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# Internal audit and Supply Chain risks

Research on the role of the internal auditor regarding supply chain risks

Research conducted via IIA Netherlands Committee of Professional Practices.

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## Introduction

Organizations are part of an ecosystem of stakeholders. Most organizations operate in a chain: they focus on their specialty and engage third parties for other matters (which in turn may also engage third parties). This includes suppliers (for example of raw materials or products) and buyers (parties that supply the goods or services to consumers) but also intermediate forms in the form of joint ventures or other partnerships. Service providers also play a critical role for many organizations, from employment agencies to IT service providers.

Throughout the last decennia supply chains have become increasingly global, connecting many different players in multiple parts of the world. Lean management and just-in time production methods have optimized these supply chains. This trend has however slowed down during the last years with geopolitical challenges and reshoring of production and services. The corona crisis has painfully exposed the interconnectivity and dependency, leading for example to computer chip shortages that continue until today. The Russian invasion of Ukraine adds to the difficulties already present in supply chains. Overall, this introduces new supply chain risks and increases pre-existing ones. Another major development is the increasing importance of Environment, Social and Governance (ESG) criteria, pushing for – amongst others - greater transparency within supply chains.

The goal of this research is to further explore the role internal auditors play around supply chain risks.

## Research approach

Internal auditors have focused on supply chain risks for many years. However, relatively few research has been conducted on the role of the internal auditor around supply chain risks. In this research we therefore take an explorative approach to find out how exactly internal auditors deal with supply chain risks to inform and hopefully inspire readers.

There are several definitions and interpretations of supply chain. In this research we adhere to how the CIPS defines supply chain:

*“In its simplest form a supply chain is the activities required by the organization to deliver goods or services to the consumer. A supply chain is a focus on the core activities within our organization required to convert raw materials or component parts through to finished products or services.”* [\[1\]](#)

We used the procurement development model of Mark Keough<sup>[2]</sup> to investigate if there is a (significant) relationship between the role of the IAF and the maturity of the organization's supply chain. In this model the maturity of purchasing is split into the five stages of evolution.



Developmental stage	"Serve the factory"	"Lowest unit cost"	"Coordinated purchasing"	"Cross-functional purchasing"	"World-class supply management"
<b>Organization</b>	<ul style="list-style-type: none"> <li>• Only at factory level</li> <li>• Reports to plant manager or lower</li> </ul>	<ul style="list-style-type: none"> <li>• Purchase departments at BU-level</li> <li>• Professional purchase</li> </ul>	<ul style="list-style-type: none"> <li>• Central purchasing or coordinated at BU-level</li> <li>• Lead buyers</li> <li>• Buying commissions</li> </ul>	<ul style="list-style-type: none"> <li>• Center-led, with implementation within BU</li> <li>• Cross-functional teams within and over BU</li> </ul>	<ul style="list-style-type: none"> <li>• Supplier development team</li> <li>• Suppliers at own location</li> </ul>
<b>Core skills</b>	<ul style="list-style-type: none"> <li>• Administrative</li> <li>• Operational focus</li> </ul>	<ul style="list-style-type: none"> <li>• Competitive tendering</li> <li>• Negotiation skills</li> </ul>	<ul style="list-style-type: none"> <li>• National contracts</li> <li>• Setting up databases</li> </ul>	<ul style="list-style-type: none"> <li>• Supplier development</li> <li>• Cross-functional problem solution</li> </ul>	<ul style="list-style-type: none"> <li>• Supplier development</li> <li>• Cross-functional problem solution</li> </ul>
<b>Examples of activities</b>	<ul style="list-style-type: none"> <li>• Order processing</li> </ul>	<ul style="list-style-type: none"> <li>• Good market analysis</li> <li>• Knocking out suppliers</li> </ul>	<ul style="list-style-type: none"> <li>• Interact with users</li> <li>• Setting up databases</li> </ul>	<ul style="list-style-type: none"> <li>• Supplier certification</li> <li>• Make vs buy</li> <li>• Total cost of ownership</li> </ul>	<ul style="list-style-type: none"> <li>• Competitive partnerships</li> <li>• Technological cooperation</li> <li>• Continuous result improvement</li> <li>• Measuring supplier performance</li> </ul>

Source: <https://www.mckinsey.com/business-functions/operations/our-insights/buying-your-way-to-the-top>

Several relevant areas of Supply Chain in which Internal Audit can participate were identified and researched. For example supplier due diligence, monitoring and termination but also contract management and the contract register. The following areas of involvement of Internal Audit related to Supply Chain risk were specifically researched:

1. Performing internal audits;
2. Risk management;
3. Supplier audits; and
4. Contract management.

The research consisted of several elements:

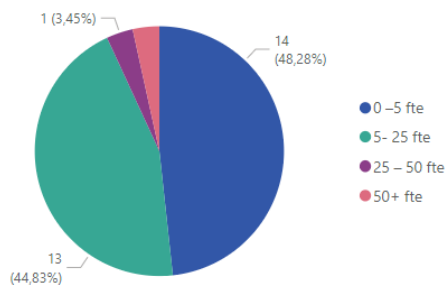
1. Literature study: existing research and publications have been analyzed.
2. Survey: based on the literature study a survey was developed.
3. Interviews: based on the survey interviews were conducted with 4 respondents to extend on the survey results.



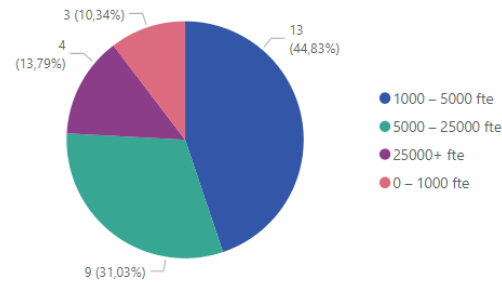
## Results

A total of 42 surveys were completed, out of a total of 180 approaches. 13 Internal Audit departments (30%) are not involved in supply chain risks or audits of supply chain processes. As a result, the remainder of the survey was completed by 29 respondents. The respondents to the survey represent a wide range of organizations, in industry, size of the organization, size of the Internal Audit Function, stock exchange enlistment and maturity of supply chain processes.

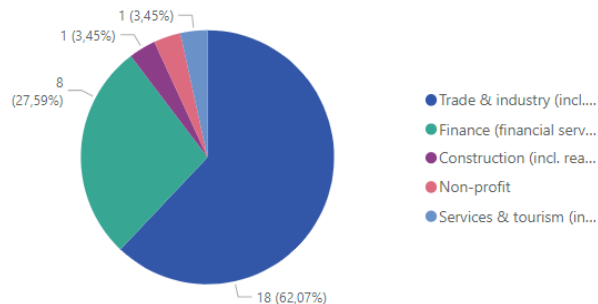
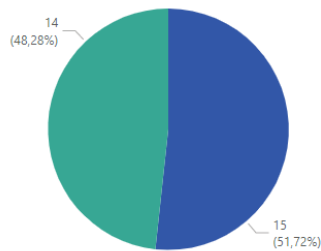
Size Internal Audit Function



Size Organization Worldwide



Listed Company

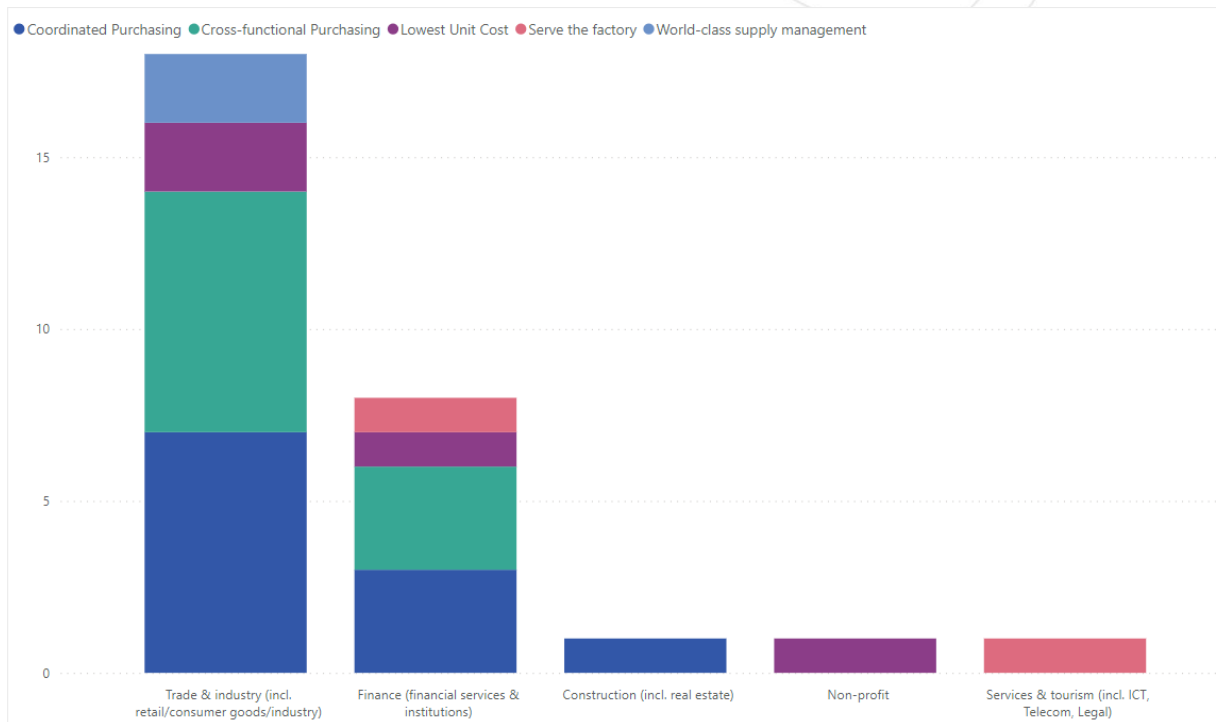




## Maturity and Industry

One of the hypotheses coming forward out of the literature study was that the maturity of the organization's procurement would impact the IAF's work. A more mature organization is organized differently and allows for different approach than a less mature organizations. The survey results confirm this. If the maturity of the organization is high (world class supply management/cross functional purchasing), topics such as supplier audits, contract management and the entire supply chain are also higher on the agenda of the internal audit department. Based on the interviews and data analysis this seems to be the key to success for internal audit.

The organizations that characterize themselves as world class in supply management are in the trade & industry category. This can be explained by the strong focus of these organizations on the production and shipping of tangible products.



*Best practice: Take the ambition level of the auditee into account during the audit. What's the gap between the current maturity of the process and the auditee's ambition and define what steps the auditee needs to take to achieve the ambition level.*



### Supply Chain audits

IAF's have rather different scopes in their supply chain audits. The following table displays the frequency with which topics are included in audits:

Topic	Included in audits	Not Included in audits
Strategy	48%	52%
Risk appetite	59%	41%
Supplier Due Diligence	60%	40%
Supplier Monitoring	76%	24%
Supplier Termination	43%	57%
Contract management	92%	8%
Price lists	50%	50%
Analyzing contract agreements	59%	41%
Contract Register	45%	55%

The results do not show a clear trend. For most of the topics there seems to be a somewhat even split (between 40 and 60%) between the inclusion or exclusion of the topic in audits. Only supplier monitoring and contract management are positive exceptions to this, in the sense that they are included by most IAFs.

Additionally IAFs indicate to include the following topics:

- Outsourcing;
- Cybersecurity;
- Customs duties;
- Security of supplies (availability);
- Legal requirements;
- Bribery.

Most of these topics are only taken into account by one IAF.



### Contract Management

The survey results show that eight internal audit departments include the subject of contract management in their annual plan and perform an audit on it. The internal audit departments mainly perform an audit on the contract management process, focusing on verifying the proper mandate and whether the right people in the organization have signed the contracts.

Only one internal audit department indicates that subjects such as "know your supplier" are also involved in an audit. Attention is also paid to right to audit clauses in contracts, safeguarding of documentation, anti-bribery requirements and automation of work.

### Supplier Audits

Internal Audit departments have limited involvement in performing supplier audits. Three participants indicated to actually perform supplier audits, all these IAFs operate within finance. Literature shows examples of IAFs within finance auditing IT service providers<sup>1</sup>. Other IAFs often limit their scope to determining whether supplier audits are conducted, or on the supplier audit program. Most companies that audit suppliers use other internal departments or external parties to perform a supplier audit (or these audits are followed up within the industry).

### ESG

Internal audit departments are not or only to a limited extent engaged in activities related to ESG topics such as climate change and circularity or social subjects like diversity and young workers. The regulations for this are changing, for example via the EU's Corporate Social Responsibility Directive (CSRD) coming into effect the coming years. Besides legal requirements, attention and importance of supply chain related ESG topics is growing within society. This poses, next to a being a necessity, an opportunity for internal audit to truly be a partner to the organization. We want to encourage internal audit departments to prepare for this in advance so that internal audit can play its part in its advisory role. This could for example be regarding reporting KPIs and performing an internal audit on the progress and the data quality.

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<sup>1</sup> [Pooled audits on cloud service providers | \(deitauditor.nl\)](https://deitauditor.nl)



## Takeaways

The goal of this research was to further explore the role internal auditors play around supply chain risks. Overall this research shows a great diversity in how internal audit departments deal with supply chains risks. Throughout the diverse range of companies and topics studied, few communalities were found. Despite that supply chain is identified as a top risk for organizations in 2022 by CAE's<sup>2</sup>, 30% of respondents indicate not being involved with supply chain risks in any way. These 30% consists of IAFs of different sizes (from 0-5 tot 50+ FTE) and different industries (Construction, Finance and non-profit). A surprising finding given the attention the topic of supply chain receives in this day and age. It might explain why the internal audit literature contains few research and guidance on the topic.

IAF's that do work on supply chain take different approaches and scopes tailored to the organization, taking into account different topics. Often these include the topics identified in the literature study underlying this survey. Additionally a diverse range of other topics are taken into account, including security and outsourcing. Another example of the diversity between IAFs found in this study. Future research could be performed on the diversity of subjects, and on providing a common analytical framework for operationalizing audits on supply chain management.

Surprisingly, ESG related supply chain topics such as climate impact are not included by most IAFs. Only three IAFs indicate to include ESG topics in supply chain audits. With upcoming sustainability regulations (and broader societal developments) Internal Auditors have an opportunity to be a driver for ESG related supply chain topics in their organizations. A good chance to be a business partner preparing and navigating the organization through uncertain times!

<sup>[1]</sup> <https://www.cips.org/knowledge/procurement-topics-and-skills/supply-chain-management/what-is-a-supply-chain/>

<sup>[2]</sup> <https://www.mckinsey.com/business-functions/operations/our-insights/buying-your-way-to-the-top>