internal supervisor conducting plausibility checks. Conclusively, the experts propose to look for a close alliance between the second line and third line to shape the perception of third line.

The code frequency is not in line with the level of agreement of the experts. In direct comparison to the following codes "sparring partner" (four experts and 8,1%), "feedback" (three experts and 6,8%), and "Chief Internal Auditor" (three experts and 6,8%), only two experts (9,5%) found the code "second line" important. The level of agreement gives reason to expect the code "second line" to be less frequent and placed at the end of the hierarchy. However, these experts assigned more relevance to the code and described it in detail. Conclusively, the code is mentioned more often. As a result, the level of agreement of the experts deviates from the code frequency. Even though the frequencies of the four addressed codes are within a comparable range, the findings represent an opportunity for investigation by other researchers. Consequently, they are subject to the corresponding chapter within the conclusion (see chapter 5.2).

The discovered code frequency of the term (5) sparring partner is in line with the finding of subquestion 3a. Four experts are convinced that the sparring partner model has a wide scope and covers a great range of usage possibilities. Independent from the question of interest, the experts assign an importance to the sparring partner role (2a: 18,8 %, 3a: 14,5 % and 3b: 8,1 %). The correlating findings enhance the assumption from the experts that internal audit might be a value driver for business performance. This is further underlined by internal audit's role to spread "best practices" and taking on a benchmarking role. According to the experts, this results in a support to the management body in regard to the further development of the institutional risk management.

By requesting structured (6) feedback, internal audit has the opportunity to learn more about its perception (6,8 %). The finding matches with the found measurand (7,0 %) to evaluate the contribution of internal audit (see 1a in chapter 4.2.4.1). Three experts suggest that feedback enables the internal audit department to gain insights on how its activities are perceived and where there is room for improvement. Questions that are of interest to gain more knowledge center around the extent to which internal audit has enhanced the risk management, documentation, and the overall transparency. From this, internal audit can conclude whether it is perceived as an important player in risk management and other fields of interest.

Three experts state that the (7) Chief Internal Auditor has a key role to a positive or negative associated perception of internal audit within the financial institution (6,8 %). This statement is underlined by the Chief Internal Auditor who is part of the responding group of three experts. He is responsible for the internal audit department and thus in the position to determine how the financial institution is audited and conclusively how the department is perceived. Moreover, the management body and its relationship to the Chief Internal Auditor are determining factors that shape the perception. A relationship of trust between the two of them leads to spillover effects and positively enhances the perception of internal audit throughout the financial institution.

On the basis of the above findings, the subordinate question (3) "What set-up does the 3-LoD require for internal audit to shape its own perception? is answered as follows: An appropriate set-up of the 3-LoD for internal audit to maintain its independence requires a level of cooperation, sharing commonalities with the first and second line of defense, intensifying the exchange with the second line to avoid redundancies, the establishment of sparring partner roles, and a meaningful reporting. These findings provide the opportunity for internal audit to shape its perception within the financial institution. Hereafter, internal audit has the possibility to shape its perception. It is noticeable that the results share similarities to previous explored dimensions. The findings on commonalities (3a and 3b), sparring partner (2a, 3a, and 3b), second line (3a and 3b), feedback (1a and 3b), and communication (1a, 2a, 3a, and 3b) match with the findings to measure and evaluate the contribution of internal audit (see chapter 4.2.4.1), and to its most valuable activities (see chapter 4.2.4.3). From this, the researcher concludes that

internal audit is aware of its capabilities and possibilities. The findings mainly confirm the findings of the other investigated dimensions ("profession and organization" and "cooperation"). Most experts are convinced that the task spectrum of internal audit will continue to change in the coming years.

In conclusion, the degree of maturity of the established 3-LoD model has an impact on the ability of internal audit to shape its own perception. There is a detectable dependency between the degree of maturity of the model and the perception of a role. The findings centering around the subordinate question (3) are taken into consideration in the context of theory-building (see chapter 4.2.6).

#### 4.2.5 Deciding: Comparison of Interview and Literature Codes

The objective is to make sense of the data collected on the macro and micro level by carrying out a comparison of the findings to capture different dimensions of the phenomenon (see chapter 3.1.1). Both applied data collection methods are of qualitative nature and subject to a qualitative content analysis. The comparison of the data originates from the adopted mixed-method approach. The chapter takes the results from the literature study into consideration and focuses on the findings from the interview study. The purpose is to interpret the differences and commonalities in understandings.

The researcher has to ensure that the findings are credible before carrying out a comparison of the results. Therefore, introductory words are needed to mirror the context: The credibility is enhanced in the present qualitative research by maintaining the audit trail (Ngulube 2015, p. 19). The term "credibility" corresponds to the study process and how the data is collected, and how the analysis is carried out (Bengtsson 2016). Generally, it can be stated that credibility links to validity. Validity results in the confidence of the content analysis at hand (Krippendorff 2004, p. 191). In the course of the analysis, the extent to which alterations are made and data is changed over time expresses the dependability of the data (Bengtsson 2016). As the researcher made use of memos to track the development and accompanying changes in the codes, dependability is given. As a result of dependability, the researcher considers the findings as reliable and thus valid to accept the research results. Accordingly, dependability corresponds to reliability and transferability connects to generalization (Bengtsson 2016). The

transferability is dependent on the representativeness of the sample and determines the ability to generalize the findings (Krippendorff 2004, p. 112). The sampling procedures explained in the chapters that deal with the data sets (see chapters 3.2.1, 3.2.3, 4.2.1., and 4.2.3) are considered representative. In line with the sampling strategies, the researcher is convinced that generalization is justified. The latter is subject to chapter 4.2.6 when it comes to theorization.

On the basis of the introductory words, light is shed on different perspectives that have the same phenomenon in common. In the following, the handling of the data and the subsequent analysis process are explained in detail: The data derived from the archival information was gathered on the macro level. On a macro level, the content centers around the understanding and dealing with the internal audit discipline in the literature (archival information) (Krippendorff 2004, p. 94). The archival information was coded in a content orientated manner (see chapter 3.2). The macro level data forms the basis to enter the micro level. The corresponding macro-level findings were used to formulate scientific relevant questions for the subsequent interview study which is located at the micro level.

The micro level is concerned with for example attributions, word cooccurrences of concepts, textual context keywords retrieved from the interview study (see chapters 4.1 and 4.1.1). The interview study is an intensive study that is based on cases that appear as experts. Its nature is case-orientated and centers around a configuration of phenomena experienced by the corresponding experts. The codes generated from the interviews are derived from the single questions.

In essence, the analytical dimensions of the macro and micro levels differ even though the same methodical procedures were adopted. The findings of both data collection methods are obtained by other means. Given the complexity of these qualitative research approaches, a comparison of the retrieved codes implies to focus on the code frequencies. This requires the researcher to establish a comparability of the data. Hereafter, the data of the interview study demands content preservation and reorganization. The codes assigned to the single questions are dissolved to see the big picture of codes. The data is broken up following the step model of Philipp Mayring to carry out a content analysis (see chapter 3.1.3). A relocation and summarization of the data is conducted.

A theoretical framework is developed by clustering the same content in codes. Thereby, a foundation is generated to compare the results from both

qualitative content analyses. The corresponding clustering allows the researcher to produce a hierarchy of codes and to preserve what matters (Krippendorff 2004, p. 208). Common meanings are accumulated in order to ensure the largest code similarities and dissimilarities. In consequence, comparable data is retrieved which results in code frequencies and conclusively in hierarchies.

The following figure outlines the descending code frequencies and enables the comparison of data:

	Qualitative content analysis: Literature		Qualitative content analysis: Interview	
Frequency distribution	31,9 %	Third line	46,2 %	Third line
	13,4 %	Second line	13,2 %	Second line
	11,9 %	First line	11,5 %	First line
	10,7 %	Regulatory supervision body	13,9 %	Management body
	9,7 %	Governance	6,2 %	Governance
	9,0 %	Management body	6,1 %	Three lines of defense model
	6,3 %	Three lines of defense model	2,8 %	Regulatory supervision body
	3,6 %	Other interest groups	0,2 %	External audit
	3,5 %	External audit	0,0 %	Other interest groups

Figure 41: Comparison of Codes (Literature vs. Interview)

The above figure compares the lists of codes. The left side of the figure displays the results obtained from the qualitative content analysis of the literature study (see chapter 3.2.3). The right side shows the reorganized data from the interview study (see chapter 4.2.3).

At first glance, there are detectable commonalities and differences concerning the code frequencies of the literature in comparison to the interview data. Commonalities underline the fundamental assumption that co-occurrences indicate association in the use of codes (Krippendorff 2004, p. 207).

In both data collection methods, the distribution is identical on the first three codes that make up the single players of the 3-LoD model. Moreover, the same applies to the code "governance" which is identical in place within the hierarchies. These four code commonalities allow the researcher to conclude that the codes "First line", "Second line", Third line", and "Governance" co-occur and are common in their associations. Overall, nearly half of the codes share commonalities according to their descending frequencies while the remaining codes distinguishes among them.

Dissimilarities appear in the codes (1) "Regulatory supervision body", (2) "Management body", (3) "Three lines of defense model", (4) "Other interest groups", and (5) "External auditor". These frequencies of codes are apparently different between the literature study and the interview study. This allows the researcher to make assumptions and to describe the theoretical consideration about these codes' disassociations. The ranks are indicated in accordance with the reading flow of the above figure:

- 1) Regulatory supervision body (fourth rank vs. seventh rank): The literature study contains numerous announced requirements of regulatory supervision bodies. Thus, the related code contents form the basis for many journals to provide insights on their interpretation in conjunction with best practices. The interviewed experts stress the relevance of the regulatory supervisory body less. They refer to it as given and as a basis of existence of the internal audit department to close gaps between internal and external requirements. In the interview study no distinctions are made on individual external requirements which at the same time are a main part of the analyzed archival information. The different ranks are based on different associations with its assigned relevance. The researcher reviewed the code content and thereof concludes that there is common meaning as well as association underlying the occurrence of the code.
- 2) Management body (sixth rank vs. fourth rank.): According to the frequency distribution, the management body is less represented in the literature. Reference is made to its role specificity being overall responsible for the financial institution. The practical relevance of the code is greater in the interview data. This is underlined by the experts that agree that the relationship with the management body is based on reporting to him and thereby providing assurance. They perceive an independent and objective internal audit department as a value driver and are convinced that its tasks changed over the last years. A change is detectable in terms of becoming a recognized sparring-partner of the management body. The researcher concludes that the theoretical and practical relevance of the relationship between the management body and the internal audit department differs. The experiences of the experts are

derived from their day to day business. They assign more importance to the management body as the archival information. The researcher recognizes that the practical component serves an indicator to practice internal audit more goal-orientated and thereby generate a value through interaction with the management body. The content associations with the code are in line in both content analyses.

- 3) Three lines of defense model (seventh rank vs. sixth rank): The ranks of the code "Three lines of defense model" are close and almost cross linking. The model is associated with the single lines which are identical in their frequency distribution in both content analyses. Many literature resources refer to the single lines and describe the model without stating its name (see chapter 3.2.5). In the interviews, the experts actually name the model and take it for granted. The content associated with the 3-LoD is identical in both analyses. From this, the researcher subsumes that the underlying understanding of the code is also equal.
- 4) Other interest groups (eight rank vs. ninth rank): In the literature study, the code is less frequently presented due to its heterogeneity (see chapter 3.2.4.1). The experts did not refer to other interest groups in the interviews. They understand themselves as servants to endogenous interest groups. This finding is not surprising to the researcher being an internal auditor. As an internal auditor, the audit activities are subject to internal proceedings and not centered on the fields of interest of for example investors, journalists, and the Supervisory Board. However, the code does not allow to conclude on associations, co-occurrences and potentially differing understandings of the code. Conclusively, the code is not included in the further interpretation and not part of theorization in chapter 4.2.6.
- 5) External audit (night rank vs. eight rank): In line with the finding on the code comparability of the "Three lines of defense model", the external auditor is ranked closely in both studies. While cooperation among the internal audit department and external audit seems more important in the literature, the external auditor is handled as the raison d'être by the experts in the interview study. The experts consider external audit as a routinely check of the own activities at the end of the year. According to

the code occurrences, different content is associated in both studies. Thus, the researcher is convinced that a comparison of the code is not appropriate. The code is not part of the further interpretation and theorization in chapter 4.2.6.

In conclusion, the present chapter combines the results of the literature study with the results from the interview study. In essence, there are codes that co-occur and are associated in the use with one and another. The corresponding codes "First line", "Second line", Third line", and "Governance" are associated with the same content, relevance and meaning in both studies. Independent from the study approach, the meaning and contents of codes remain the same with the first four codes. By this, they represent entry data to interpret the findings and build theories. In practice, the other half of the codes "Regulatory supervision body", "Management body", "Three lines of defense model" are assigned with a deviating importance and differ in their descending frequency. On the basis of the coded contents, the researcher concludes that the understanding is identical in both studies. Thus, they are also considered as entry data for further interpretation in the context of theorization. The researcher is encouraged to interpret, theorizes the results, and conclude on the data repertoire.

The code "Other interest groups" is not used at all in the interviews. Moreover, the association to the code "External auditor" underlies a different understanding in the literature to the interview study. The researcher excludes both of these codes from the subsequent analysis as their content is not considered appropriate for further theorization measures.

# 4.2.6 Theorizing: Interpretation

The objective is to explain how internal audit needs to be practiced to generate value for the institution's interest groups.

In the present chapter, the researcher interprets the findings and generates theories that center around the phenomena observed within the three dimensions (see chapter 4.2.4) and links them to the associated and disassociated codes (see chapter 4.2.5). In order to relate the phenomena, abduction is used as a form of reasoning. As a result, explanatory hypotheses are formulated.

Flick (2002, p. 176) states that it is the core of qualitative research to interpret the data. The interpretation of the data is the terminal phase of qualitative research (Denzin and Lincoln 2005, p. 909). However, the interpretation of qualitative data is regarded as an art and is subject to formal rules (Ngulube 2015, p. 18). This is underlined by Denzin and Lincoln (2005, p. 909) understanding that interpretation is an unpredictable, emerging and ongoing process.

The findings on the three dimensions are used to explain and validate the interpretation of the associated codes. Consistently with the afore conducted analyses, "Grounded Theory" is adopted for theory development (Bitsch 2005, p. 77). Moreover, the goal is to generate useful and plausible theories of the experienced phenomena which are grounded in the gathered data (Mc Leod 2001, quoted by Brown et al 2014, p. 8). Furthermore, theoretic constructs derived from the analysis conform the validation of a build theory in the context of their structural correspondence (Krippendorff, 2004, p. 179). Generally,

"[...] content analysts rely on hypothetical generalizations in the form of analytical constructs. But the test of these generalizations lies in their effects. It comes after content analysts have answered their research questions, made their abductive inferences, or interpreted their texts systematically." (Krippendorff 2004, p. 93).

Drawing from the theory of inference, abduction represents the guiding principles to theory construction (Timmermans and Tavory 2012, p. 167). Abduction refers to an inferential process that aims to produce theories and hypotheses. The quality of abduction lies in its "means-of-inferencing" and centers around logical-inferences (Bryant and Charmaz 2007, p. 216). More precisely, it generates knowledge, extends insights, and reaches out to a sphere of methodically ordered and logical discoveries. In total, abduction is a cognitive logic of discovery (p. 220). The theories developed in an abductive analysis attempt to describe and to generalize the found causal links (Abend 2008, p. 177-179). The researcher provides descriptions of the findings by following Peirce's "basic kinds of reasoning" to configure a rule, case, and a result (Yu and Zenker 2018). Hereafter, a hypotheses(-abduction) consists of the following inference:

- rule "All the beans from this bag are white.",
- result "These beans are white", and
- case "These beans are from this bag".

The researcher generalizes the found constructs that are derived from the associations and generated hypotheses. The corresponding hypotheses represent the output of the afore conducted comparison and the examined dimensions. This methodically controlled exploration makes the formulation of hypotheses transparent and comprehensible.

The comparison of the literature with the interview study resulted in findings that require further interpretation (see chapter 4.2.5). The researcher interprets codes that co-occur and are associated in the use with one and another as directly relevant for the future state of the internal audit discipline. These corresponding codes provide indication how internal audit needs to be practiced to generate value for the institution's interest groups. An indirect relevance is derived from codes that share the same underlying understanding but have a deviating code frequency. In the following, a closer look is taken at the corresponding codes: The practice of internal audit to unfold a value for the institution's interest groups is directly shaped by the influence of the (a) "First line", (b) "Second line", (c) "Third line", and (d) "Governance". An indirect impacting factor to generate a value for the financial institution through internal audit practice is assigned to the codes (e) "Regulatory supervision body", (f) "Management body", and (g) "Three lines of defense model". The coded content and the underlying understanding are identical in both studies. In theory and practice these codes are assigned with a deviating importance and differ in their descending frequency.

In the following, theory is developed to analyse the code constructs. The subsequent theory is derived from a version of the dissonance theory (Osgood, Saporta and Nunnally in 1956; quoted by Krippendorff 2004, p. 177). The objective is to build balanced concept pairs in order to associate and disassociate between two similarly valued constructs. The constructs are equated with the analyzed dimensions. Hereafter, the dimensions and findings from the comparison are parentheses. More concretely this means the use of:

"[...] ( + ) and (-), and let associations be represented as positive links, - + -, and dissociations as negative links, - - -. [...] concepts with open valuation are valued implicitly, and analysts can therefore infer their value from suitably recorded texts:

```
From (+) - + - (?) one can infer (?) = (+), from (+) - - - (?) one can infer (?) = (-), and
```

from (-) - - - (?) one can infer (?) = (+)." (Krippendorff 2004, p. 178)

The explored dimensions and the answers to the subordinate questions serve as starting points to conduct theorization (see chapters 4.2.4.1, 4.2.4.2, and 4.2.4.3). In this context, the findings centering around the dimension (1) to (3) are linked to the results (a) to (g) retrieved from the comparison of the content analyses of the literature and interview study (see chapter 4.2.5):

- 1) Profession and organization (measurable contribution) (see chapter 4.2.4.1): Regular and specific in-depth assessments, advisory activities, project management and assurance are activities that contribute to the financial institution. These activities relate to measurands that are of quantitative nature (risk coverage, findings (number and weighting), no measure, audit universe coverage, standard audit program, time, prevention (loss and fraud)) and qualitative nature (importance of internal audit and feedback). In essence, there are several qualitative and quantitative measurands that relate to the "profession" of internal audit. The measurands considered useful to evaluate the effectiveness enable to measure the contribution of internal activities to the "organization". The internal audit discipline provides transparency regarding performance of the single lines. In other words, effective activities of (c) the third line contribute to the financial institution by aligning the (a) first and (b) second line. Thus, the researcher equates the findings by connecting: (c) + (a) + (b) = (1). An interplay between these three sets of codes with the first dimension (profession and organization) is subsumed. This results in the following association and disassociation to construct a valid theory:
  - From (+) effective third line activities in the + first line and second line
     (?) one can infer a generation of value (?) = (+) which enables to measure the contribution of internal audit practice,
  - from (+) effective third line activities outside the first line and second line (?) one can infer no generation of value (?) = (-) which neglects to measure the contribution of internal audit practice, and
  - from (-) ineffective third line activities outside the first line and second line (?) one can infer no generation of value (?) = (-) which enables to measure the contribution of internal audit practice. As a

result, it is concluded that no measurable contribution emerged even though one could measure the nonexistence.

Based on the above generated theory, one can infer a generation of value from effective third line activities in the first and second line. Conclusively, the developed theory underlines that effective third line activities represent a measurable contribution to the first and second line of defense and results in the generation of value.

This allows the researcher to carry out a logic-based abduction reasoning on the above build theory. Following the "basic kind of reasoning" the researcher hypothizes the association of codes with one and another:

- Rule: Effective internal audit activities in the first and second line generate a value.
- Result: These internal audit activities generate a value.
- Case: These internal audit activities are carried out in the first and second line.

There is a causal relationship between third line activities in the first and second line and the generation of value.

2) Cooperation (valuable activities) (see chapter 4.2.4.2): Reporting, assurance, independence, taking on a sparring partner role, and advisory represent activities are considered the most valuable for the management body. The management body has to ensure to have a proper business organization, which is compliant with the legal provisions and with the business management requirements. In essence, (c) the third line supports the (f) management body in executing its assigned institutional responsibility which underlines a relationship of "cooperation". A proper business organization includes the establishment of an appropriate (d) governance, which consists of a risk culture and framework, by the management body. Therewith, internal audit takes on a valuable role to enhance risk management on behalf of the management body. Moreover, internal audit can make the financial institution fit and proper for a potential on-site inspection of the (e) regulatory supervision body. Accordingly, the researcher links the findings: (c) + (f) + (d) + (e) = (2). The bottom line is that these four sets of codes interplay with the second dimension (cooperation). Subsequently, the codes are associated and disassociates respectively to construct the following valid theory:

- From (+) supportive third line activities to + the management body and his governance that prevent regulatory findings (?) one can infer a generation of value (?) = (+) which enables to add value to internal audit practice,
- from (+) supportive third line activities that fail to address the interests of the management body and his governance that prevent regulatory findings (?) one can infer no generation of value (?) = (-) which neglects to add value to internal audit practice, and
- from (-) unsupportive third line activities that fail to address the interests of the management body and his governance that prevent regulatory findings (?) one can infer no generation of value (?) = (+) which enables to add value to internal audit practice. Conclusively, the room for improvement is recognised as internal audit's awareness is raised to prospectively add value to its activities.

On the basis of the above build theory, one can infer a generation of value from supportive third line activities towards the management body and his governance that prevent regulatory findings. Conclusively, the set-up theory emphasizes that supportive third line activities represent added value to the management body and his governance.

Following the "basic kind of reasoning" to construct a hypothesis(abduction), the researcher associates the codes with one and another:

- Rule: Supportive internal audit activities towards the management body and his governance that prevent regulatory findings generate a value.
- Result: These internal audit activities generate a value.
- Case: These internal audit activities are carried out for the management body and his governance.

There is a causal relationship between third line activities and the management body and his governance that prevent regulatory findings and the generation of value.

3) Output (3-LoD) (see chapter 4.2.4.3): The findings mainly confirm the findings of the other investigated dimensions ("profession and

organization" and "cooperation"). An appropriate set-up of the 3-LoD for internal audit to maintain its independence requires a level of cooperation, sharing commonalities with the first and second line of defense, intensifying the exchange with the second line to avoid redundancies, the establishment of sparring partner roles, and a meaningful reporting. Thus, the construct of the 3-LoD model and the role perception of internal audit influence the "output". Moreover, the degree of maturity of the established 3-LoD model has an impact on the ability of internal audit to shape its own perception. The level of operative activities of internal audit allows to conclude on the appropriateness of the set-up of the 3-Lod model. As there is no antonym for the term operative, the researcher makes use of the words "preventive" and "detective" (see chapter 3.2.4.2). The researcher associates preventive activities with a higher output quality as detective activities that reveal inadequate regulations, processes, or structures in the first and second line. The (a) first line, (b) second line, and (c) third line are embedded in the (g) 3-LoD model. In this context, the researcher relates the findings: (c) + (a) + (b) + (g) = (3). The third dimension (output) interacts with these four sets of codes. The following theory is subject to association and disassociation:

- From (+) preventive third line activities in the + first line and second which are part of the 3-LoD (?) one can infer a generation of value (?)
   = (+) which enables to determine the output quality of internal audit practice,
- from (+) preventive third line activities outside the first line and second line which are part of the 3-LoD (?) one can infer no generation of value (?) = (-) which neglects to determine the output quality of internal audit practice, and
- from (-) detective third line activities outside the first line and second line which are part of the 3-LoD (?) one can infer no generation of value (?) = (-) which enables to determine the output quality of internal audit practice. As the activities are carried out outside the 3-LoD, the researcher subsumes that detective activities are performed

based on occurred incidents that relate for example to the management body.

The above theory enables the researcher to infer a generation of value from preventive third line activities to the first and second line which are embedded in the 3-LoD. Conclusively, the theory highlights that preventive third line activities determine the output quality for the first and second line in the 3-LoD.

In the context of the "basic kind of reasoning", the researcher hypothesizes the association of the codes with one and another:

- Rule: Preventive internal audit activities in the first and second line embedded in the 3-LoD generate a value.
- Result: These internal audit activities generate a value.
- Case: These internal audit activities are carried out in the first and second line that are embedded in the 3-LoD.

There is a causal relationship between third line activities in the first and second line that are embedded in the 3-LoD and the generation of value.

In conclusion, the generation of value through internal audit activities depends on the three dimensions and the associated codes. According to the comparison of the findings from the literature study and interview study, there are codes that co-occur and are associated in the use with one and another. The researcher interprets these findings by shedding light on their association and disassociation within the examined three dimensions.

The overall objective is to understand and describe how the internal audit discipline needs be practiced to generate value for the institution's interest groups. From the build theories and generated hypotheses, the following three relationships are of importance to practice internal audit: 1) There is a causal relationship between third line activities in the first and second line and the generation of value. 2) There is a causal relationship between third line activities and the management body and his governance that prevent regulatory findings and the generation of value. 3) There is a causal relationship between third line activities in the first and second line that are embedded in the 3-LoD and the generation of value.

The explored dimensions and the association of codes enables the researcher to answer the research question RQ3 "How does internal audit need to be practiced to generate value for the institution's interest groups?". Hereafter, internal audit activities generate a value to the institution's interest groups when internal audit practices concentrate on the first line and second line of defense, the management body and his governance that prevent supervisory findings, and on the 3-LoD.

# 4.2.7 Displaying: Conceptual Map of Codes

In line with the concept mapping carried out in the context of the state of the art of internal audit, the researcher's understanding of the explored dimensions (see chapter 4.2.4), the results from the comparative data analyses (see chapter 4.2.5), the interpretation and theorization (see chapter 4.2.6) are united in conceptual map of codes. The objective is to identify key concepts and to visualize the theory-building centering around the research question RQ3. Accordingly, the codes are brought together in three figures that focus on the three analyzed dimensions. Within the figure, the coded terms with the highest number of occurrences in the texts are displayed larger and with a thicker line. The closeness and distance of the codes relate to the level of similarities and common naming. As MaxQDA creates the maps on the basis of the selected codes by the researcher, there is no influence nor flexibility in presenting or reorganizing the results.

The following figure visualizes the causal relationship explored in the first dimension "profession and organization":

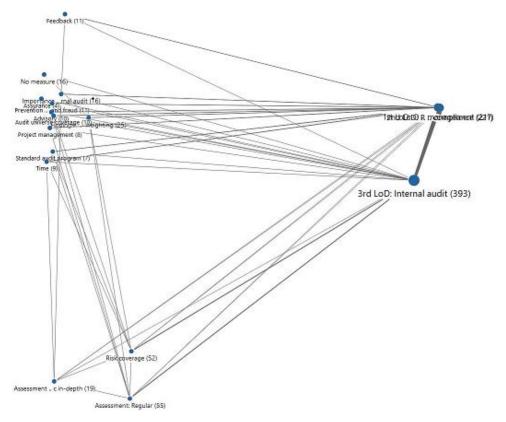


Figure 42: Dimension "Profession and Organization" relating to the Causal Relationship of Internal Audit

In the above figure, the inferences from third line activities in the first and second line in conjunction with the first dimension are displayed. The researcher derived from the findings that there is a causal relationship between them which result in the generation of value. The relationship between the first and second line is so close that they are presented as overlapping codes. Moreover, the thickness of the lines and the font size emphasize the close relationship of the "first line", "second line", and "third line". Their relationship is built on the foundation centering around the first dimension which consists of measurands to evaluate the contribution of internal audit activities (see chapter 4.2.4.1). There is detectable closeness of single measurands as they provide different in-depth information but are comparable in their intention to measure the effectiveness. The assessment types "regular and in-depth specific" and "risk coverage" maintain a more distant relationship. This is to be explained with the nature of these codes. The assessment types are the products of internal audit activities within which a statement on the risk coverage is provided. In addition, "feedback" is also illustrated to have a more

distant relationship. This allows to draw the conclusion that feedback is rather a continuous measurand. Moreover, it is connected to "no measure" and implicitly describes the nature of feedback which is hard to express in numbers.

In the figure below, the causal relationship explored in the second dimension "cooperation" is illustrated:

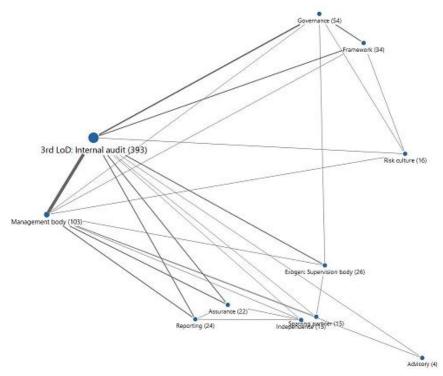


Figure 43: Dimension "Cooperation" relating to the Causal Relationship of Internal Audit

The figure provides an overview of the inferences from the third line towards the management body and his governance that go hand in hand with the prevention of findings from the regulatory supervision body. The causal relationship summarizes the interpretation and the build theory of the second dimension "cooperation" (see chapter 4.2.4.2). The added value from internal audit practices is emphasized by the thick line between internal audit and the management body. The upper half of the figure illustrates the activities from internal audit centering around the "framework" and "risk culture". In line with these activities, "governance" is herewith related. The supportive activities of internal audit which are subsumed as "assurance", "reporting", "sparring partner", and "independence" are placed in the lower half of the figure. These

activities support the prevention of findings from the "regulatory supervision body" that is also placed in the corresponding surrounding.

Lastly, the causal relationship centering around the third dimension "output" is brought together in a consolidated map of codes:

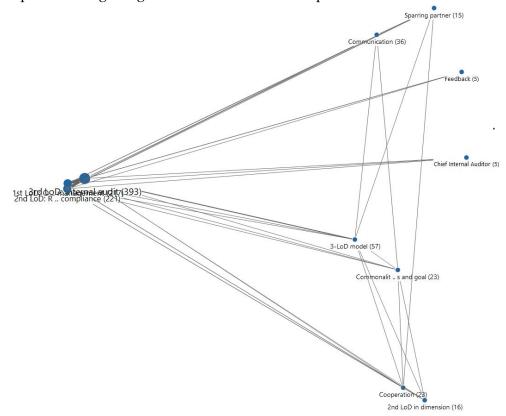


Figure 44: Consolidated Dimension "Output" relating to the Causal Relationship of Internal Audit

In line with the afore analyzed dimensions, the third dimension "output" is displayed in the above figure. The figure displays the causal relationship between third line activities in the first and second line within the 3-LoD. The researcher consolidated the findings from the subquestions 3a and 3b (see chapter 4.2.4.3) as the results mainly are identical. Thus, the content of the codes was copied and united to one code in the illustration where applicable.

Based on the build theory, the researcher infers a generation of value from preventive third line activities to the first and second line which are embedded in the 3-LoD. The close relationship between the single lines is shown on the left side of the figure. Here it becomes evident that the codes are almost overlapping. The

closest code to the single lines is the "3-LoD model" which is placed in the center of the figure. The codes derived from the analysis of third dimension continue to unfold closely after the 3-LoD which is considered the center piece. The code directly next to the 3-LoD is "commonalities: success and goal" which suggests that these two codes are considered to share similarities. Thus, internal audit's ability to shape its perception is linked to the extent of shared commonalities with the single lines embedded in the 3-LoD model. Congruent to this, the role of the "sparring partner" is placed near to "communication" which allows to conclude that the role demands intensive communication skills. The codes "feedback" and "Chief Internal Auditor" are solely in a relationship with the single lines. As stated in the analysis of the dimension, the latter has a key role to a positive or negative associated perception of internal audit. Analogously, the visualized relationship of the code "feedback" in the third dimension confirms the findings from the first dimension. "Cooperation" and "second line" (code in dimension) are placed close by one and another. This observation is also confirmed in the afore carried out analysis of the third dimension.

Conclusively, the concept maps visualize that internal audit practices generate a value to the financial institution when they are concentrated on the first line and second line, the management body and his governance in order to prevent findings from the regulatory supervision body, and on the 3-LoD (see chapter 4.2.6). In total, the explored dimensions (see chapter 4.2.4. with subchapters), the comparative content analyses (see chapter 4.2.5), and the illustrated relationships (see chapter 4.2.7) are in line with the build theories and the abductive hypotheses (see chapter 4.2.6).

### 4.3 CONSOLIDATING THE FUTURE STATE OF INTERNAL AUDIT

The present chapter consolidates the findings on the future state of the internal audit discipline.

Based on the results of chapter three, chapter four focuses on the 1) research strategy by structurally 2) examining the question of interest (RQ3). Thereof the 3) method is analyzed in conjunction with the 4) handling of data. Congruent to the afore conducted analysis, a 5) qualitative content analysis of the interview data is carried out. In detail, the steps are described to 6) analyze interviews and 7) to

develop the corresponding questions. Insights are provided centering around the 8) organization of the interview data to then 9) explore the single dimensions. The dimensions under investigation are composed of the 10) profession and organization, 11) cooperation, and 12) output. A 13) comparison of the literature and interview data is carried out in order to 14) theorize and interpret the data. In line with researcher's understanding the 15) conceptual maps of codes are displayed.

- 1) Explaining research strategy: Interviews are considered as a tandem to the afore conducted qualitative content analysis of the (archived) information at the macro level. There are different interview strategies and designs available to gather different supplementing types of data. It is therefore examined which interview strategy is to be considered as appropriate to answer RQ3. The research question is located at the micro level of the auditing function. It becomes apparent that only qualitative interview strategies apply.
- 2) <u>Examining question:</u> Following the strategic fit of the different types of interviews, the semistructured interview type represents the most appropriate method as it enables the researcher to ask the same questions to all of the interview participants and to conduct corresponding counts.
- 3) Analyzing method: Expert interviews enable the chance of uncovering trends and relations that were neither expected nor hypothesized. From the afore conducted qualitative content analysis, the researcher developed theoretical concepts which were discovered in the data. These need to be proven in the subsequent interview data. The "Grounded Theory" method supports the construction of theory.
- 4) <u>Handling data:</u> The goal is to gather data on the experiences of the interviewee's expressing their perception on the questioned issue. On the basis of the afore conducted qualitative content analysis, the researcher is in the position to formulate scientific relevant questions.
- 5) <u>Utilizing content analysis:</u> All over again, the approach of Philipp Mayring is applied to carry out a qualitative content analysis and to thereby analyze the findings from the interviews. The structure of the chapter and the proceedings are congruent to chapter three.

6) Analyzing interview: The conduction of interviews with a homogenous group enables the researcher to understand common experience and perceptions. In the literature, the adequacy of a sample size in qualitative interviews is discussed in great length and results in different recommendations. Consequently, the researcher carries out interviews until certainty of the answer is reached and thereby saturation is experienced.

- 7) <u>Using interview questions:</u> The following three dimensions categorize the interview constructs: (1) profession and organization, (2) cooperation, and (3) output. In this context, questions are developed centering around the internal audit function that result in an understanding of (1) measures or indicators regarding its contribution, (2) the relationship between internal audit and the management body interacting within internal governance arrangements, and the (3) 3-LoD.
- 8) Organizing interview data: According to Guest et al. (2006, p. 79), a homogenous group of six to twelve interviews is needed to reach saturation and to achieve the research objective. The interview data is composed of eleven experts. All of the experts are experienced internal auditors in senior management level. A qualitative content analysis is carried out to identify text fragments with rich information, extract its contents and to thereof derive findings, and generalize these across the interview data. A saturation of codes took place after carrying out half of the interviews.
- 9) Exploring dimensions: The objective is to explore the dimensions (see 7). It is of interest to gather insights on the generated value of internal audit practices for the institution's interest groups. In the course of the analysis, the knowledge gained in the interviews and the qualitative content analysis are used to build theory to practice internal audit in a way that value is generated.
- 10) <u>Dimension (profession and organization)</u>: The subordinate question (1) "What are activities of internal audit that represent a measurable contribution to the institution?" consists of a practical component (profession) and a structural component (organization). As a result, there is no unique or single activity that represents a measurable contribution to the financial

institution. Regular and specific in-depth assessments, advisory activities, project management, and assurance are activities that contribute to the financial institution. These activities relate to measurands that are of quantitative nature (risk coverage, findings (number and weighting), no measure, audit universe coverage, standard audit program, time, prevention (loss and fraud)) and qualitative nature (importance of internal audit and feedback). Dependent on the type of audit assessment and the activity these measurands provide insights to evaluate the effectiveness of internal audit activities and their contribution to the financial institution.

- 11) Dimension (valuable activity): The subordinate question (2) "What is the most valuable activity of internal audit?" centers around cooperation. The examination reveals that reporting, assurance, independence, taking on a sparring partner role, and advisory represent activities that are considered the most valuable for the management body. In the governance context, the management body intersects with the role of internal audit. Internal audit plays a role in assessing the governance framework and the risk culture. It is concluded that it is more about what internal audit does and less about its own role within the governance arrangements.
- 12) Dimension (output): The subordinate question (3) "What set-up does the 3-LoD require for internal audit to shape its own perception? is answered as follows: An appropriate set-up of the 3-LoD for internal audit to maintain its independence requires a level of cooperation, sharing commonalities with the first and second line of defense, intensifying the exchange with the second line to avoid redundancies, the establishment of sparring partner roles, and a meaningful reporting. These findings provide the opportunity for internal audit to shape its perception within the financial institution. The findings mainly confirm the results of the other investigated dimensions. The degree of maturity of the established 3-LoD model has an impact on the ability of internal audit to shape its own perception.
- 13) <u>Deciding comparison of codes:</u> The objective is to make sense of the data collected on the macro and micro level by carrying out a comparison of

the findings. The comparison of the data originates from the adopted mixed-method approach. The codes "First line", "Second line", "Third line", and "Governance" are associated with the same content, relevance, and meaning in both studies. In practice, the other half of the codes "Regulatory supervision body", "Management body", "Three lines of defense model" are assigned with a deviating importance and differ in their descending frequency. On the basis of the coded contents, the researcher concludes that the underlying understanding is identical in both studies.

- 14) Theorizing interpretation: The researcher interprets the findings and generates theories that center around the phenomena observed within the three dimensions and links them to the associated and disassociated codes. Abduction is used as a form of reasoning to formulate explanatory hypotheses. The explored dimensions and the association of codes enables the researcher to answer the research question RQ3. Hereafter, value is generated for the institution's interest groups when internal audit practices concentrate on the first line and second line of defense, the management body and his governance in order to prevent supervisory findings, and on the 3-LoD.
- 15) <u>Displaying conceptual map of codes:</u> The concept mapping illustrates the researcher's understanding of the explored dimensions. In total, the explored dimensions, the comparative content analyses, and the illustrated relationships are in line with the build theories and the abductive hypotheses.

Based on the results presented in 1) to 15) and thereby consolidating the future state of the internal audit discipline, the research question RQ3 "How does internal audit need to be practiced to generate value for the institution's interest groups?" is to be answered as follows: The following three inferences were identified as crucial to generate value for the institution's interest groups:

1) Profession and organization: One can infer a generation of value from effective third line activities in the first and second line. Conclusively, the developed theory underlines that effective third line activities represent a measurable contribution to the first and second line of defense and results in the generation of value. As a result, the explanatory hypothesis

- is formulated: There is a causal relationship between third line activities in the first and second line and the generation of value.
- 2) Cooperation: One can infer a generation of value from supportive third line activities towards the management body and his governance that prevent regulatory findings. Conclusively, the set-up theory emphasizes that supportive third line activities represent added value to the management body and his governance. The inference is expressed in the hypothesis: There is a causal relationship between third line activities and the management body and his governance that prevent regulatory findings and the generation of value.
- 3) Output: One can infer a generation of value from preventive third line activities to the first and second line which are embedded in the 3-LoD. Conclusively, the theory highlights that preventive third line activities determine the output quality for the first and second line in the 3-LoD. Consequently, the hypothesis is set-up: There is a causal relationship between third line activities in the first and second line that are embedded in the 3-LoD and the generation of value.

The analyses conclude that the generation of value of internal audit practices depends on the ability to interact within causal relationships. In order to generate value, internal audit practices need to concentrate on the first line and second line of defense, the management body and his governance in order to prevent supervisory findings, and on the 3-LoD.

#### 5 CONCLUSION AND OUTLOOK

Internal audit once had the charm of a back-office function. Meanwhile, it has developed into an important source of information for its various interest groups. Thus, the current status in conjunction with the state of the art of the internal audit discipline were examined to conclude on its future state.

The first chapter of the research contains the motivation to carry out the research, outlines the problem with the corresponding research objective, the description of the research, and its structure. Chapter two summarizes the results along the current status of the internal audit discipline by answering the research question RQ1. The third chapter is an ex-course on the state of the art of internal audit in conjunction with a qualitative content analysis to answer the research question RQ2. The research question RQ3 is examined in the fourth chapter. In this context, the future state of the internal audit discipline is analyzed on the basis of expert interviews. The findings are brought together in a comparative qualitative content analysis. As a result, theories are built, inferences are drawn and explanatory hypotheses are generated.

A conclusion is given by putting the results into the context of this thesis by answering the main research question MRQ "How can the internal audit discipline evolve to be effective and generate value for the institution?".

## 5.1 CONCLUSION

At the point of time of the present research, there was no study available which focused on the research objective and adopted the research methodology. Effective and value generating internal audit activities have long been contested because they play a key part in the achievement of the financial institution's objectives. The lack of qualitative research in this area confirms that it was about time and appropriate to investigate the topic. The motivation to write the thesis was to enrich and extend the current understanding of the internal audit discipline. The research aimed to identify the fields of relevance to practice effective and value generating internal audit activities in financial institutions. The addressed

theoretical and practical research gaps were closed by generating new knowledge about the internal audit discipline, its effectiveness within and its value for a financial institution.

In the following, the results from the explored states of the internal audit discipline are summarizes to thereof answer the main research question MRQ. Hereby, it is important to consider that there are dependencies among the investigated research questions (RQ1, RQ2, and RQ3).

The current state of the internal audit discipline deals with the research question RQ1 "What is the current state of internal audit as a discipline?". The findings enable the researcher to answer the research question RQ1: A contributing and performing internal audit function requires a consistent, integral risk management system embedded in the 3-LoD model. This is to be based on the "COSO"-approach and aligned with an internal governance system. Internal audit activities support the management body to take decisions based on transparent risk information and deliver guidance to the financial institution.

The state of the art analysis centers around the research question RQ2 "What are fields of relevance for internal audit in order for the discipline to be effective?". The findings from the qualitative content analysis and the build theories allow the researcher to answer the research question RQ2: The activities of internal audit need to be aligned to business requests and strategy or if it is the case to an unexpected occurrence of an event. Three starting points for internal audit practice are developed for the discipline to be perceived as effective: 1) a measure of contribution, 2) valuable activities, 3) the ability to shape the perception of internal audit within the 3-LoD model.

The future state focuses on the research question RQ3 "How does internal audit need to be practiced to generate value for the institution's interest groups?". The conducted interviews, the developed theories and the generated explanatory hypotheses contribute to answer the research question RQ3: The generation of value of internal audit practices depends on the ability to interact within causal relationships. Hereafter, a generation of value is achievable when internal audit activities concentrate on the first line and second line, the management body and his governance in order to prevent findings from the regulatory supervision body, and on the 3-LoD.

Each of the above answers to the single research question deliver a share to answer the overall main research question MRQ: "How can the internal audit discipline evolve to be effective and generate value for the institution?". The results provide evidence that effective internal audit activities represent a significant contribution and in consequence deliver value to the institution. A risk management embedded in the 3-LoD model is a central enabling factor for internal audit to perform its activities. The single lines of defense need to be aligned while internal audit has to maintain its independency. As a result, internal audit evolves to provide transparency towards the management body to take sound decisions. The evolvement of internal audit is dependent on its ability to align its activities with the financial institution's mission and strategy. To achieve the desired effectiveness of internal audit activities, an adequate collaboration within the 3-LoD model is a prerequisite. The evolvement of effective activities depends on the ability of internal audit to serve its endogenous and exogenous interest groups. Following the theory of heredity, an effectively practiced internal audit discipline within the financial institution results in an effectively perceived internal audit function by the actors outside the financial institution. Internal audit maintains causal relationships with the first and second line, the management body with his governance in order to prevent supervisory findings, and the 3-LoD. The extent to which value is generated evolves from the concentration of internal audit's activities on these relationships. The evolvement of the internal audit discipline depends on the importance assigned to the internal audit department by the management body.

In conclusion, the researcher infers that effective and value generating internal audit activities will evolve in the provision of advice. As a result, the risk management is improved within the financial institution. Internal audit will evolve to play a central role in a successful and progressive financial institution. Effective internal audit activities can modify an institution by inserting foreign DNA into it and thereby generate value (Spooner 2017, p. 896). The transformation of the institution 's environment is a key characteristic of internal audit (Shore 2008, p. 281). In total, it is time to seize the day and recognize internal audit as a respected and valuable part of a financial institution.

#### 5.2 OPPORTUNITY FOR FUTURE RESEARCH

The results of the research are subject to a time specific character. The relevance and the content assigned to the internal audit discipline are influenced by the current regulation and business environment. Conclusively, a longitudinal research on the internal audit discipline and its changes overtime provides an interesting research opportunity.

In line with a longitudinal research, reference was made in the thesis for potential followed up research. In the dimensions "profession and organization" and "output", few experts were very detailed about the relevance of "prevention: loss and fraud" (see chapter 4.2.4.1) and "sparring partner" in conjunction with "communication" (see chapter 4.2.4.3). In these cases, the low level of agreement deviates from the high code frequency. This observation offers the opportunity for further research in a longitudinal research and to thereby investigate whether few experts can serve as an indicator for a so far underrepresented but potentially more relevant theme in the future. Another opportunity for research is the conduction of a quantitative research to test the generated hypotheses (see chapter 4.2.6).

During the thesis was written, COVID-19 pandemic took place and impacted the way compliance of financial institutions are managed. The European Banking Authority as well as national supervisory bodies have provided various facilitations on their supervisory activities to mitigate the financial impact on the economic environment. Consequently, these measures most probably have an impact on the risk management of a financial institution. Thus, internal audit will face challenges as the employees are operating partly remote. This will potentially result in new risks and lead to compliance challenges as the business is performing in ways that have never been considered before. It is of interest to conduct a research on the impact of crisis on the set-up of 3-LoD and internal audit activities to learn more about spontaneously arising risks. Risk owning business lines are under pressure to generate profit which may result in a different risk appetite. Subsequently, it could be of interest to undertake research on the COVID-19 pandemic in conjunction with the risk appetite of the business lines and their perception of risk tolerance.

The suggested ideas might deliver an inspiration for future researchers to further examine and analyze the relevance of an effective and value generating internal audit function embedded in the 3-LoD model.

## 5.3 OUTLOOK

While internal audit once had the charm of a back-office activity, it has developed to an important source of information for the various interest groups. The perception of the internal audit discipline is changing, and it is no longer blamed to block the development of a financial institution and the ideas of its stakeholders. The findings confirm that internal audit creates value to the financial institution by highlighting and illuminating risks that have an impact on management decision and the financial institution's risk management. Moreover, the researcher believes that the advisory role of internal audit will gain more importance in the future. Likewise, internal audit's success to provide advice depends on its ability to understand the financial institution and the needs of the single business lines (Shahimi and Mahzan 2018, p. 1258). Above all, internal audit has to maintain its independence when providing consultancy services. Therefore, it is important to be aware of the scope of work and the nature of advice which may compromise internal audit's independence.

Internal audit is a discipline embedded in the 3-LoD model with a growing research interest. Each of the involved functions has a unique perspective and a variety of skills which are valuable to their institutions.

It is common to find internal auditors working together in diverse teams that are composed of specialists in risk management, quality assessors, experts for internal controls, fraud investigators, compliance officers, and other professionals to enhance a financial institution's management of risks (The Institute of Internal Auditors 2013a, p. 1). It is necessary to consider risk management into the decision-making in order to avoid the downside of risk and simultaneously benefit from its upside. It should therefore put in question, whether defense in the sense of "lines of defense" is proactive, reactive or can be both at the same time. The term 'defense' is potentially misleading and it should rather be named 'offense' (Internal Auditor 2015, p. 30). It can be assumed that the 3-LoD fail to recognize the upside and focuses more on the downside as the model is about reducing risk. The model lacks

to deal more with sizing controls on managing risks and how they need to be taken to achieve the financial institution's objectives.

In the past date until present, the 3-LoD model provided accountability and structure in relation to control functions, and risk management. Looking forward to 2025, it is recommendable that the regulatory supervision body should not define the 3-LoD responsibilities too closely as financial institution's requirements vary according to risk appetite, purpose, size, complexity, and culture. Regulators should rather provide guidance and governance principles.

- Abend, G.. 2008. "The meaning of theory." Sociological Theory, published June 1, 2008, 26: 173-199 https://www.researchgate.net/publication/227496484\_The\_Meaning\_of\_%27 Theory%27 (January 5, 2021)
- Allen, F. and Gale, D.M.. 2004. "Competition and Financial Stability." In: Journal of Money, Credit and Banking, 36(3): 453-80.
- Alves, H., Fernandes, C. and Raposo, M. 2016. "Social media marketing: a literature review and implications." In: Psychological Marketing, 33 (12) (2016), p. 1029-1038.
- Anderson, D.J. and Eubanks, G.. 2015. "Leveraging COSO across the Three Lines of Defense." https://na.theiia.org/standards-guidance/Public%20Documents/2015-Leveraging-COSO-3LOD.pdf (February 5, 2017)
- Bank for International Settlements. 2011. "Principles for the Sound Management of Operational Risks." Basel Committee on Banking Supervision. https://www.bis.org/publ/bcbs195.pdf (October 10, 2018)
- Bank for International Settlements. 2012. "The internal audit function in banks, Basel Committee on Banking Supervision." http://www.bis.org/publ/bcbs223.pdf (October 5, 2018)
- Bank for International Settlements. 2015. "The "four lines of defence" for financial institutions." https://www.bis.org/fsi/fsipapers11.pdf (March 30, 2019)
- Becker, L.. 2016. "Methodological proposals for the study of consumer experience." In: Qualitative Market Research, 21 (4) (2018), p. 465-490
- Bengtsson, M.. 2016. "How to plan and perform qualitative study using content analysis." In: NursingPlus Open, Volume 2, p. 8-14 https://www.sciencedirect.com/science/article/pii/S2352900816000029#bib12 (January 12, 2021)
- Bitsch, V.. 2005. "Qualitative Research. A Grounded Theory Example and

Evaluation Crieria." In: Journal of Agribusiness 23,1, Agricultural Association of Georgia, Spring 2005, https://ageconsearch.umn.edu/record/59612/ (October 20, 2019)

- Bogner, A., Littig, B. and Menz, B.. 2009. "Interviewing Experts." Research Methods Series. palgrave macmillan, 1st edition
- Boyd, C. O. 2001. "Phenomenology the method. In P.L. Munhall (Ed.), Nursing research: A qualitative perspective" 3<sup>rd</sup> edition Sudbury, MA: Jones and Bartlett., pp. 93-122.
- Boyd, J. H. and DeNicoló, G.. 2005 "The theory of bank risk taking and competition revisited." IMF Working Papers, 03(114).
- Braun, V., Clarke, V. and Terry, G.. 2014. "Thematic Analysis" In: Qualitative Research in Clinical and Health Psychology, pp. 95-113 https://www.researchgate.net/publication/267623311\_Thematic\_Analysis (January 5, 2021)
- Brinkmann, S., and Kvale, S.. 2015. "Interviews: Learning the craft of qualitative research interviewing" 3<sup>rd</sup> edition, Thousand Oaks, CA: Sage
- Bryant, A., and Charmaz, K.. 2007. "The SAGE Handbook of Grounded Theory" Sage Publications
- Business Dictionary. 2012. "Scientific method." http://www.businessdictionary.com/definition/scientific-method.html (October 3, 2015)
- Cason, N., Friesen, L. and Gangadharan, L.. 2016. "Regulatory performance of audit tournaments and compliance observability, European Economic Review." In: Volume 85. June 2016: pages 288-306. http://www.sciencedirect.com/science/article/pii/S0014292116300629 (December 15, 2016)
- Chartered Institute of Internal Auditors. 2014. "Risk based internal auditing", published on the October 8, 2014. https://global.theiia.org/standards-guidance/topics/Documents/201501GuidetoRBIA.pdf (February 8, 2020)
- Chartered Institute of Internal Auditors. 2020. "Following up recommendations/management actions" https://www.iia.org.uk/resources/delivering-internal-audit/following-up-recommendations/ (September 22, 2020)

Chartered Institute of Internal Auditors. 2021. "What is internal audit?" What is internal audit? | About us | IIA (January 28, 2021)

- Corbin, J. and Strauss, A.. 2008. "Basics of qualitative research Techniques and procedures for developing grounded theory". Thousands Oaks. CA: Sage. 3<sup>rd</sup> edition.
- COSO. 2017. "Enterprise Risk Management Integrating with Strategy and Performance" June 2017: https://www.coso.org/Documents/2017-COSO-ERM-Integrating-with-Strategy-and-Performance-Executive-Summary.pdf (May 1, 2019)
- COSO. 2020. "Welcome to COSO." https://www.coso.org/Pages/default.aspx (November 3, 2020)
- Court, J., Hyden, G. and Mease, G. 2002. "Assessing Governance: Methodological Challenges World Governance Survey Discussion Paper 2" United Nations University, August 2002: https://www.odi.org/sites/odi.org.uk/files/odiassets/publications-opinion-files/4096.pdf (November 12, 2020)
- Creswell, J. W. 2015.. "30 essential skills for the qualitative researcher." Los Angeles, CA: SAGE
- Creswell, J. W. and Poth, C. N.. 2018. "Qualitative Inquiry and Research Design. Choosing among Five Approaches." Sage Publications, Inc..
- Decaux, L.. 2015 "Internal Auditing and Organizational Governance: The combined Assurance Approach" September 10, 2016: Louvain School of Management file://kfw-f-fsp1/fr1\$/Y683/Desktop/view.pdf (March 10, 2020)
- Dentons 2020. "Re-assessing the Three Lines of Defense (3LoD) model during a time of continued crisis and remote working" May 6, 2020: https://www.dentons.com/en/insights/articles/2020/may/6/re-assessing-the-three-lines-of-defense-3lod-model-during-crisis-and-remote-working (October 1, 2020)
- Denzin, N. K. and Lincoln, Y. S.. 2005. "The sage handbook of qualitative research.". 3<sup>rd</sup> edition, London: Sage
- Dupree, R.. 2020. "The Three Lines of Defence: Time to Call the Kraken." https://www.finextra.com/the-long-read/43/the-three-lines-of-defence-time-to-recall-the-kraken (January 18, 2021)

Elliott, V.. 2018. "Thinking about the Coding Process in Qualitative Data Analysis."

The Qualitative Report, Volume 23, Number 11, 2850-2861.

https://nsuworks.nova.edu/cgi/viewcontent.cgi?article=3560&context=tqr

(January 7, 2021)

- Eppler, M. and Aeschimann, M.. 2008. "A systematic framework for risk visualization in risk management and communication". In: Risk Management, 11 (2) April 2009.
- Ernst & Young. 2012. "The future of internal audit is now, Increasing relevance by turning risk into results, Insights on risk". Autumn 2012.
- Eulerich, M., Theis, J., Velte, P. and Stiglbauer, M. 2013. "Self-perception of the internal audit function within the corporate governance system empirical evidence for the European Union". In: Problems and Perspectives in Management, Volume 11, June 2, 2013
- Eulerich, M.. 2015. "Die Positionierung der Internen Revision. Die Entwicklung der Revisionsfunktion zur dritten Verteidigungslinie". In Zeitschrift Interne Revision, 50. Jahrgang, 2015, p. 1-84
- Eulerich, M., and Eulerich, A. K.. 2020. "What is the value of internal auditing? -A literature review on qualitative and quantitaive perspectives". In: Maandblad Voor Accountancy en Bedrijfseconomie, 94 (3/4) (2020), published April 2020, p. 83-90
- European Banking Authority. 2014. "Guidelines on common procedures and methodologies for the supervisory review and evaluation process (SREP), EBA/GL/2014/13." published on the 19th of December 2014. (February 19, 2017)
- European Banking Authority. 2017. "Guidelines on internal governance under Directive 2013/36/EU." published on the 26th of September 2017 https://www.eba.europa.eu/sites/default/documents/files/documents/10180/1 972987/eb859955-614a-4afb-bdcd-aaa664994889/Final%20Guidelines%20on%20Internal%20Governance%20%2
  - aaa664994889/Final%20Guidelines%20on%20Internal%20Governance%20%2 8EBA-GL-2017-11%29.pdf?retry=1 (April 25, 2019)
- European Banking Authority. 2018. "Guidelines on internal governance." published on the 21st of March 2018 Guidelines on Internal Governance (EBA-GL-2017-11)\_EN.pdf (europa.eu)8EBA-GL-2017-11%29.pdf?retry=1 (April 28,

2019)

European Banking Authority. 2020. "Consultation paper. Draft Guidelines on internal governance under Directive (EU) 2019/2034." published on the 20th of December 2020. https://www.eba.europa.eu/sites/default/documents/files/document\_library/Publications/Consultations/2020/Consultation%20on%20Guidelines%20on%20internal%20governance%20for%20investment%20firms/961610/CP%20on%20draft%20GL%20on%20internal%20governance%20IFD.pdf (January 29, 2021)

- European Banking Authority. 2021. "EBA at a glance." EBA at a glance | European Banking Authority (europa.eu) (January 30, 2021)
- European Central Bank. 2015. "The role of internal control and internal audit." published on the 22<sup>nd</sup> of September 2015. https://www.bankingsupervision.europa.eu/press/speeches/date/2015/html/s e150922.en.html (November 30, 2015)
- European Central Bank. 2016. "Report on financial structures." October 2016. https://www.ecb.europa.eu/pub/pdf/other/reportonfinancialstructures201610 .en.pdf (January 20, 2017).
- European Central Bank. 2018a. "Guide to on-site inspections and internal model investigations." September 2018. https://www.bankingsupervision.europa.eu/ecb/pub/pdf/ssm.osi\_guide2018 09.en.pdf?49b4c0998c62d4ab6f31a4733c7ea518 (December 20, 2020).
- European Central Bank. 2018b. "Ten years after the crisis risks, rules and supervision." speech by Sabine Lautenschläger, Member of the Executive Board of the ECB and Vice-Chair of the Supervisory Board of the ECB, October 30, 2018. https://www.bankingsupervision.europa.eu/press/speeches/date/2018/html/s sm.sp181030.en.html (December 20, 2020).
- European Central Bank. 2019. "2 SSM Risk Map fore 2020" October 2019. https://www.bankingsupervision.europa.eu/ecb/pub/ra/html/ssm.ra2020~a91 64196cc.en.html#toc1 (December 20, 2020).
- European Central Bank. 2019. "2 SSM Risk Map fore 2020" October 2019. https://www.bankingsupervision.europa.eu/ecb/pub/ra/html/ssm.ra2020~a91

- 64196cc.en.html#toc1 (December 20, 2020).
- European Comission. 2020. "Strengthening banks' compliance frameworks" https://www.bankingsupervision.europa.eu/press/publications/newsletter/20 20/html/ssm.nl200212\_1.en.html (December 20, 2020).
- European Confederation of Institute of Internal Auditors. 2009. "The role of internal audit in corporate governance in Europe, current state, necessary improvements, future tasks." Erich Schmidt Verlag. Berlin 2009.
- Federal Ministry of Finance. 2019. "Ten years after the financial crisis: have regulatory reforms made the financial sector more resilient in the crisis?." https://www.bundesfinanzministerium.de/Content/EN/Standardartikel/Topi cs/Financial\_markets/Articles/2019-04-15-ten-years-financial-crisis.html (December 19, 2020)
- Federation of the European Risk Management Associations and the European Confederation of Institutes of Internal Accounting. 2010 "Guidance on the 8th EU Company Law Directive article 41." published on September 21, 2010 https://www.iia.nl/SiteFiles/ECIIA%20FERMA.pdf (January 18, 2021)
- Financial Stability Board. 2012. "Increasing the Intensity and Effectiveness of SIFI Supervision." Progress Report to the G20 Ministers and Governors https://www.fsb.org/wp-content/uploads/r\_121031ab.pdf (December 10, 2020)
- Flick, U. 2002. "An introduction to qualitative research." Sage Publication Inc., London
- Flick, U. 2009. "An introduction to qualitative research." 4<sup>th</sup> edition, SAGE Publications Ltd.
- Flick, U., von Kardoff, E. and Steinke, I. 2004. "What is qualitative research? An introduction to the field." SAGE Publications Ltd.
- Flick, U. 2018. "An Introduction to Qualitative Research." SAGE Publications.
- Forbes Insights. 2017. "The Future is Now, Audit 2025." In association with KPMG.
- Glaser, B. G. and Strauss, A. L.. 2006. "The Discovery of Grounded Theory: strategies for qualitative research." Aldine Transaction.
- Gläser, J. and Grit, L.. 2010. "Experteninterviews und qualitative Inhaltsanalyse." 4. Auflage. VS Verlag.

Grove, H. and Patelli, L.. 2013. "Lehman Brothers and Bear Stearns: risk management and corporate governance differences?." In: Corporate Ownership and Control, 11(1), p. 611-620. (PDF) Lehman Brothers and Bear Stearns: risk assessment and corporate governance differences? (researchgate.net) (January 21, 2021)

- Gubrium, J. F., Holstein, J.A. Marvasti, A. B. and McKinny, K. D.. 2012. "The SGE Handbook of interview research, the complexity of the craft." 2<sup>nd</sup> edition. SAGE Publications. Inc..
- Guest, G., Bunce, A. and Johnson, L.. 2006. "How many interviews are enough? An experiment with data saturation and variability." http://fmx.sagepub.com/cgi/content/abstract/18/1/59 (December 15, 2020)
- Gunz, S. and Thorne, L.. 2014. "Introduction to the Special Issue on Tone at the Top." In: Journal of Business Ethics, 126(1): 167-176.
- Hofer, M. and Bothe, C.. 2012. "The success story of the Minimum Requirements for Risk Management." http://www.bafin.de/SharedDocs/Veroeffentlichungen/EN/Fachartikel/2012/fa\_bj\_2012-08\_marisk\_en.html;jsessionid=228165D5F6EB0F5A1960FD020E7164BE.1\_cid3 63 (October 15,2015).
- Internal Auditor. 2015. "Three Lines of Defense." Volume 72. Issue date October 2015..
- International Chamber of Commerce. 2014. "Das ICC-Toolkit zur kartellrechtlichen Compliance." http://www.iccgermany.de/aktuelles/detailansicht/rezensionicc-toolkit-zur-kartellrechtlichen-compliance/ (January 20, 2017).
- Jamieson, D.. 2018 "Communication." In The magazine of the Chartered Institute of Internal Auditors, Audit & Risk, Issue 44 November/December 2018.
- Joskimovic, M. and Alseddig, A.. 2018 "The internal audit as function to the corporate governance." In Megatrend Revija, 14(2), p. 109-125 https://www.researchgate.net/publication/321280732\_The\_internal\_audit\_as\_function\_to\_the\_corporate\_governance (January 29, 2021)
- Khan, A.. 2018. "A Behavorial Approach to Financial Supervision, Regulation and Central Banking." IMF Working Papers, International Monetary Fund 18(178) (PDF) A Behavioral Approach to Financial Supervision, Regulation, and

- Central Banking (researchgate.net) (January 2, 2021)
- Klamut, E.. 2018. "Internal Audit Tool for Minimizing the Risk of Fraud." In: e-Finanse, 14(1), p. 49-68. (PDF) Internal Audit Tool for Minimizing the Risk of Fraud (researchgate.net) (January 2, 2021)
- KPMG. 2017. "The future is now, Audit 2025." Forbes Insights. 2017..
- Krippendorff, K.. 2004 "Content Analysis An Introduction to Its Methodology." University of Pennsylvania, Second edition, Sage Publications Inc., Thousand Oaks, Printed in the United States of America
- Kuckartz, U. Dr.. 2010. "Realizing mixed-methods approach with MAXQDA." Philipps-Universitaet Marburg. https://www.maxqda.com/download/MixMethMAXQDA-Nov01-2010.pdf. (June 20, 2020).
- Kuckartz, U. Dr. and Rädiker, S.. 2019. "Analyzing qualitative data with MAXQDA. Text, Audio, and Video" Springer Verlag. https://link.springer.com/chapter/10.1007/978-3-030-15671-8\_12 (June 20, 2020).
- Kuckartz, U. Dr.. 2019. "Qualitative Text Analysis: A Systematic Approach." Springer Verlag. Qualitative Text Analysis: A Systematic Approach | SpringerLink (Janaury 22, 2020).
- Lenz, R., Sarens, G. and Hoos, F.. 2017. "Internal Audit Effectiveness: Multiple Case Study Research Involving Chief Audit Executives and Senior Management." EDPACS, 55:1, p. 1-17 http://www.tandfonline.com/doi/full/10.1080/07366981.2017.1278980 (October 24, 2020).
- Lenz, R., Sarens, G. and Jeppesen, K.K.. 2018. "In Search for a Measure of Effectiveness for Internal Audit Functions: An Institutional Perspective." EDPACS, 58:2, p. 1-36 https://www.tandfonline.com/doi/full/10.1080/07366981.2018.1511324 (October 24, 2020).
- Levison, W. A.. 2017. "Replacing the Risk Priority Number." Quality Digest https://www.qualitydigest.com/inside/risk-management-article/replacing-risk-priority-number-062017.html (August 26, 2020).
- Luburic, R., Perovic, M. L. and Sekulovic, R.. 2015. "Quality Management in terms

- of strengthening the "Three Lines of Defence" in Risk Management-Process Approach." In: International Journal for Quality Research, 9(2): 243-250.
- Lundqvist, S. A.. 2014. "Abandoning Silos for Integration: Implementing Enterprise Risk Management and Risk Governance." https://www.researchgate.net/publication/283634314\_Abandoning\_Silos\_for \_Integration\_Implementing\_Enterprise\_Risk\_Management\_and\_Risk\_Gover nance (January 18, 2021)
- Market Connections. 2020. "When to Use Qualitative vs. Quantitative Market Research" https://www.marketconnectionsinc.com/when-to-use-qualitative-vs-quantitative-research/ (November 3, 2020)
- Marshall, C. and Rossmann, G. B.. 2016. "Designing Qualitative Research" 6<sup>th</sup> edition, Newbury Park, CA:Sage
- MaxQDA 2020. "Code Configurations: Analyze Code Combinations" https://www.maxqda.com/help-mx20/statistics-and-graphics-functions/configuration-table (August 5, 2020)
- Mayring, P.. 2000. "Qualitative Content Analysis." Volume 1, No. 2, Art. 20, June 2000
  https://www.researchgate.net/publication/215666096\_Qualitative\_Content\_A nalysis (Marc 2, 2020).
- Mayring, P.. 2014. "Qualitative content analysis: Theoretical foundation, basic procedures and software solution." https://www.ssoar.info/ssoar/handle/document/39517(January 28, 2020).
- Mayring, P.. 2015. "Qualitative Inhaltsanalyse: Grundlagen Und Techniken." Beltz.
- Miele, M. G. and Sales, E.. 2011. "The financial crisis and regulation reform." In: Journal of Banking Regulation, 12(4), (PDF) The financial crisis and regulation reform (researchgate.net) (February 13, 2020).
- McIntosh, M. J. and Morse, J. M.. 2015. "Situating and Constructing Diversity in Semi-structured Interviews." In: Global Nursing Research, 1-12.
- Namazi, M.. 2013. "Qualitative Data Analysis and Interpretation: Systematic Search for Meaning." In: Journal of Accounting and Taxation, Vol. 5(2), p. 38-47, July 2013.
- Ngulube, P.. 2015. "Role of agency theory in implementing management's control."

in Mathipa, ER & Gumbo, MT. (eds) Adressing research challenges: making headway for developing research., Mosala MASEDI Publishers and Booksellers cc: Noordwyk, p. 131-156 https://www.researchgate.net/publication/278961843\_Qualitative\_Data\_Anal ysis\_and\_Interpretation\_Systematic\_Search\_for\_Meaning (January 5, 2021)

- Nightingale, A. J.. 2020 "Triangulation." International Encyclopedia of Human Geography, 2<sup>nd</sup> Edition, https://www.sciencedirect.com/topics/social-sciences/triangulation (November 1, 2019)
- Otetea, A., Batusaru, C. and Ungureanu, M. A.. 2013. "Internal Public Audit in the Financial Crisis Context." In: Procedia Economics and Finance, 6: 688-693.
- Parker, D. and Kirkpatrick, C.. 2012. "Measuring Regulatory Performance. The Economic Impact of Regulatory Policy: A Literture review of quantitative evidence" OECD, Expert Paper No. 3, August 2012 https://www.oecd.org/gov/regulatory-policy/3\_Kirkpatrick%20Parker%20web.pdf (November 12, 2020).
- Peemoeller, V.. 2015. "Interne Revision und Compliance". In Zeitschrift Interne Revision, 50. Jahrgang, 2015, p. 1-84
- Peters, I.. 2018 "Reform. Change is in the air." In The magazine of the Chartered Institute of Internal Auditors, Audit & Risk, Issue 44 November/December 2018.
- Philipps, A. and Mrowczynski, R.. 2019. "Getting more out of interviews. Understanding interviewees' accounts in relation to their frames of orientation" https://journals.sagepub.com/doi/full/10.1177/1468794119867548 (March 18, 2020)
- Pisano, P., Pironti, M., Vagnani, G. and Simoni, M.. 2011. "The propensity to exploration and exploitation strategy: from theory to content analysis." International Conference on Economics and Finance Research, IPEDR, vol. 4 (2011), IACSIT Press, Singapore.
- Power, M. 1997. "The Audit Society: Rituals of Verification." Oxford: Oxford University Press.
- Power, M., Ashy, S. and Palermo, T.. 2013. "Risk culture in financial organisations, a research report." https://www.lse.ac.uk/accounting/CARR/pdf/final-risk-culture-report.pdf (January 28, 2017).

Protiviti. 2015. "From cybersecurity to collaboration: assessing the top priorities for internal audit functions, 2015 internal audit capabilities and needs survey." https://chapters.theiia.org/topeka/Events/Documents/From%20Cybersecurity %20to%20Collaboration%20%20Assessing%20the%20Top%20Priorities%20fo r%20Internal%20Audit%20Functions.pdf (December 27, 2016).

- Pryor, M. G. and Taneja, S.. 2010. "Henri Fayol, practioner and theoretican revered and reviled." In: Journal of Management History. 16: 489-503. https://www.researchgate.net/publication/225083631\_Henri\_Fayol\_practition er\_and\_theoretician\_-\_revered\_and\_reviled (December 21, 2020)
- PwC. 2015. "2015 State of the Internal Audit Profession Study, Finding True North in a period of rapid information." http://www.pwc.com/us/en/risk-assurance/internal-audit-transformation-study/assets/pwc-state-of-the-internal-audit-profession-2015.pdf (December 28, 2016).
- Roberts, R. E.. 2020 "Qualitative interview questions: Guidance for novice researchers. The Qualitative Report" 25(9), 3185-3203. https://nsuworks.nova.edu/tqr/vol25/iss9/1 (December 20, 2020)
- Saldaña, J.. 2016. "The coding manual for qualitative researchers." London, UK: SAGE.
- Sarens, G. and De Beelde, I.. 2006. "Internal auditors perception about their role in risk management: A comparison between US and Belgian companies." In: Managerial Auditing Journal ISSN 0268-6902, Volume 21 Issue 1, published on the January 1, 2006 https://www.emerald.com/insight/content/doi/10.1108/02686900610634766/fu ll/html (September 2, 2020).
- Scheld, D., Paha, J. and Fandrey, N.. 2015. "A risk governance approach to managing antritrust risks in the banking industry." No. 35-2015. ISSN 1867-3678. http://www.unimarburg.de/fb02/makro/forschung/magkspapers/index\_html%28magks%29 (January 20, 2017).
- Sim, J.: 1998. "Collecting and analyzing qualitative data: Issues raised by the focus group." In: Journal of Advanced Nursing, 28(2), 345-352
- Shah, K. S. and Corley, K. G. 2006. "Building Better Theory by Bridging the Quantitative-Qualitative Divide." In: Journal of Management Studies, Volume

43, Issue 8, pages 1821-1835, published December 6, 2006. https://onlinelibrary.wiley.com/doi/full/10.1111/j.1467-6486.2006.00662.x (November 20, 2019).

- Shahimi, S. and Mahzan, N. 2018. "Building a Research Model and Hypotheses Development for Internal Audit Consulting: Insights from Literature and Findings of Exploratory Interviews." In: International Journal of Management Excellence, Volume 10 No. 2, February 2018 https://www.researchgate.net/publication/323596414\_Building\_a\_Research\_ Model\_and\_Hypotheses\_Development\_for\_Internal\_Audit\_Consulting\_Insi ghts\_from\_Literature\_and\_Findings\_of\_Exploratory\_Interviews (January 20, 2021).
- Shore, C.. 2008. "Qualitative Research and Global Audit Culture: The Politics of Productivity, Accountability, and Possibility." Sage Handbook of Qualitative Research, 5<sup>th</sup> edition
- Spooner, M.. 2017. "Audit culture and illiberal governance: Universities and the politics of accountability." In: Anthropological Theory, 8 (3), p. 278–298.
- Thabit, T. H., Solaimanzadah, A. and Mohammed, M.. 2019 "Determining the Effectiveness of Internal Controls in Enterprise Risk Management based on COSO recommendations." The 2<sup>nd</sup> International Conference on Accounting, Business, Economics and Politics https://www.researchgate.net/publication/334730098\_Determining\_the\_Effectiveness\_of\_Internal\_Controls\_in\_Enterprise\_Risk\_Management\_based\_on\_COSO\_Recommendations (December 22, 2020).
- The Banker. 2015. "Report Regulation and strategy Introduction –The regulatory challenges of 2015." published January 1, 2015
- The Institute of Internal Auditors. 2009. "The Role of Internal Auditing in Enterprise-wide Risk Management." IIA Position Paper, https://na.theiia.org/standards-guidance/public%20documents/pp%20the%20role%20of%20internal%20auditing%20in%20enterprise%20risk%20management.pdf (December 22, 2020).
- The Institute of Internal Auditors. 2013a. "The Three Lines of Defense in effective risk management and control." IIA Position Paper, published January 2013.
- The Institute of Internal Auditors. 2013b. "Defining our role in a changing

landscape, North America Report." October 2013. https://na.theiia.org/about-ia/PublicDocuments/2013%20October%20NA%20Pulse%20of%20the%20Profession%20Report.pdf (December 27, 2016).

- The Institute of Internal Auditors. 2016a. "International standards for the professional practice of internal auditing (standards)." https://na.theiia.org/standards-guidance/Public%20Documents/IPPF-Standards-2017.pdf (December 29, 2016).
- The Institute of Internal Auditors. 2016b. "Internal Audit and the Second Line of Defense." https://chapters.theiia.org/mwg-internal/de5fs23hu73ds/progress?id=SE6Y6m2bfr638pb1EiW3DTMQgdN1w yKJPz0WY100u6U, (December 20, 2020).
- The Institute of Internal Auditors. 2017a. "Implementation Guides International Professional Practice Framework (IPPF)." https://iaichile.org/wp-content/uploads/2018/07/2017-Implementation-Guides-ALL.pdf (December 20, 2020).
- The Institute of Internal Auditors. 2017b. "Global Perspectives and Insights: Internal Audit and External Audit. Distinctive Roles in Organizational Governance" Issue 8 https://global.theiia.org/mwg-internal/de5fs23hu73ds/progress?id=2GJSkllVqoaOyiNxeTKC6tzdR04zzhtqo NGmfkmVII0, (December 22, 2020).
- The Institute of Internal Auditors. 2019a. "Foundations of Internal Auditing in Financial Services Firms, Supplemental Guidance, Practice Guide." August 2019. https://global.theiia.org/standards-guidance/recommended-guidance/practice-guides/Pages/Foundations-of-Internal-Auditing-in-Financial-Services-Firms.aspx (October 10, 2019).
- The Institute of Internal Auditors. 2019b. "IPPF." October 2019. https://www.iia.org.uk/resources/ippf/ (December 19, 2020)
- The Institute of Internal Auditors. 2020a. "The IPPF: The Framework for Internal Audit Effectiveness, Standards & Guidance Internal Professional Practices Framework." https://na.theiia.org/standards-guidance/Pages/Standards-and-Guidance-IPPF.aspx (June 28, 2020).
- The Institute of Internal Auditors. 2020b. "The IIA's Three Lines Model. An update of the Three Lines of Defense." July 2020 https://global.theiia.org/about/about-

- internal-auditing/Public%20Documents/Three-Lines-Model-Updated.pdf (August 30, 2020).
- The Institute of Internal Auditors. 2020c. "Position paper: Internal audit's relationship with external audit." April 2020 https://www.iia.org.uk/resources/delivering-internal-audit/position-paper-internal-audits-relationship-with-external-audit/ (December 20, 2020).
- The Institute of Internal Auditors. 2021. "Practice Guide: Developing a Risk-based Internal Audit Plan" https://na.theiia.org/standards-guidance/recommended-guidance/practice-guides/Pages/Developing-a-Risk-based-Internal-Audit-Plan.aspx (January 8, 2021).
- The Institute of Risk Management. 2012. "Risk culture under the microscope guidance for boards." https://www.theirm.org/media/885907/Risk\_Culture\_A5\_WEB15\_Oct\_2012.p df (December 16, 2016).
- Timmermans, S. and Tavory, I.. 2012. "Theory Construction in Qualitative Research: From Grounded Theory to Abductive Analysis." published September 10, 2012 by Sage on behalf of ASA 30: 167 http://grap.ulb.ac.be/wp-content/uploads/Timmermans-and-Tavory\_Abductive-Analysis.pdf (January 10, 2021).
- Turner, D. W.. 2010. "Qualitative Interview Design: A Practical Guide for Novice Investigartors." The Qualitative Report, 15 (3) 754-760 https://nsuworks.nova.edu/tqr/vol15/iss3/19/?utm\_source=nsuworks.nova.edu%2Ftqr%2Fvol15%2Fiss3%2F19&utm\_medium=PDF&utm\_campaign=PDF CoverPages (December 18, 2018).
- UBS Groups AG. 2019a. "Risk management & control." https://www.ubs.com/global/en/investor-relations/investors/risk-management.html (January 18, 2021)
- UBS Group AG. 2019b. "Annual Report 2019." https://www.ubs.com/content/dam/assets/cc/investor-relations/annual-report/2019/epaper/group/en/index.html# (January 18, 2021)
- Volkswagen AG. 2017 "Annual Report 2017. Risk Management and Internal Control System." https://annualreport2017.volkswagenag.com/group-management-report/report-on-risks-and-opportunities/risk-management-

- and-control-system.html (January 18, 2021).
- Weber, L.. 2020. "Is Audit Committee Expertise Related to Earnings Quality? Evidence from Germany." Journal of Managerial Issues, Vol. XXXII Number 3 Fall 2020 https://www.pittstate.edu/business/\_files/documents/jmifall20web.pdf#page =66 (November 11, 2020).
- Westhausen, U.-H.. 2015. "Interne Revision in Verbundgruppen und Franchise-Systemen, Verbreitung und Qualität der Internen Revision in Unternehmensnetzwerken." Springer Gabler.
- Wiesemnann, B.. 2014. "The internal audit function: Banking supervisors' expectations." http://www.bafin.de/SharedDocs/Veroeffentlichungen/EN/Fachartikel/2014/fa\_bj\_1403\_interne\_revision\_en.html (December 1, 2015).
- Wilson, C.. 2014. "Semi-structured interviews." https://www.sciencedirect.com/topics/computer-science/semistructured-interview (December 16, 2015).

#### A APPENDIX

The content within the following appendix section is composed of the interview data. The corresponding data is anonymized, and personally identifiable information has been removed.

## A.1 INTERVIEW TRANSCRIPTS

Interview transcript 1: Chief Internal Auditor

1a) Which qualitative and quantitative measures exist to evaluate the effectiveness of internal audit activities?

In any case, there is not one and only measure. There are no individual measurands that evaluate the effectiveness of internal audit activities. The contribution of internal audit is multi-dimensional and therefore the measurands that measure the effectiveness are also multi-dimensional. The most classic measure is the speed in which internal audit activities are carried out. Examples are the resource consumption, the fulfillment of the audit plan and the level of completion in percentage. All of these classic measures are useful, but they are not sufficient to describe the effectiveness of internal audit.

An adequate measure must have a content component. The job of internal audit is risk prevention, so the content component should have a kind of risk coverage measure. This measure is distributed heterogeneously in the financial institution, since the risks are also distributed differently in the individual lines of the financial institution. Internal audit should achieve a high level of risk coverage through its activities. As a result, the internal audit department should therefore measure whether it has assessed every department and all of the topics in which risks are present. A suitable measure for the effectiveness of the internal audit department is the so-called risk weighted contribution. This could be depicted in the form of a cell procedure. A linear representation is not applicable because the risk coverage of internal audit is dynamic. Internal audit must therefore cover all risk areas over time. If a new risk emerges that is dynamic in terms of time, it is to be expected that internal audit will conduct an in-depth assessment to identify the

risk points. For this purpose, other planned standard assessments must be postponed. There are approaches existent that opt to evaluate internal audit with key figures that aim for excellence performance.

The individual assessments and their output require different measurand variables. The broader the risk coverage is the better. It is important to cover standardized topics by making use of audit programs, i.e. for the assessment of the internal control system, to ensure a comparability of the conducted assessments. With a standardized measure and repeatedly asking the same questions in each assessment, the effectiveness of the internal audit department can be evaluated. At the same time, this is accompanied by a tradeoff, as this can also lead to less thoroughness. What matters here is the mesh size that is used for the examination. The findings from in-depth audits are very valuable for the financial institution. A possible benchmark is the fact whether the internal audit department has correctly identified the relevant facts.

From a strategic point of view, the composition of the individual assessments and types must be controlled and thus also represent a measure to determine whether the internal audit department was effective.

Another measure is the feedback of the audited departments. In practice, this means that regardless of the results of the internal audit review, the satisfaction is queried at a specific time of the assessment. It is important that the audited line activity does not cause too much assessment unwillingness in order to be included in the evaluation. The measure also depends on the type of assessment that is to be evaluated by the audited departments. In the interplay of all facets the effectiveness of internal audit activities can then be described in several measured variables. An example is the measurement of the size of the monetary ratio of the assessment in relation to the resources used (50 assessment days). This enables the internal audit department to make a statement on how much money was saved (5 million euros) and how much risk was mitigated. This allows to conclude whether the assessment days were worthwhile investing or not. However, I do not see that the effectiveness of conducted assessments should be related to the number or weighting of findings. This does not provide the right steering impulses.

APPENDIX 195

1b) What contribution does internal audit make to the institution?

Different activities of internal audit provide a different contribution to the financial institution. However, few internal audit departments provide consulting or advisory services in the sense of the IPPF. The most contributing activities of internal audit can be divided into two categories.

Regular internal auditing activities that are carried out according to the cycle and the audit universe. By this, internal audit obtains a broad view by ensuring that it is present everywhere and in each business line. Some line activities are audited more often and some less frequently. This is to be interpreted as a tour of a reactor. The contribution of internal audit originates from the surface effect and is based to a lesser extent on individual findings. In this way, the departments to be audited in the first and second line are asking themselves the question "What is my situation and where am I standing right now? This approach is in line with the principle of the police patrol which ensure that there are no speed violations.

An in-depth examination is comparable to a project management examination. The contribution of internal audit is the concrete analysis of a question or a subject. This procedure is not comparable to a regular assessment. A much more differentiated analysis is carried out by the internal audit department which requires a great deal of expertise. The examination aims at the design and the way something is built and what characteristics it has. An in-depth assessment demands a different quality of auditing activities. In direct comparison to the standard examination, the in-depth examination is to be understood as an expert analysis not as a cursory review.

2a) What is the most valuable activity of internal audit for the management body?

The most valuable activity of internal audit is the so-called positive assurance towards the management body. The internal audit function supports the management body in reviewing the control system and in expressing an opinion on how risks are managed. These internal audit activities help the management body to keep unintentional risks away from the financial institution. As a result, the internal audit department provides the management body with a statement as to whether everything is in order in the bank and thereby performs the most valuable activity for the management body.

The second most important thing for the management body is to get a second opinion from the internal audit department. The internal audit department should have a broad and profound know-how in order to be able to provide a second opinion to the management body. The internal audit department plays an essential role as a guarantor towards the management body. This special role of internal audit is also reflected in its assigned responsibility which is to inform the management body about risks. It is of primary interest to the internal audit department to inform the management body about the situation of the bank. The management body may also ask the internal audit department for its independent opinion on how the department is dealing with a topic.

A relationship of trust between the management body and the internal audit department contributes to the improvement of the financial institution's internal control system. At the same time, the internal audit department is also seen as a bridge to the outside world. This outside world is the regulatory supervision body. The internal audit department knows best what the supervisor expects. It is part of the financial institution and thus on its side. In any case, it is better an error, or a risk is detected by the internal audit department than by the regulatory supervision body. In the best case, the internal audit department is considered too strict by the audited departments.

Internal audit is a sparring partner in the competition against other financial institutions as well as against the supervisory authority. Failure is bad for the entire financial institution. The internal audit department helps the lines to practice before inspections are carried out by the supervisory authority. The task of internal audit is to show to the departments where they would have been knocked out. It is important for the management body that the internal audit department trains the departments that are subject to potential supervisory practices.

## 2b) What role does internal audit play in the context of governance?

The importance of governance has increased quite recently. Sound governance is fundamental in banks. Internal governance arrangements are of great importance and contribute to the achievement of the financial institution's objectives. They are set out by the management body and operationalized by the single departments. Thus, governance regulations are subject to regular internal auditing activities. The internal audit department assesses the related control systems and the risk management. It is of special interest to the management body

APPENDIX 197

to have the governance arrangements reviewed by the internal audit department as they should provide effective oversight of risk awareness and promote the financial institution's risk culture.

In the cycle of the audit universe, the arrangements of the departments regarding their risk appetite and risk awareness are subject to internal audit activities. Governance regulations can also be subject to an in-depth assessment which very much depends on the question or the subject under investigation. It is the task of the internal audit department to identify gaps between internal regulation and external imposed regulations that relate to governance. Good and sound governance is promoted through internal audit assessments.

3a) What is an appropriate set-up of the 3-LoD for internal audit to maintain its independence?

First of all, the internal audit function is independent and objective no matter whether a 3-LoD model is established or set-up appropriately. Generally, it is important to work together. The aim is to exchange information in an aggregated form as a single point of contact. This role is important in the context of assessments, advice, or voting. Rights and duties are assigned to the sparring partner role. Internal audit perceives itself in this function as a personal trainer of the first and second lines. When my sparring partner trains me, it helps me, and I do not receive any findings from the regulatory supervision body or external auditor. All lines involved within the model get fitter by working together. This also creates joint success within the 3-LoD model. This is the desirable relationship of trust under within which internal audit is in the position to shape its perception. In this way, it is possible to create added value through assessment. In this respect, the audited department should have the impression to be lucky that the internal audit department has seen this.

In a first step, the second line should train the first line on how to deal with risks within the first line. This results in a better cooperation between the first and second line. In this way, the allegory of the sparring partner is propagated best. If the individual lines realize that it helps to train together, this can only contribute to the big picture and thus to a sensibly designed 3-LoD with a common goal. There must be visible success for the lines involved within the model.

3b) What kind of possibilities does internal audit have to shape its perception?

The possibility of shaping the perception of the internal audit department is very much dependent on the mixture of situations and how the internal audit department is set-up in a financial institution. The Chief Internal Auditor can influence how the financial institution is assessed and thus also how the financial institution perceives the internal audit department. The Chief Internal Auditor is dependent on the support of the management body.

A sparring partner model is a possibility to shape the perception in the bank. It consists of one person from the internal audit department's hierarchy and one person from the business line's department. This construct only works if the departments that belong to the first and second line are convinced that the internal audit department works effectively, and that one can trust its professional expertise. If the departments feel that internal audit is working with them and not against them, then the internal audit department succeeds in shaping its perception in the 3-LoD model. This requires confidence that the activities of the internal audit department are carried out for the benefit of the first and second line and only in this way a common goal is achieved.

# Interview transcript 2: Head of department

1a) Which qualitative and quantitative measures exist to evaluate the effectiveness of internal audit activities?

The question is difficult to answer. There is no one and only measurand. One potential measurand is the importance assigned to the internal audit department. This can be determined by the availability or allocated time of the management body to the internal audit department. Another way to measure the activities of the internal audit department is the proactivity and reaction of the head of the internal audit department towards other heads of department. In other words, how often other heads of department of the first line or second line approach the head of department of internal audit to discuss things and ask for advice. Another measurand is the extent of provided advisory capacity to the management body, the first and second business lines.

APPENDIX 199

#### 1b) What contribution does internal audit make to the institution?

The so-called standard products in the sense of assessments represent a contribution to the financial institution but I do not consider them as progressive as other activities. It is important to take responsibility for the statements of internal audit and to stand by them. This requires a certain willingness to tell the departments what internal audit stands for. The regulatory supervision body only looks at the obligations of the internal audit department and solely examines these. The duties of the internal audit department also result in a contribution to the financial institution. The internal audit discipline is a people business. In the end, it is important to have people who are willing to understand the business lines and to develop an understanding of what the first and second line are concerned about. This has to be translated into the audit language.

The ability to contribute to the financial institution is more a question of significance and the perceived standing of the internal audit department. In other words, this means how quickly the Chief Internal Auditor, or I can get an appointment with the management body. The task of the internal audit department is to create transparency towards the management body regarding the risk situation in the financial institution. The contribution of internal audit's activities is to be understood in the same way as a seat belt in connection with the management body. If I as head of department do not get an appointment within one or two hours, then something is wrong. From my perspective, the management body then fails to understand the importance of the internal audit department. The more often the internal audit department acts in an advisory capacity, the more importance is assigned to the internal audit department as the third line. Practical examples for advisory activities are project management support, the interpretation of regulatory requirements, its implementation in the first and second line as well as follow-up after the execution of regulatory supervision inspections. The corresponding proactive approach often leads to fewer findings and less irritation in the future. The goal of the internal audit department is "no surprises" when interacting with the first and second line. Ideally, the internal audit department acts on an equal footing with the first and second line and can transport its know-how accordingly.

2a) What is the most valuable activity of internal audit for the management body?

Valuable activities are all things that the internal audit department does beyond assessments. For the management body, the most valuable attribute is the independence of the internal audit department. The management body can assume that an internal audit activity is uninfluenced. The internal audit department is not subject to incentivization in a bank. The internal audit department is involved at a very early stage in issues relating to the business lines and can also intervene. The internal audit discipline is to be understood as a sparring partner for the management body as well as the departments. In the end, this means "You can do that, but if I audit you, you'll get a finding. I will write in my report to the management body that this has been said before". No value is generated, for example, when a project is already completed.

The internal audit department has the possibility to transport risk-relevant information directly to the management body. This includes direct and unfiltered reporting to the management body. In other words, the added value of the internal audit department is to bring auditing competence into the decision-making process and to be an advisor on an equal footing with the first and second line. Due to the involvement of the internal audit department good sustainable decisions can be made by the business lines and the management body.

# 2b) What role does internal audit play in the context of governance?

The Internal audit department has a great deal of know-how regarding compliance, governance, and supervisory requirements. Moreover, internal audit has an overview of the entire financial institution, and can describe how it deals with issues, and abstracts them to the respective situation of the department. Outside of assessments, the internal audit department can proactively contribute by addressing subordinate issues that relate to governance, project management, presence in committees, answering questions from the supervisory authority and the specialist departments. By this, the internal audit department contributes to the learning and improvement of the financial institution which is of specific importance for the risk culture and established governance.

APPENDIX 201

3a) What is an appropriate set-up of the 3-LoD for internal audit to maintain its independence?

The model must be designed in a way that the independence of the internal audit department is maintained. The internal audit department must be able to communicate intensively, and above all, independently of conducted assessments in the first or second line. It is important that the 3-LoD model is designed in a way that cooperation among the business lines is enhanced. Moreover, the set-up has to clarify what someone can do and what no one can do in the first, second, and third line.

3b) What kind of possibilities does internal audit have to shape its perception?

In order to shape its perception, the internal audit department needs time and resources. The internal audit department is in the position to shape its perception in the first and second line through interaction, the investment of time, and resources. Therefore, it is also important that the internal audit department reflects itself and is involved in discussions with both lines. In case of doubt, the internal audit department can support the lines to clarify responsibilities between the first and second line, and to thereby emphasize its position. One option to proactively influence the perception of the internal audit department is to carry out workshops with the first and second line on how an operational process could be structured in terms of resources and content. In the context of workshops, the internal audit department can clarify what is to be expected if an assessment comes up and which role is assigned to whom.

# Interview transcript 3: Head of department

1a) Which qualitative and quantitative measures exist to evaluate the effectiveness of internal audit activities?

I have not thought about it yet how internal audit activities can be measured. An adequate or suitable measure is pure speculation. The internal audit department can for example measure how many assessments were conducted and how many findings resulted from the assessments over time. I can compare the changes to the last assessment and thereby measure the effectiveness of internal audit activities. In continuous assessments, I assume that certain themes and areas may result in fewer findings. On this basis, I can conclude that the business lines

improved their risk awareness. This means that this year the assessment result is good, whereas last year it was satisfactory. As a result, it can then be measured whether the activities of the internal audit department lead to improvements in the audited business lines. Issues related to the perceived satisfaction of the audited department represent another potential measurand. This requires a process and a culture of feedback.

A prerequisite to evaluate the effectiveness of internal audit activities is the creation of a satisfaction index or factor. The obtained feedback can be used to assess whether the audited business lines perceived the activities of internal audit as effective. Moreover, it can thereof be carved out whether this has led to new findings and risks that would have been overlooked without the activities of the internal audit department. A sensible measurand requires to divide the satisfaction factor into qualitative and quantitative feedback determinants. In addition, the internal audit department should provide feedback guidelines to the audited business lines.

#### 1b) What contribution does internal audit make to the institution?

Internal audit's contribution is to make the financial institution aware of its risks and to ensure that appropriate measures can be taken to mitigate these. In order to create added value, the task of the internal audit department is to make risks transparent. This is a continuous process. Depending on the risks involved, the internal audit department reviews the institution's business lines on a rotational basis. The aim is to identify structural deficits and make them transparent to the management body. On the one hand, there are the regular audit activities, more precisely the standard assessments, and on the other hand, there are the special indepth assessments. Both assessment types contribute to the improvement of the financial institution's processes. From my perspective, the in-depth assessments represent the greatest contribution of the internal audit department. Due to COVID, they were not carried out this year. In this context, the task of internal audit is to. examine the established 3-LoD model in more detail and touch upon the issue related to governance arrangements. In addition, a continuous exchange with the management body on the experiences made in the conducted assessments is also crucial.

2a) What is the most valuable activity of internal audit for the management body?

I would say that the most valuable internal audit activity is the discussion of risk issues among the internal audit department and the management body on an equal footing. The same applies to the relationship with the business lines. The aim of the internal audit department is to ensure that an exchange takes place on an ongoing basis. The management body should an interest in confidently dealing with risks and mistakes made by the business lines. The objective therefore is to proactively face risks and mistakes. This requires an intensive exchange between the Chief Internal Auditor and the management body. In other words, this also involves opening doors to learning and working in the bank. The results of internal audit activities, if necessary, must be translated for the management body. Both, the Chief Internal Auditor and the management body, should continuously reflect on the year together. In addition, the internal audit department also has a warning function towards the management body. The independence of the internal audit function must always be maintained.

### 2b) What role does internal audit play in the context of governance?

There is no unique activity of the internal audit department that in particular contributes to the improvement of governance arrangements. More than one activity is required in to enhance the governance arrangements. Almost every single assessment of the internal audit department represents value to the financial institution and somewhat deals with internal governance regulation. From internal audit's perspective, it is important to point out that mistakes are being made. The desired result of assessments is that the business lines are able to deal with risks and mistakes, and on this basis establish a risk culture. The aim is to get to the point where all business lines involved lose their fear of risks being highlighted by the internal audit department.

Outside of internal audit assessments, it is crucial that the internal audit department encourages the exchange of information with the business lines on for example subordinate topics. The latter involves governance regulations that deal with the risk culture of the financial institution. Thus, the establishment of subordinate formats to communicate the aggregated results of the internal audit department form a prerequisite. A sparring partner model is needed to ensure a stringent communication with the business lines. Within this format, an internal audit department should explain from its perspective what the bank's hotspots are

and what topics, options for action, and which supervisory requirements the bank will face in the future. The sparring partner model goes beyond advisory activities.

3a) What is an appropriate set-up of the 3-LoD for internal audit to maintain its independence?

Difficult. The management body must express a clear opinion on the ideal set-up of the 3-LoD and needs to communicate his expectations. Here, it is crucial to implement a sparring partner model within the internal audit department. I also believe that it is very important that internal audit acts as a sparring partner towards the management body on how the model needs to be understood. This means that the internal audit department must have an opinion on how the model should be implemented within the financial institution. Moreover, the internal control framework plays a central role in this respect. This also applies to the second lines as they are considered as central coordinators. Internal audit must communicate its expectations to the departments. The model is still a moving target. According to my feeling, the model has not been fully established yet.

# 3b) What kind of possibilities does internal audit have to shape its perception?

In order to shape the perception of the internal audit department, it is important to understand the contribution of the internal audit function to the 3-LoD model. It is therefore very important for the internal audit department to communicate immature approaches of the model towards the management body. Consequently, this will lead to an intensive exchange between the first and second line, and the management body. The establishment of a single point of contact and a sparring partner for specific topics within the internal audit department can support the business lines in this process. Overall, it is important to have a functioning internal audit department. The internal audit department provides the financial institution with a review of the performance of the first and second line, and whether these are working properly. In individual assessments in the first and second line, the internal audit department evaluates the appropriateness of the implemented processes and thus can shape its perception. Subsequently, it is the responsibility of the sparring partner to ask the business lines how they perceive the on-site assessments. In order to shape the perception of the internal audit department, it is important to create added value and to position oneself fairly and equally among the audited units. That is not easy.

# Interview transcript 4: Head of department

1a) Which qualitative and quantitative measures exist to evaluate the effectiveness of internal audit activities?

Difficult. It is neither advisable nor possible to evaluate the quality or quantity of internal audit activities. From my experience, there is no appropriate variable or measurand. In order to measure the quantity of conducted assessments, I would relate the invested assessments days to single performed assessments. However, the measurement of working days does not provide any information on the effectiveness of internal audit activities.

The effectiveness of internal audit activities in the sense of contribution is composed of qualitative components. Thus, measurands can only be of a qualitative nature. The effectiveness of internal audit activities is related to the establishment of sound quality management. I consider the quality of the single assessments carried out by the internal audit department as the most important measure. This goes hand in hand with the ability of the internal audit department to act quickly and that its activities do not demand a lot of time, i.e. ¾ of a year. In order to measure the effectiveness of the activities, the internal audit department needs professional competence and has to adopt a forward-looking approach to address critical issues. Here, a classic example is a technological change. From my perspective, sound risk management includes keeping an eye on critical scenarios.

### 1b) What contribution does internal audit make to the institution?

The internal audit department makes a neutral and objective contribution to the financial institution by executing its activities. It provides the management body with an independent assurance on the risk situation in the bank. An appropriate and sound reporting from the internal audit department is a prerequisite. In the case that something is wrong, and this is evident from the reporting, the management body must act. At the same time, the internal audit department is required to find the right balance and risk orientation. In other words, I have to ask myself to what extent the thumbscrews need to be tightened in the business lines. Thus, the ability of the internal audit department to contribute to the financial institution depends on its risk orientation and understanding. Therefore, the question is whether the internal audit department has a full understanding of the risks and costs of the financial institution.

I believe that the classical standard assessment as well as advisory activities contribute the most to the v. It is important that internal audit activities are not exclusively ex-post reviews. A central aspect of internal audit's contribution is its involvement in change processes like takeovers. The main risks of a financial institution are changes arising from outside and inside. In these cases, the internal audit department must be involved more closely compared to the established standard processes that operate well. The more complex the changes are the greater is the arising risk for the financial institution.

2a) What is the most valuable activity of internal audit for the management body?

The most valuable activity of the internal audit department is to provide an independent opinion to the management body and provide steps that need to be taken. This requires a relationship of trust between the management body and the internal audit department. The internal audit department can only deliver a value proposition if it is taken serious by the management body. This demands a close exchange between the management body and the Chief Internal Auditor. Soft skills are a key factor to be successful.

Central for the value of internal audit activities is to know what the management body's understanding of risk culture and risk appetite is. Moreover, it is also a matter of making business lines responsible for their operations. A regular exchange between the internal audit department and the management body is needed to understand the responsibilities of the single business lines. If this is not the case, the internal audit department fails to provide value to the financial institution and loses its purpose. It is as if you are a toothless tiger. The activities of the internal audit department will then remain meaningless as nothing will develop or result in changes in the business line operations.

2b) What role does internal audit play in the context of governance?

The risk culture of a financial institution has an impact on the individual lines and plays a central role in the day to day business. The Chief Internal Auditor and the management body should share the same ideas regarding risk appetite and risk culture. The internal audit department must be aware of the fact that there is no such thing as a risk-free business. Promoting the risk culture in the business lines is one of the main tasks of the internal audit department. Moreover, a risk-orientated approach needs to be adopted by the internal department. If the internal

audit department has a completely different opinion regarding the appropriateness of the established risk culture, a regular exchange on this issue is needed. The internal audit department has to find the right balance. It must know about the responsibilities of the audited business lines and when it is necessary to intervene as risk management is being neglected. A close exchange between the management body and the internal audit department is important to share a common understanding of risk culture. In terms of risk culture and risk appetite, a common denominator has to be found between the management body, the first, second and third line.

3a) What is an appropriate set-up of the 3-LoD for internal audit to maintain its independence?

The 3-LoD model is a risk management model. The model is a tool to describe roles and assign responsibilities. It has to be designed in a way that the internal audit department maintains its independence. At the same time, the bank has to be in a position to operate without an internal audit department. In the model, the internal audit department is to be understood as the neutral assessor of risk management.

To determine the appropriateness of the set-up of the 3-LoD, all lines should ask themselves the question "Are we there yet and where do we stand today?". With the support of all lines and the management body, it is necessary to determine the right measure of decentralized responsibility and decision-making. Ideally, there is a common understanding. At the same time, the internal audit department is independent and bears no responsibility for the businesses of the single lines. The internal audit department is independent from the results that are produced like a conclusion of a contract, the introduction of a new product.

3b) What kind of possibilities does internal audit have to shape its perception?

In order to shape its perception, the internal audit department needs to take the first and second line serious. A common goal and vision are a prerequisite to have an influence on one's perception. There needs to be a common understanding of objectives, risk culture, and risk appetite among the lines. This can only be achieved step by step. The more positive the perception of the internal audit department is, the more it is accepted as a neutral sparring partner by the business departments. The internal audit department is in the position to help these

specialist departments and to carry out a transversal comparison of these. If it is the case, an internal audit department will have to demonstrate through its work that operational management is not sufficient yet. This requires a dialogue between the first, second, and third line, and the management body.

### Interview transcript 5: Head of department

1a) Which qualitative and quantitative measures exist to evaluate the effectiveness of internal audit activities?

The internal audit department does a good job when unknown risk or fraud issues are found before things become public. However, this cannot be measured. Monetarily, the internal audit department can measure the costs of prevented damage in the sense of detected legal and compliance risks in assessments. The activities of internal audit are effective when reputational risks do not arise; i.e. negative press. However, you cannot measure things that have not happened. You can only measure financial or non-financial losses that the internal audit department was not able to find. In other words, hits from close range are a signal that all business lines fail within the 3-LoD model.

### 1b) What contribution does internal audit make to the institution?

Regular assessments are the core business and the most contributing activities of the internal audit department to the financial institution. Internal audit activities that represent the greatest contribution are the ones that ensure complete risk-oriented coverage of the topics that the audited business lines face. In a financial institution, the internal audit department is the only unit that covers a wide range of risk-related issues. All other business lines have their partial aspects on which they focus on. In the end, you never know whether the second line has covered everything in its surveillance activities. Only the third line is in the position to obtain the big picture of the financial institution's risk inventory. The internal audit department has adopted a systematic approach to assess the risks in the business lines. From my perspective, this is an added value of the internal audit department.

In practice, advisory is not as big as others would like to see it. Typically, advisory services are obtained from external sources like auditing companies. You

can only provide advice to the first and second line if you have a broad view. Currently, I consider the provision of advisory services as wishful thinking.

2a) What is the most valuable activity of internal audit for the management body?

The internal audit department provides reports on its assessment activities to the business lines and to the management body. However, I am convinced that the most valuable activities are follow-up activities on past internal audit assessments. It is of great importance to ensure that the once identified risks are excluded or mitigated. This is a very valuable activity and is sometimes neglected. The internal audit department must be stringent in the follow-up process. In the end, every activity of the internal audit department is concerned with the improvement and development of the financial institution. The independent assessment of risks and the corresponding communication are ultimately important for the business lines and the management body. The internal audit discipline deals with very complex processes, products, and laws which a financial institution faces. The task of the internal audit department is to provide an independent opinion on the assessed risks which are subject to a report. The report outlines what has been found in a simple and understandable way. In doing so, the internal audit department provides the management body with an abstract summary of the activities of the business lines; i.e. comparable to a summary of a book or a film. It is the sound of music. As a result, the management body is in a position to better understand the addressed issues.

2b) What role does internal audit play in the context of governance?

Thorough assessments represent a valuable activity of the internal audit department to the financial institution. These include the evaluation of governance arrangements and the compliance with these in the day to day business. The task of the internal audit department is the provision of objective assurance on effective governance. In this context, the internal audit department assesses the rules, processes, and practices of the audited business line.

3a) What is an appropriate set-up of the 3-LoD for internal audit to maintain its independence?

The model determines the independence of the internal audit function. In essence, an appropriate set-up of the 3-LoD supports a constructive exchange of ideas on the conceptual approach of the business lines while maintaining the

independence of the audit. Despite its independence, the internal audit department has to share information with the second and first line. This means that the lines have to agree on a common terminology. As a result, it helps to better harmonize the business lines and identify interfaces. The aim is to avoid duplication of work in the lines. The internal audit department should not explain to the two lines how the job is to be done. A common language must be developed for risk mitigation in the business lines to enable the use of common metrics. This makes it easier for the internal audit department to identify gaps in the business lines and then discuss further development together.

Front-to-end is a common concept that the second line and third line use for their process map. This makes life easier for those involved. From the point of view of the first line and second line, the work of internal audit then no longer is perceived as top secret. This means that every audited line has transparency about what and how the internal audit department works, and this contributes to the transparency within the 3-LoD. Consequently, the internal audit department is also perceived as a part of the financial institution by the first and second line.

3b) What kind of possibilities does internal audit have to shape its perception?

The perception of the internal audit department has nothing to do with the 3-LoD model. I believe that the internal audit department is perceived positively if it is objective and describes risks appropriately. Thus, a fair and equal treatment across the business lines represents a possibility to shape the perception of the internal audit department. The task of the audit department is to evaluate the same risks in the same way. The internal audit department needs well-trained people to be in the position to talk to the departments on an equal footing. I consider this essential to shape and influence the perception of the internal audit department. Close cooperation of all business lines involved in the 3-LoD results in an understanding of common concepts and terms.

### Interview transcript 6: Manager

1a) Which qualitative and quantitative measures exist to evaluate the effectiveness of internal audit activities?

There are various variables that enable the measurement of the effectiveness of internal audit activities. A possible quantitative measure is the number of

findings and produced assessment reports. I believe that an adequate measure can only be a qualitative ratio. The effectiveness can be measured by carrying out a comparison between the audit universe and the number of audited processes. This allows to make a statement on the audit coverage in relation to the financial institution's procedures. These results can be used as a benchmark and whether internal audit covers everything. With a statement on the completeness of the audit universe, an evaluation of the effectiveness of the internal audit's activities can be undertaken. There are other parameters that are easier to measure like the satisfaction of the audited units. A satisfaction factor enables to measure the relationship between the internal audit department and the audited units in the first and second line. From this, it can be deduced whether the first and second line are satisfied with the work of the internal audit department. Moreover, one can determine whether the relationship is based on partnership and trust. The collection of this structured information can be used to evaluate the perception of the internal audit department as the third line.

#### 1b) What contribution does internal audit make to the institution?

Essentially, the internal audit department deals with the financial institution's risk management. Accordingly, the risks of the bank are to be assessed by the internal audit department. The internal audit department states in its report how appropriate the risks are managed by the first and second line. Often the internal audit department identifies risks that have not been detected by the first and second line departments yet. In these cases, the departments do not act in accordance with the internal and external requirements. This may result in capital burdens; i.e. penalty or capital add-on. I am convinced that the internal audit department contributes to the financial institution by preventing findings from the regulatory supervision body and external audit.

The internal audit department can also take on an advisory role. In the scope of the advisory role, it is possible to discuss issues with the departments independently from findings or deficiencies; i.e. how to reach compliance with the regulatory requirements. The scope of advisory activities also includes follow-up procedures focusing on regulatory supervision inspections. Internal audit's advice to the first and second line has increased in recent years. Cooperation has become a matter of course for the departments and makes a valuable contribution to the financial institution. Nonetheless, when providing advice, the internal audit

department must always ensure that its independence is maintained. The objective is to avoid involving oneself in the design of processes.

2a) What is the most valuable activity of internal audit for the management body?

The question is easier to answer. The activities of the internal audit department are defined in the audit standards, i.e. code and IPPF. The entirety of the activities is documented in the audit plan and approved by the management body. The frequency of regular assessments is derived from the risk content in the area of investigation. Accordingly, activities in the first and second line containing higher risks are audited more frequently. In-depth assessments, incident examinations and project monitoring are treated differently and considered as exceptions. From the perspective of the management body, I assume that all internal audit activities represent a value.

I believe that the independency of the internal audit department represents the greatest value for the management body. The internal audit department draws its own picture of the financial institution's situation and makes it transparent to the management body. Consequently, the most valuable activity of the internal audit department is its reporting to the management body. The reports deal with the conducted assessments, its findings, the implementation of risk mitigating measures, and advisory activities. The reports enable the management body to gather aggregated information on the risk situation in the financial institution. In addition, the internal audit department can also provide a second opinion to the management body. However, it is the management body that has to take the decision in the end.

2b) What role does internal audit play in the context of governance?

The internal audit department is an integral part of the financial institution and its governance. All departments of an institution strive to achieve the financial institution's objectives. In this context, every department, including the internal audit department, is part of the governance and culture. The internal audit department assesses the governance arrangements and initiates changes were cultural adjustments are necessary to achieve the financial institution's objectives.

3a) What is an appropriate set-up of the 3-LoD for internal audit to maintain its independence?

The 3-LoD model is the most classic approach to organize responsibilities in banks. A prerequisite for an appropriate set-up is the independency of the internal audit department. The objective of the first and second lines is to keep a grip on their own activities. This means that the first line closes the transaction and takes the risks, while ensuring that it can rely on the internal regulations.

The second line has a central monitoring and surveillance role for the first line. The internal audit department checks the suitability of the internal guidelines, taking into account external requirements. The lines embedded in the 3-LoD model are all in the same boat. It is about the acceptance of responsibility and to make the 3-LoD model a safe bet.

3b) What kind of possibilities does internal audit have to shape its perception?

The internal audit department can shape its perception by providing help to the first and second line to close gaps regarding internal and external requirements. It is a matter of communication and not only criticizing the first and second lines. I believe that a constructive and solution-orientated communication with the single lines will result in a positive perception of the internal audit department. In addition, a roadshow within the financial institution is an instrument to proactively influence the perception of the internal audit department.

#### Interview transcript 7: Manager

1a) What qualitative and quantitative measures exist to evaluate the effectiveness of internal audit activities?

There is no unique measurand to evaluate the effectiveness of internal audit activities. Risk control, its management, as well as the appropriateness of the implementation of regulatory supervision issues are subject to the examination of the internal audit department and the regulatory supervision body. If you want to measure the effectiveness quantitatively, you can compare the extent to which internal audit department and the regulatory supervision body share similarities in their weighting and number of findings.

Another possible quantitative measure is the number of operational risks and whether the cases decrease over a time span. In the end, this allows to conclude on

the appearance of operational risk crimes and the number of breaches of regulatory requirements. However, this is difficult to measure.

1b) What contribution does internal audit make to the institution?

The internal audit department generates a contribution to the financial institution by highlighting the risk situation and providing impulses for optimization. The main contribution is to challenge the single business lines and the identification of improvable operations. I experience that the internal audit department is often consulted by the departments in terms of how something would be assessed if processes would be amended in the department. I feel that these advisory activities of the internal audit department generate an institutional contribution. Activities of the internal audit department prevent the financial institution from being fined due to violation of external regulations. Moreover, internal audit prevents the departments from receiving findings from the regulatory supervision body or external audit. In a sense the internal audit department protects the financial institution from the outside world and from receiving penalties that may cost significant money.

2a) What is the most valuable activity of internal audit for the management body?

The most valuable activity of the internal audit department is to make risks transparent to the management body. Internal audit is in the position to detect where resources are required for improvement. As a result, resources can be allocated where needed. It is outlined by the internal audit department to which issues the management body should pay more attention to and where intervention is required by the management body. In the end, internal audit activities aim to deliver assurance to the management body. The management body gains knowledge about what is going well and what is not appropriately established in the business lines yet. The internal audit department points out weaknesses to the departments that they so far did not realizes themselves.

Another contributing activity of the internal audit department is the monitoring of projects. I observe that this is proactively demanded by the financial institution. The project participants want to have the internal audit department involved to look over their shoulder. They perceive it as a seal in the sense that the internal audit department was present. This provides a feeling of assurance to the departments as well as to the management body.

Above all, the internal audit department is perceived as a sparring partner. I consider it as important for the departments to have a reliable statement from a third party like internal audit. Currently, the internal audit department takes on a comparable role to the regulatory supervision body, that also tells the management body what it needs to pay attention to.

2b) What role does internal audit play in the context of governance?

Governance sets structures, defines communication lines, and consists of rules and processes. It unites the single departments and makes transparent where risks are allocated. The risk culture is the sum of the risk appetite and the resulting risk tolerance. In addition, internal controls and the tone at the top are also main contributing factors for sound internal governance rules. Comparable to other risk issues, internal governance rules are allocated in the audit universe and assessed by the internal audit department on a regular basis.

3a) What is an appropriate set-up of the 3-LoD for internal audit to maintain its independence?

I perceive the current 3-LoD model as not well established yet. There is still room for improvement. It is important that the internal audit department maintains its independence within the 3-LoD.

Irrespective of findings, it is important that the internal audit department takes on a sparring partner role and to discuss issues with the specialist departments. No distinction should be made between the first and second line.

3b) What kind of possibilities does internal audit have to shape its perception?

The internal audit department can shape its perception by communicating in an appreciative manner. Holding close out meetings can be used as an instrument to highlight the results and to stress cooperation. As an internal auditor, you should remain professional, be aware of the problems of the departments, and help them to overcome resistance. It is important that the audited departments have the feeling that the internal audit department understands them. An instrument to evaluate the perception of the internal audit department is to ask the departments for feedback. Today, this is often neglected due to the lack of time. I believe that constructive feedback makes a big difference. I think it is much easier to shape the perception of internal audit in the second line as you can conclude allegories. The second line faces a comparable dilemma. They have an internal supervisor role and

also conduct plausibility checks. Here one can look for a close alliance. The way the internal audit department is perceived also depends on its assessment reports. A positive presentation - where applicable - of the audited departments in the reports goes hand in hand with the acceptance of the internal audit department.

### Interview transcript 8: Manager

1a) Which qualitative and quantitative measures exist to evaluate the effectiveness of internal audit activities?

It is difficult to determine a measure for the effectiveness of the internal audit department. I cannot measure the effectiveness of internal audit in one or more measurands. One can only measure the quality of the carried-out internal audit activities. An appropriate measure for the effectiveness of internal audit activities is the identification of gaps between external and internal requirements within the business line's regulations. An effectively practiced internal audit activity results in closing these gaps. If external requirements are not appropriately implemented, this means that employees are not doing their job properly. Internal audit has to keep pace with new developments that pose new risks to the financial institution like individual data processing.

Internal audit has to examine the internal control system and thereby also question the efficiency of the implemented business activities. The work of the internal audit department goes far beyond the internal and external regulations. The internal audit department must constantly evaluate which risks are associated with the business and has to assess how these risks are mitigated.

# 1b) What contribution does internal audit make to the institution?

Until recently, internal audit had a dusty image that it is gradually getting rid of now. By performing regular assessment activities, internal audit contributes to the financial institution. The internal audit department works on behalf of the management body. As a result, internal audit provides assurance to the first and second line of defense, which is of particular interest to the management body. The task of the internal audit department is to identify risks in the financial institution and to thereby contribute to the achievement of the financial institution's objectives. The contribution of internal audit is the identification of gaps between internal and external guidelines or regulations.

The internal audit department executes regular assessments and specific indepth assessments on behalf of the management body. In either both ways, the management body is informed about the assessed subject and the appropriateness of the internal requirements. The contribution of the internal audit department is to inform the management body.

A prerequisite to generate a contribution are appropriately qualified employees. In order to be able to cover all topics and risks a financial institution faces, you need well educated people with know-how.

I consider it important to have mixed teams in the internal audit department, i.e. young and experienced people. I am convinced that the internal audit department is a steppingstone for a career. An internal audit department has to be agile. Agility is way to get things done.

2a) What is the most valuable activity of internal audit for the management body?

Being on the road on behalf of the management body means that the internal audit department has to inform the management body about the situation within the financial institution. The most valuable activity of internal audit is to make the results of an assessment transparent to the audited departments and the management body. It is important for the management body to know that the internal audit department has checked the activities of the first and second line. In the end, the work of internal audit can result in less capital add-ons instigated by the regulatory supervision body.

I believe that it is important to be perceived as a sparring partner by the management body, the first and second line of defense. In this context, internal audit also has an advisory function. Internal audit also has the option to provide project-related support. In this case, internal audit closely operates with the project participant and can make use of synergies in future assessments. The monitoring and examination of projects is a valuable activity of internal audit as deficits are detected at a very early stage. For this purpose, internal audit colleagues can even be sent to the project. This was the case in the early days of COVID. I am convinced that the first and second lines perceived internal audit as a great support. Some internal auditors even quit their job and started working for these business lines.

2b) What role does internal audit play in the context of governance?

Many activities of the internal audit department deal with governance regulations imposed by the first and second line of defense. The assessment of the governance rules represents value for the financial institution as gaps are identified. When auditing the first and second line of defense, the management body sees whether and to what extent processes are set-up properly. From this, the audited lines can conclude whether the institutional and supervisory issues are covered. In particular, it is important to check whether the requirements announced by second line of defense are interpreted differently by the first line. As a result, the second line of defense would then have to contact and assess the first line until a common understanding is achieved. This would result in a radiating effect like a cascade from the top, first line, to the bottom, second line.

3a) What is an appropriate set-up of the 3-LoD for internal audit to maintain its independence?

I find it difficult to answer the question. In the very beginning, a 3-LoD model is associated with conflicts among the individual lines. The second and third line can make use of synergies. If it is clear who checks and monitors what, no activities need to be repeated. It is important for the third and second line to be interlinked and to exchange information. A coordination between the second and third line is required to experience synergy effects. As the audit plan is approved by the management body, it is transparent to the second line what the internal audit department will assess, and the second line could use it to align its reviews accordingly. The aim is to ensure that both do not review the same thing.

Currently, I perceive the established 3-LoD as not mature enough. In the last executed assessment, I realized that we cannot go any further at this point. There are inappropriate internal requirements regarding the internal control environment in place that pose a problem for a financial institution and thus also for the internal audit department. It is up to internal audit to discuss these inappropriate internal requirements with the first and second line of defense.

It needs a strong Chief Internal Auditor that has to cover the political side and who can assert himself against the first and second line of defense. A strong Chief Internal Auditor is very important for the financial institution.

3b) What kind of possibilities does internal audit have to shape its perception?

It requires a continuous contact with the business lines and an established sparring partner model to shape internal audit's perception. The tasks and procedures of the second and third line of defense bear a certain degree of comparability. If the second line reviews the internal control system, the third line is in the position to take random samples in other lines. An ongoing dialogue between lines is central to the success of internal audit. A cooperation between the second line and the third line is important to influence the perception within the 3-LoD model. Everyone belonging to the second and third line must speak to each other. The establishment of a sparring partner who acts as a Single Point of Contact is required on both sides.

### Interview transcript 9: Manager

1a) Which qualitative and quantitative measures exist to evaluate the effectiveness of internal audit activities?

There is no measurand to evaluate the effectiveness of internal audit activities. Internal audit is independent. The task of internal audit is to save the management body's butt by identifying risks before they turn out to be critical. Internal audit deals with things that have not happened yet and to prevent disaster or not. In the end, we will never find out the truth behind it. There is no adequate quantitative or qualitative measurand for the effectiveness of internal audit activities. I can only record, evaluate and measure events, when it is too late. It's like reading tea leaves. No matter how we weight findings, nobody knows what would have happened.

In line with the IPPF standards, internal audit tries to find ways to evaluate and improve the quality of its activities. However, it is impossible to predict whether the activities of internal audit are effective. Thus, internal audit faces a circle dependency when attempting to evaluate its activities.

### 1b) What contribution does internal audit make to the institution?

There is a simple answer to the question. From my perspective, there are two internal audit activities that I weight as equally important: audit procedures and project management assessments. The task of internal audit is to identify risks and to prevent the occurrence of damage. I do not want to evaluate whether these

activities represent a contribution to the financial institution. However, internal audit has an unclouded view of potential risks. At the same time, it has less knowledge compared to the business lines. No one can accuse internal audit to ask stupid questions. Most probably, the internal audit department is the only unit in a bank that has an overview of the financial institution's entirety and the corresponding risk context. If we grant a loan, I need to report data to ensure that the bank's balance sheet and risk position are correct. These proceedings drill down to interrelated IT issues. Internal audit is in the position to assess the interfaces and provide a risk-orientated overview.

2a) What is the most valuable activity of internal audit for the management body?

For the management body, the most valuable activity of internal audit is its independency. As we are not involved and active in the process ourselves, internal audit does not pursue any interests in a process. For this reason, internal audit is a neutral assessor in regard to where risks can arise. The management body must ask itself what kind of internal audit department it wants and what importance it assigns to it. There is no available blueprint. Everything must be evaluated in the risk context. The management body must answer the questions "What role does internal audit play?", "What role do I assign to the internal audit department?", and "What is the situation at present?" The set-up of the internal audit department is based on the answers to these questions.

2b) What role does internal audit play in the context of governance?

Internal audit has an important and special role to play in the context of governance. Due to the nature of internal audit's role, it is independent from the governance framework. Completely irrespective, it is the mandate of internal audit to assess the governance framework. At the same time, the role of internal audit is shaped by a modern governance model in a financial institution. However, the exact role assigned to internal audit within the governance model remains cloudy. This is comparable to the question "How do I design the audit universe?"

3a) What is an appropriate set-up of the 3-LoD for internal audit to maintain its independence?

Internal audit has to maintain its independence no matter whether a 3-LoD model is established or something comparable is in place. The question is how I can avoid the duplication of work among the business lines when designing a

cooperation model. At the same time, the activities of internal audit are completely independent from the established model. The role of internal audit is determined by how it performs its task and not by the design of a model. A model can only serve as a basis to describe the task and responsibility.

3b) What kind of possibilities does internal audit have to shape its perception?

I am not in the position to answer the question. Why is that? It sounds as if internal audit can shape or even influence its perception through a model or its implementation. The standing and characterization of the internal audit department has to be developed within the financial institution. This also requires external support.

In case the regulatory supervision body carries out on-site inspections that focus on the internal audit department, these may result in the clarification of expectations regarding the functional capabilities of the internal audit department towards the management body. As a result, this will have an impact on the perception of internal audit. The ability to shape the perception of internal audit is not achievable by designing and setting up a 3-LoD model. Internal audit should ask itself what one's own role is and to what extent it can shape its perception. Internal audit can only shape its perception by executing its activities which are not based on the design of a model.

#### Interview transcript 10: Manager

1a) Which qualitative and quantitative measures exist to evaluate the effectiveness of internal audit activities?

A distinction must be made between quantitative and qualitative measurands. When measuring the quantity of internal audit activities, the prevention of operational losses serves as a basis. In this respect, audit activities can be used to demonstrate the probability of negative risk occurrences. In practice, I mean the prevented loss due to internal audit activities. I do not consider it appropriate to measure the number of findings produced in an assessment of the internal audit department. Findings are not comparable among the business lines and they also depend on the carried-out assessment procedures. Another option to measure the effectiveness of internal audit activities is the number of fraud cases within a financial institution. In this case, an adequate measure can only be of

monetary nature like number employees who had their hands in the till. Thus, the effectiveness of internal audit activities is measurable in terms of damage incurred.

In order to measure the quality of internal audit activities in terms of its effectiveness, the level or degree of institutional coverage needs to be determined. In other words, whether the audit universe covers the risks of the entire group or financial institution. It can then be measured whether all departments or areas with their processes are anchored in the audit universe. It also depends on structure of the financial institution and it is possible to measure the completeness of the audit universe. The issue of quality is much discussed. The question is whether quality can be measured at all. It is important to prevent damage. If the single audit activities are effective, fewer loss events and reputational risks arise.

#### *1b)* What contribution does internal audit make to the institution?

The internal audit department is rather perceived as a disturbing factor by the audited business lines and less as a contributing department. I consider it as not realistic to determine the contribution of the internal audit department to the financial institution. Generally, it is important that the internal audit department is involved in issues related to risk, control, and compliance.

The execution of regular assessments that are based on the audit universe contribute to the improvement of processes and regulations of the financial institution. Due to ongoing continuous auditing activities in the business lines, the internal audit department assesses the entire bank in regular intervals.

Internal audit ensures an objective view on the entirety of the bank's activities which I consider as a contribution. The bottom line is that the internal audit department delivers a contribution to the financial institution by providing its knowledge and insights.

Advisory activities represent a separate point. In the case of regulatory changes, the internal audit department should be able to provide an opinion to the affected business lines. Another important contribution to the financial institution is the creation of an atmosphere of exchange between the Chief Internal Auditor and the management body.

2a) What is the most valuable activity of internal audit for the management body?

It is up to the Chief Internal Auditor to decide how he presents his department to the management body and the business lines. If I had to choose the

most valuable activity, I need to make up my mind between advisory and regular assessment activities. But I cannot commit myself. From my point of view, one determines the other. In order to be able to give good advice, I need to have to be familiar with the entire financial institution. I can only acquire this knowledge through auditing activities. When executing internal audit activities, I gain insights into the business lines. Overall, one of the most valuable activities of the internal audit department is its reporting to the management body, which consists of quarterly reports and audit reports on the examined processes and business lines.

2b) What role does internal audit play in the context of governance?

The risk culture in a financial institution and consequently in the audited business lines plays an important role. If the processes of the business lines are risky and are not properly applied, the internal audit department must put down in words what actions are required. It is then up to the management body to decide how the business lines should deal with it and whether or not the financial institution should deviate from the internal governance requirements.

The internal audit department can provide the financial institution with an overview of all activities. When the internal audit department is properly established and the risk management is well and fully audited, it will ensure that the bank's control system is improved.

3a) What is an appropriate set-up of the 3-LoD for internal audit to maintain its independence?

The independence of the internal audit department is the most important thing. Independence makes the internal audit function more credible. The internal audit department has no preferences and is independent within the model. Another key interest of the internal audit department is its reporting to the management body.

It is central to 3-LoD that the interests of all involved lines are taken equally seriously. Control activities are just as important as operational activities. The 3-LoD model is an example of consistent separation of roles between the first, second, and third line. The third and second line need to operate more closely.

3b) What kind of possibilities does internal audit have to shape its perception?

The task of internal audit department is not popular with everyone. As a manager, I need to exchange ideas with my team how their assessments are

perceived by the audited business lines. In total, the employees and the single assessments carried out by them shape and affect the perception of the internal audit department within the financial institution. How the internal audit department behaves in the financial institution should be given more space in meetings in order to reflect the own perception.

The perception of the internal audit discipline is a matter of marketing. At the same time, its activities are not a marketing instrument itself. From my perspective, the internal audit department can be positively recognized within the financial institution if it assesses the single lines fairly and equally. This requires a consistency of internal audit activities in the individual areas as well as objective standards for the formulation and weighting of findings. By this, it can be ensured that the image of the internal audit department is presented positively. With good and solid audit work, you achieve more than if you praise yourself. As a result, an assessment will be taken seriously by the business lines. It is of great importance that the results are presented in a transparent and comprehensible manner to the audited business lines. This also includes being present in the financial institution and exchanging ideas with the management body.

#### Interview transcript 11: Manager

1a) Which qualitative and quantitative measures exist to evaluate the effectiveness of internal audit activities?

There is no applicable measurand for the effectiveness of internal audit activities. The internal audit department does not directly deal with activities that affect equity ratios nor is it responsible for them. A satisfaction indicator can be considered as a potential measurand. Herein, it can be measured how satisfied the audited business lines are with the executed activities of the internal audit department. A satisfaction factor among stakeholders, which includes the management body, represents a variable to measure the performance and perception of the internal audit department. The number of received findings from the regulatory supervision body is also a potential determinant for the effectiveness of the internal audit department. The same applies to the audited units which receive findings from the internal audit department. Another measurand is the number of weighting of findings in the assessments of the internal audit department. The performance of the business lines is interdependent with the

findings from assessments. The question is whether the internal audit department finds much or little to complain about. The weighting of findings also serves as a variable measurand.

1b) What contribution does internal audit make to the institution?

You can only indirectly measure the contribution of internal audit activities to the financial institution. There is no direct link to the internal audit department. The contribution of internal audit is the mitigation of risk sources. I cannot measure the contribution of internal audit activities in euros. The regular assessments cover the risks of the bank and thereby continuously contribute to the financial institution. Overall, incident in-depth assessments represent the lowest contribution to a bank. Behind the scenes there are triggers why this has happened. These investigations are undertaken when something went wrong which should not happen in the first place. Investigations carried out by the internal audit department ensure that comparable errors or mistakes will no longer occur. The effect is the smallest, even if the potential for loss is high, but it has already happened. From my perspective, the greatest contribution of the internal audit department are continuous auditing and advisory activities.

2a) What is the most valuable activity of internal audit for the management body?

In a financial institution, the management body is the controller and therefore the most valuable activity of internal audit is reporting to the management body. The task of internal audit is to communicate immediately to the management body. Fast and direct communication with the management body is the most important and valuable activity of the internal audit department.

The internal audit department also provides advisory activities to the business lines and to the management body. I believe that these advisory activities are very valuable activities. In this regard, the internal audit department is to be understood as a sparring partner. Moreover, internal audit activities provide impulses to mitigate risks.

2b) What role does internal audit play in the context of governance?

I consider the creation of a solid basis that ensures risk mitigation as the main value driver of the internal audit department. This includes the assessment of governance regulation in each business line in the financial institution. Moreover,

the internal control system plays a central role in a bank's risk management. The system serves as a basis for the overall governance framework.

3a) What is an appropriate set-up of the 3-LoD for internal audit to maintain its independence?

Currently, an adequately established 3-LoD model is still lacking in my financial institution. Especially the continuous exchange between the third and second line is not well established. In the first step, the responsibilities and boundaries of the second and third line require a clear definition. This includes defining where there are interfaces and interactions required between the second and third lines. An atmosphere of continuous exchange is needed to appropriately set-up the 3-LoD. It is important that the first and second line have an idea about their tasks.

The independence of the internal audit department is a prerequisite for the 3-LoD. It is of great importance that the internal audit department cannot be influenced by the business lines. This requires intensive communication, especially between the third and second line, but also among the first and second lines. A functioning 3-LoD requires a lot of communication and constant reminders when you are losing track. It needs training to introduce the model. As a result, you will achieve the desired awareness of the single lines regarding their responsibilities and roles.

3b) What kind of possibilities does internal audit have to shape its perception?

The 3-LoD model must be known in its entirety that the internal audit department is in the position to shape its perception. Furthermore, it is central to be aware of one's current perception. We can influence how we want to be perceived by working transparently following the motto "no surprises" in our communication model.

The internal audit department can make use of a sparring partner model to shape its perception in the first and second line. Another impulse is a road show what internal audit stands for within the financial institution. A road show would provide answers to the following questions: What does internal audit do? What does it mean to be audited? Who is responsible for what?

In addition, management conferences provide an opportunity for the audit department to present oneself. By this, internal audit can shape its perception by presenting the own role and highlighting its relevance to the departments.