

Insuring the Future: Managing Risks and Disruptions within the Insurance Value Chain

A multiple case study on the commercial insurance industry

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Authors: Ezabella Kwok & Sarah Pramle

Supervisor: Hanna Martin

MASTER OF SCIENCE IN INTERNATIONAL BUSINESS AND TRADE
SCHOOL OF BUSINESS ECONOMICS & LAW
UNIVERSITY OF GOTHENBURG

Abstract

Globalization has resulted in the fragmentation of business activities and participation in cross-border networks, giving rise to Global Value Chains, thus increasing vulnerability to risks and disruptions. While there is existing research on risk management in tangible product production within GVCs, there is a scarcity of literature on risk management in service industries, particularly on the Insurance Value Chain. Due to the unprecedented nature of the Covid-19 pandemic, there is little research on the effects of such a disruption. As the insurance industry is essential for creating a stable economic environment, our thesis investigates how the insurance industry can manage risks and disruptions to their value chain. A multiple-case study is applied and consists of 14 interviews with specialists, middle and senior management from various global insurers and insurance brokers. Our findings align with the limited existing literature on service supply chain risk management, highlighting the need for a flexible and iterative approach to risk management, especially in the face of unexpected events. Additionally, our research suggests that insurance companies should foster a risk-aware organizational culture that permeates the daily responsibilities of all employees, while maintaining a people-oriented approach that nurtures employees' well-being and development. Moreover, companies need to be creative and quick to adapt to disruptions, while maintaining effective communication both internally and externally. Furthermore, reflecting on past experiences and learning from them is crucial for revising and improving risk management processes. Consequently, insurance companies can effectively navigate unexpected risks and disruptions, minimizing adverse effects and ensuring continued stability.

Key words

Risk, Risk Management, Commercial Insurance, Insurance Value Chain, Global Disruption, Covid-19 Pandemic

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Ezabella Kwok

Sarah Pramle

Sanda Praul

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Abbreviations	
GVC = Global Value Chain	
SSC = Service Supply Chain	
SOSC = Service-Only Supply Chain	
PSSC = Product-Service Supply Chain	
B2B = Business to Business	
B2C = Business to Consumer	
IHIP = Intangibility, Heterogeneity, Inseparability and Perishability (attributes of a service	e)
ERM = Enterprise Risk Management	
SME = Small and Medium-sized Enterprises	

1.0 Introduction

Through globalization, multinational corporations are relocating sections of their operations beyond national borders, giving rise to the creation of Global Value Chains (GVC), which increases potential risks (Manuj & Mentzer, 2008). Multinational companies can strive for efficiency in their operations by locating various stages of their production, such as manufacturing, marketing and research & development, in separate locations spread across the globe (OECD, 2023). Moreover, according to the World Bank (2023), participation in global value chains does not only result in the production of a single product, but it also generates jobs and economic growth in various national economies. By tapping into global value chains, it allows for the trade of goods and services as well as knowledge on an international level (World Bank, 2023).

Furthermore, it is important to note that global value chains do not solely refer to the manufacturing industries and physical products, but can also be applied to non-tangible goods and services (Dicken, 2015). An example is insurance value chains, which differ from a typical manufacturing company due to the intangible nature of insurance products, meaning that there is no need for warehouses, production centers or physical transportation of goods. However, similar to a traditional global value chain, the insurance value chain is fragmented across the globe and integrates various value-adding activities involved in insurance operations, including designing and developing products, sales and post-sales service (Wang, 2019). All types of global value chains are vulnerable and subject to increased risks due to the international nature, which can be intensified by crises such as the Covid-19 pandemic. Risk is central to the insurance industry, where insurers need to identify and assess risks twice. Firstly, insurers need to assess and underwrite the risks of the policyholders in order to accurately calculate the premium of insuring the particular policyholder at a level that ensures profitability for the insurer. The second approach to risk insurers need to acknowledge is the risks associated with the investments of premium and equity capital (Oscar Akotey & Abar, 2013).

The global business environment is currently recovering and experiencing the effects of the Covid-19 pandemic. The virus outbreak began in Wuhan, China in the end of 2019 and rapidly spread to various countries around the world (WHO, 2023). The high degree of interconnectedness of the world was evident due to the instant escalation and outspread of the virus. This resulted in widespread lockdowns and business closures. Consequently, the supply

and demand of goods and services were significantly impacted which affected the sourcing of raw materials and necessary components for production (Maital & Barzani, 2020). In a general perspective, the virus has affected global value chains in four different ways: (1) direct, (2) indirect, (3) demand and (4) trade and investments.

Firstly, there is a *direct* effect on global value chains when companies halt their production due to health and safety measures such as illness and social distancing rules (OECD, 2020). Secondly, there are a variety of *indirect* impacts that can affect GVCs in different ways. One of these impacts the supply chain, where production in one location depends on inputs from another location that has been directly affected by the virus. This can lead to disruptions in the flow of goods and services and can have a ripple effect through the value chain. Thirdly, the *demand* side can be impacted where the production and supply is not disturbed. However, there is a decrease in the demand for the products. This can also occur due to an increase in demand, as seen with the virus for certain medical supplies, or a change in demand, as seen with the shutdown of hotels and restaurants. Fourthly, a *trade and investment* policy risk also exists, which is demonstrated by the imposition of export bans and a need for re-nationalization of production in order to ensure there is a stable national supply. This uncertainty in future trade and investment policies reflect significant risks that companies are evaluating in order to mitigate potential negative outcomes that can influence their global value chains (OECD, 2020).

The financial burden of the risks and outcomes mentioned above can be reduced to some extent by having the appropriate insurance coverages (Allied Market Research, 2023). Hence, this thesis will focus on the global insurance industry and its value chain during this unprecedented global event that we call the Covid-19 pandemic. The insurance industry allows individuals and businesses to live and operate in an economically secure environment by providing various coverages to mitigate risks (Svensk Försäkring, 2023). The insurance industry can be classified into two broad categories: life insurance and non-life/ general insurance, with commercial insurance being a part of the latter (European Central Bank, 2023). Söderberg & Partners (2023) describe commercial insurance as a "product stimulant for the global economy", allowing business to grow and develop. Business insurance offers protection against a wide range of losses, including those resulting from fire, natural disasters, legal liability and automobile accidents. It covers physical damage caused by accidents as well as losses suffered by customers due to defective products or poor service. To some extent, business insurance can also help reduce the financial impact of unexpected

events, such as economic downturns. The global business insurance market is divided into segments based on the type of insurance, application and region. Insurance types include professional liability, property & casualty, vehicle insurance among others. Applications are broken down into large corporations and small and medium-sized enterprises (SMEs). The business insurance market can also be analyzed by region, including North America, Europe, Asia-Pacific and LAMEA (Allied Market Research, 2023).

Within international business studies, there exists value in researching the insurance industry, particularly business insurance, as this is an essential part of any company, whether it is large or small. Business insurance, such as general and products liability and property insurance, provides protection for companies' global business operations and assets, which allows commercial customers to grow their business ventures by seizing new and unfamiliar opportunities whilst minimizing financial losses. Further, business insurance is an inevitable product that needs to be purchased as it is required by law, in which the extent of coverage can vary based on the country of operations (SBA, 2023). Thus, in order to comply with the local jurisdiction and avoid invalidity of the insurance coverage, a multinational company with operations spread across the globe needs to purchase a global insurance program, which includes local policies in countries where the company has subsidiaries and operations (Zurich, 2015). As the world is becoming more globalized with businesses expanding internationally, they often seek to diversify their income potential.

However, this also means increased exposure to various jurisdictions, which leads multinational companies to navigate more complex insurance needs, including compliance with coverage regulations in new markets (Jensen, 2021). This includes questions about how a multinational company should manage risks across borders, from an insurance perspective. Hence, a uniform insurance programme consisting of local policies is vital for providing consistent coverage and limits globally, eliminating unwanted surprises during the event of a claim. A harmonized global insurance program not only helps limit liability but also provides the financial stability that businesses desire (Roberto, 2016). As a business and its operations grow, so do its liabilities, which need to be reassessed by the insurance company in order to reflect the associated risks. Any change or disruption in the operations or business activities of a company will inevitably impact their insurance coverages, hence also their premiums (SBA, 2023).

In order to help businesses navigate through the insurance world and select the right insurance coverages, businesses can utilize the specialized expertise and knowledge of insurance brokers to mitigate risks and increase protection. Insurance products and services are heavily abstract and complex, which makes it difficult for direct buyers to fully understand them. Brokers go beyond traditional insurance coverage and can assist with loss prevention, such as managing contract risks or providing risk reports for industries (Söderberrg & Partners, 2023). Brokers assist in resolving claims efficiently as well as leveraging their connections and relationships with insurance companies to secure the most comprehensive coverage to the best price (Clementson, 2022). They tailor insurance products and services to specific customer groups and create their own solutions, such as "portfolio programs" or "facilities", where customers can join forces and receive lower premiums as well as better terms compared to purchasing insurance directly from an insurance company. Insurance brokers are an essential part of the insurance industry as well as the insurance value chain as they act as consultants that advise on important decisions about a business. They continue to provide valuable ongoing services throughout the policy period, such as ensuring that insurance limits and policy coverages reflect the ever-changing market conditions (Söderberg & Partners, 2023; Clementson, 2022).

Without business insurance, it would be difficult for corporations to manage the financial repercussions of economic activity or reduce the effects of unpredictable events, such as the Covid-19 pandemic, making it harder for them to recover from these incidents (Zweifel & Eisen, 2012). The effect of the pandemic on general insurers differs based on the types of products, services and coverage they offer. Certain lines of business, such as travel, events, and trade credit insurance, have seen a decline in new premiums and may result in significant losses for the insurers. Regarding personal lines of insurance, the number of claims have decreased as a result of the pandemic (Deloitte, 2020). Overall, non-life insurers across most jurisdictions were able to see an increasing trend in their underwriting profits due to a decrease in loss ratios. However, there was some resistance due to an increase in claims for business continuity/ business interruption, where policyholders have coverage for revenue loss as a result of the slow economic activity caused by the pandemic (OECD, 2021). Insurers must carefully examine policy exclusions and be prepared to take a consumer-friendly, non-legalistic approach when evaluating claims, in line with government expectations. It is important that insurers use this unfortunate opportunity to show support for their individual and business customers. The pandemic has highlighted the importance of effective risk

management and the need for insurers to be prepared from global crises. The strategies that they implemented during the pandemic will have either negative or positive impact on the company's current and future reputation (Deloitte, 2020).

1.1 Problem Discussion

Being part of global value chains entails greater susceptibility to external risks as a result of the interconnectedness on an international level (Manuj & Mentzer, 2008). Since the Covid-19 pandemic is a very recent and unique event that is still ongoing, with significant global impact on both people and businesses, there is a lack of previous research on the effects of the pandemic on the global value chains of the commercial insurance industry, opening up a new and interesting research area within the realms of international business. In order to manage risks associated with global disruptions, it is important to implement appropriate risk management strategies that align with the overall goals of the company (Tchankova, 2002).

Furthermore, when assessing current literature on risk management and supply chains, we deduce that an effective supply chain risk management policy is essential for any company and their future survival, regardless of the industry they operate in. Nevertheless, current literature mainly focuses on the production and manufacturing industries and their global value chains and supply chains (Tchankova, 2002; Rejda & McNamara, 2013; Manuj & Mentzer, 2008; Kasap & Kaymak, 2007; Sodhi & Tang, 2012). Research on service supply chains for companies that create intangible products and services is still in its infancy (Ellram et al., 2014; Baltacioglu et al., 2007; Liu, 2007; de Waart & Kemper, 2004). Hence, highlighting a research gap that allows for the opportunity to investigate how insurance companies manage risks in connection to global disturbances. The insurance industry is vital for conducting international business. As companies expand internationally, the more complex the insurance needs become due to increased exposure in different countries. This expansion can become difficult to manage, leading to potential gaps in coverage and increased costs. The implementation of a global insurance program with multiple local policies entails the need for close cooperation along the insurance company's global value chain (Jensen, 2021). Hence, a robust and functioning insurance value chain is needed, especially during high-impact events.

Researching the insurance value chain of international insurance companies will allow us to gain a deeper understanding of the role of the insurance industry during an unforeseeable event, such as the pandemic. In addition to this, this research will demonstrate how the pandemic impacted global insurance carriers as well as insurance broker companies, how the organizations managed these unpredicted global changes and what strategies they have adopted to mitigate risks. Since the chosen firms have clients, partners and offices in numerous countries all over the world, they conduct international business on a daily basis. By studying the insurance industry, we will acquire insights of the initial impact of Covid-19 on the industry as well as the prolonged effects as we are entering the aftermath of the pandemic at the time of writing.

1.2 Research Question

The problem discussion above has identified a research gap within the realms of international business. Given that the appropriate insurance coverage can help a business reduce their financial burden and aid in risk management, it is unknown how the insurance company itself can internally manage risks and disruptions and ensure profitability simultaneously. Thus, in this thesis, we explore the following research question:

How can the insurance industry manage risks and global disruptions to the insurance value chain?

This question is analyzed through a qualitative study, where we conduct semi-structured interviews with 14 employees of mid- and senior management positions as well as specialist positions from seven insurance companies and two insurance broker companies. The major international insurance actors are heavily concentrated in Stockholm, Sweden (Banco de España, 2023). Therefore, the study focuses on organizations that have a branch established in this city. In order to develop our own theoretical contributions, we continuously move between theory and empirical findings, thus implementing an abductive approach. The interviews are structured in accordance with our theoretical framework and analyzed using a thematic analysis to compare and contrast our case findings.

1.3 Delimitations

Due to the limited scope of this research and the broad range of insurance products and companies, we focused our research on the non-life commercial side of insurance, i.e. business insurance, which includes insurance actors specializing in insuring international business. We believe that insurance companies and brokers that cater their services and

products to business clients have been impacted, both directly and indirectly, by the pandemic given that this event has directly disrupted their clients' business activities to various extents. We conduct multiple interviews with various international insurance carriers and insurance brokers that have a presence in Sweden to facilitate the establishment of contact and correspondence. This allowed for a thorough analysis of each interview, which captured the effects of the Covid-19 pandemic on the commercial insurance industry as well as how the case companies have managed this situation. Furthermore, we only considered the pandemic as a source of disruption since it is an unprecedented event with global effects, which have not been fully realized as of yet.

1.4 Structure of Thesis

The thesis will first introduce the theoretical framework that was used to develop our own integrated theoretical perspective, linking value chains and risk management practices. The methodology chapter will offer a thorough explanation of how the research was conducted to explore and answer the research question. It will also include our research method, data collection, data analysis, research quality including research limitations and ethical considerations. Thereafter, the empirical data from conducting semi-structured interviews with the nine case companies will be presented. The empirical findings are divided into five main sections: Value Chain, Effects of the Pandemic, Risk Management, Managing the Pandemic and Learnings. The analysis chapter of the empirical findings will provide a thorough analysis based on the theoretical framework introduced in Chapter 2. The chapter concludes with a revised version of the integrated theoretical model developed in Chapter 2.7. Subsequently, the final chapter describes the main findings and the answer to our research question where theoretical contributions and managerial implications are discussed as well as suggestions for future research areas.

2.0 Theoretical Framework

This section reviews the existing literature on services, service supply chains, global value chains, insurance value chains as well as risk management in order to form a basis for our theoretical framework. This chapter concludes with an integrated theoretical model that condenses the existing literature and incorporates the service value chain with risk management, which is heavily emphasized on the insurance industry.

2.1 Service Supply Chains

The expansion of the services sector and the increased outsourcing of services, combined with the impact of advanced technologies, have sparked significant interest in the Service Supply Chain (SSC) as a research area (Vilko & Ritala, 2014). In a supply chain in general, there must be a "product" that is created by the points of origin and delivered to the points of consumption. This "product" can either be a tangible physical product or a service-based product (Wang et al., 2015). Previous research fails to find consensus on whether insurance should be classified as a *product* or a *service*. We deduce that an insurance offering falls within the gray zone between the classification of a service or a product. A service is differentiated from a product in terms of various attributes; intangibility, heterogeneity, inseparability and perishability (IHIP) (Vilko & Ritala, 2014). The first distinguishable attribute, intangibility, entails that services are not physically present (Flipo, 1988). The degree of tangibility can vary within the service sector. Various service-delivery industries include tangible elements, such as hotels, while knowledge based-services are intangible in its entirety (Flipo, 1988; Ritala et al., 2013).

Heterogeneity refers to how service processes differ between firms in terms of employees, customers as well as customer demand (Edvardsson et al., 2005). There are no standard inputs to the service supply chain, making each service industry highly diverse from one another (Vilko & Ritala, 2014; Lovelock, 1983; Silvestro et al., 1992). The higher the number of participants in the supply chain, the higher the degree of uniqueness and heterogeneity (Vilko & Ritala, 2014). Inseparability means that the production and consumption of the service occurs simultaneously as services have dynamic and activity-based characteristics, which calls for the need for collaboration or co-creation between service provider and customer (Tether & Hipp, 2002; Edvardsson et al., 2005). The final attribute of services is their perishable nature, which means that services are bound by time and cannot be saved for

future use, like products can (Zeithaml et al., 1985; Onkvisit & Shaw, 1991; Grönroos, 2000). The figure below summarizes the above characteristics of services.



Figure 1 - Attributes of Services (own illustration)

From reading current literature about the insurance industry, we noted that researchers use both terms interchangeably given the intangible and abstract nature of this industry. Ganapathy (2021), for example, describes how the insurance industry delivers a *service* to its policyholders in order to mitigate the effects of unpredicted risks. However, Ganapathy (2021) also utilizes the term *insurance product* when referring to an insurance company's offerings. Similarly, Wang (2019) discusses how product design and innovation of *insurance products* are essential to the insurance value chain. We conclude that, on the whole, insurance offerings can be considered as both a product and service. The policyholder purchases a contract, an intangible product, which provides coverage for various risks for a fixed amount of time. On the other hand, an insurance company also provides service in the form of ongoing support with claims handling and mitigating risks. Hence, in this thesis, we will use the terms insurance product and insurance service interchangeably, which can also be regarded as a *service product*, meaning that the concept of service supply chain is applicable to this industry (Wang et al., 2015).

As the significance of the service industry increased, scholars began incorporating the impact of services into the conventional manufacturing supply chain, leading to the development of the SSC (Anderson & Morrice, 2000). Initially, SSC was viewed as complementary to the manufacturing supply chain and was not given much consideration on its own. Research on SSC gained popularity in 2004 when Lisa Ellram published a seminal paper on the subject,

which gave rise to the establishment of the importance and distinctiveness of the service supply chain (Ganapathy, 2021; Liu et al., 2019). Since then, scholars have gradually recognized the unique characteristics of service operations and the differences between service and manufacturing supply chains, giving rise to various definitions of the concept (Ellram et al., 2014; Baltacioglu et al., 2007; Liu, 2007; de Waart & Kemper, 2004).

Ellram et al. (2014) define SSC as the integrated management of service-related information, processes, capacity, performance, and funding from the initial suppliers to the final customers. Similarly, Baltacioglu et al. (2007) and Ganapathy (2021) view the service supply chain as a network of suppliers, service providers, customers, and supporting units that facilitate the transaction of resources necessary for producing services, the transformation of these resources into core and supporting services, and the delivery of these services to customers. Furthermore, Liu (2007) differentiated between service and manufacturing supply chains based on four key dimensions: supply chain structure, product form, stability, and supply chain coordination. The author found that service supply chains have different structures, with a greater emphasis on customer interactions and a more decentralized structure. De Waart & Kemper (2004) view the SSC as the processes and activities involved in planning, transporting, and repairing materials for the purpose of providing after-sales support for a company's products.

Wang et al. (2015), on the other hand, proposed a framework for classifying service supply chains into two categories: the service-only supply chain (SOSC) and product-service supply chain (PSSC). In SOSC, the service is the sole product, such as body/health checks in healthcare and financial advisory, while in PSSC, the product is a combination of a physical product and intangible service, such as a car rental service, which includes both the rental vehicle and the accompanying customer service. This distinction between SOSC and PSSC provides a useful framework for understanding the different types of service supply chains and the unique challenges faced by each (Wang et al., 2015). Few studies on SOSC take into account the unique features of the service industry, including intangibility, simultaneity, heterogeneity, perishability, and customer-intensive labor. These attributes make it hard to visualize and quantify service and create added difficulties in managing the service supply chain (Baltacioglu et al., 2007).

Wang et al. (2015) further describe how service supply chains tend to be shorter vertically in the sense that they have fewer levels of intermediaries between the service provider and the final customer. However, the service supply chain is typically wider horizontally involving a large number of parties, meaning that they can include a wide range of service providers, suppliers, and other stakeholders who are involved in the delivery of the service. This can make service supply chains complex and challenging to manage, as it calls for close coordination and collaboration among multiple actors. It is important for service supply chain managers to understand the structure of their supply chains and to develop strategies for effectively managing relationships with all stakeholders involved both horizontally and vertically (Wang et al., 2015).

2.2 Global Value Chains

The contemporary business environment is becoming increasingly more globalized where industrial organization as well as international trade have changed drastically. Transnational companies are vertically disintegrating more frequently while emphasizing the most value-adding activities in order to strengthen the organization's core competencies. This prominent shift, in addition to globalization, has subsequently resulted in the formation of new networks and governance structures, including the emergence of Global Value Chains (Gereffi et al., 2005). Global Value Chains (GVCs) depicts how an organization creates value through various activities (Dicken, 2015). The separate physical locations of the activities, or the 'fragmentation', enables organizations to produce and engage in cross-border networks involving other firms as well (Arndt & Kierzkowski, 2001).

The concept of value chains was established in the 1980s, where Porter (1985) describes it as a tool for distinguishing a company's competitive advantage. The value chain separates the various business activities that a company is performing, which includes producing, distributing as well as marketing the product. The competitive scope of a company's activities significantly impacts the value chain of a firm which in turn affects their competitive advantage. A company's competitive advantage can be created through the adopted strategy where a wide scope enables companies to exploit and benefit from various interrelationships in the value chain, even if they operate in other geographical areas, industries and segments. Utilizing the various relationships with other stakeholders allows companies to outsource activities instead of performing them internally which can increase efficiency as well as lower costs. Additionally, it is significant to understand the consumer's value chain since their inputs contribute with valuable information that can further improve a firm's value chain.

Thus, the value chain enables companies to enhance their competitive advantage by recognizing the value-adding activities and the linkages between them (Porter, 1985).

The creation of value depends on two factors, who the customer is and what the customer values. Value creation differs if the exchange occurs between Business to Business (B2B) or Business to Consumer (B2C). The transactions in B2B generate three types of value where technical value is the provided resource and organizational value represents the context where value can arise from various factors, including brand image and reputation. The aforementioned value forms are both associated with the organizations that are engaging in the exchange whereas personal value emerges through the personal interactions in the transaction and depends on the individual (Feller et al., 2006). The generation of value in B2C differs and consists of three layers, or rings, where the ring in the center depicts the product value and the second one represents services that provide the consumer with additional benefits and assurance to the products. Additionally, the third layer is referred to as "Wow" value where enhanced services are offered to the consumers which leads to added value. Instead of solely satisfying the consumers needs, it enables firms to contribute to making their consumers successful (Clemmer, 1990; Feller et al., 2006).

Value chains and supply chains are constructed similarly where both include large networks of organizations that are connected and interact to produce goods and services. The key difference between value chains and supply chains is the flow of value. In supply chains, value flows downstream from the suppliers to the end consumers whereas value is considered to flow in an opposite manner in value chains, from the consumer to the supplier. Thus, the fundamental focal point is shifted from improving upstream activities that integrate producer and supplier procedures in a supply chain to downstream activities that create value for the consumers in a value chain. Furthermore, consumers are also considered a source of value since highly knowledgeable consumers can significantly contribute with valuable information that can be essential when developing new products as well as improving existing products (Feller et al., 2006).

The complexity of supply and value chains entail risks where the chains are vulnerable to disruptions that can impact various fragments. Due to the intricate structure of the chains and the interdependence of business activities and stakeholders, any disruption can have a significant impact on the chains, even though the disruption is relatively small and the affected fragment may not be a key segment. In other words, regardless of the magnitude of a

disruption, it creates a ripple effect that can lead to substantial consequences throughout an organization even numerous years after the initial disruption (Hendricks & Singhal, 2003; Ivanov et al., 2014). This makes risk management a crucial element for companies since risks are practically impossible to completely avoid. Some organizations prefer to implement a proactive approach with various mitigation strategies at hand while other organizations favor a more reactive approach. There are many different chain disruptions that can arise on a daily basis where some are easier for companies to manage by having proactive strategies. Other disruptions, such as natural disasters or a pandemic in this case, are much more difficult for companies to predict and control which can result in the need for a reactive approach (Lodree Jr & Taskin, 2008).

An additional form of disruption emerges due to technological advancements. The adoption of newly developed digital technologies disrupts companies' business models, processes and structures while also affecting innovation and adaptation since the current ones being used are replaced (Clarke, 2019; Horlacher & Hess, 2016). This in turn alters the creation of value and allows organizations to be creative and innovative by finding additional ways to add value since different capabilities are required for new technologies (Bolton et al., 2019; Fitzgerald et al., 2014; Haffke et al., 2016). Companies respond to disruptions in different manners where some may adopt more drastic changes to the organization and their identity meanwhile other firms implement smaller alterations to their operations. Furthermore, digital disruptions also affect how organizations operate where digitalization has become increasingly prevalent in many industries. Actors' roles can significantly change as networks and relationships can either improve or deteriorate due to digital developments. The disruptions also result in opportunities and challenges where establishing a Chief Digital Officer is becoming more common among firms in order to manage the disruptions (Haffke et al., 2016; Naimi-Sadigh, 2022).

2.3 Insurance Value Chains

The Insurance Value Chain differs slightly as there are no physical goods moving through the value chain, however, there still exists similar value adding activities. According to Wang (2019), it refers to the series of activities that are part of the operations of an insurance company, which includes product design, product development and after-sales activities. The insurance value chain includes numerous key actors that facilitate the movement of product, information and value. These include the insurer, insurance intermediaries and the insured.

Product design as well as research and development are at the beginning of the value chain. The marketing function is the core of the value chain and it entails close and effective cooperation between the insurance company and insurance intermediaries, such as brokers. Each step, connected by the flow of information and the product itself, contributes to the overall value of the insurance product or service (Wang, 2019).

Large consulting firms, such as McKinsey, Deloitte and Accenture, share a similar view on how the insurance value chain is structured, which can be viewed as a more detailed extension of Wang's (2019) traditional insurance value chain described above (Lorenz et al., 2020; Deloitte, 2023; Accenture Insurance, 2018). This extended value chain adds functional elements of the insurance company, including the underwriting, policy administration and claims functions. Given the limited research on the insurance value chain concerning non-life commercial insurance, we have developed a combined insurance value chain that merges the findings in Wang (2019) with the insurance value chains illustrated by Accenture Insurance (2018), Deloitte (2023) and Lorenz et al. (2020). Figure 2 demonstrates our understanding of the insurance value chain in terms of the flow of product and input between the different functions of the insurance industry.

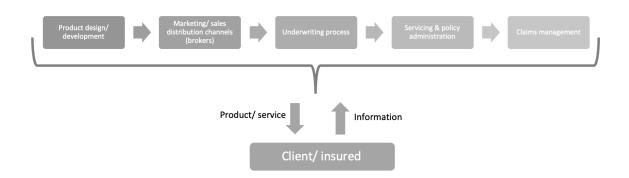


Figure 2 - Insurance Value Chain (own illustration, based on Wang (2019), Accenture Insurance (2018), Deloitte (2023) and Lorenz et al. (2020))

The key value-adding activities in the insurance value chain are presented on the top, which combined, create a unique product offering or service for the insured. The front end of the value chain involves the design and development of the insurance product, which is then marketed to the client through distribution channels, such as insurance brokers. The underwriting process involves evaluating the risk associated with the insured to accurately calculate the premium level. Similar to Wang's (2019) insurance value chain, each link is connected by the flow of value, information and the product, where the client (individual or

group) is the final receiver of the product. The insured provides value to each link of the value chain in the form of information which can in turn improve each stage of the value chain. For instance, information from the insured or potential clients regarding new business operations can lead to more innovative development of insurance products and solutions that can cover the client's new business ventures. Hence, the client and their input play a pivotal role in the improvement and effectivization of the entire insurance value chain, which is in accordance with the findings by Porter (1985).

Previous research has lightly touched upon the effects of the pandemic on insurance value chains, in which there was a strong focus on digitalization and innovation. According to Lafranchi & Grassi (2022), insurance companies in general responded to the pandemic by seizing the opportunity to increase innovation. Through re-evaluating their value chains and understanding their customers' needs, insurance companies developed new products and procedures. The pandemic highlighted that insurance companies have the potential and capability to innovate by using technology selectively to address new and existing risks across the entire insurance value chain. For instance, key primary activities such as product development, sales, and claims management demonstrate that utilizing new technology is vital for the business' success, increasing their competitive advantage. This ultimately creates a conducive environment for established players to collaborate with more innovative players (Lafranchi & Grassi, 2022). This observation was also shared in the Global Insurance Market Trends report by OECD (2021), in which the pandemic has fostered the digitalization of various services, which has allowed insurers to mitigate the negative impact of minimized in-person interactions. In numerous jurisdictions, the use of more digitized processes has increased the frequency and efficiency of communicating to existing and potential customers. However, remote working and the use of digital platforms has made insurance companies, partners and clients more vulnerable to cyber-attacks (OECD, 2021).

2.4 Defining Insurance Risks

Risk has been frequently used throughout this thesis, however, the term has not been properly defined. It is important to understand the characteristics of the term in order to fully comprehend the concept of risk management. Sodhi & Tang (2012) assert that the establishment of a shared language of risk is crucial for effective supply chain risk management. There does not exist one single definition of risk due to the ambiguous nature, however, the term has been frequently defined in terms of uncertainty (Rejda & McNamara,

2013). Rejda & McNamara (2013) defines risk as "the uncertainty concerning the occurrence of a loss" (Rejda & McNamara, 2013, p. 2). This is in accordance with Waters (2007), who highlights how risks are derived from uncertainties about the future. Similarly, according to Knight (1921), uncertainty should be seen as the root cause of risk, and the two terms should not be equated to one another. Waters (2007) further defines risk in the supply chain as a potential danger that could disturb the regular operations and prevent things from proceeding as intended. Given the ambiguity of the term risk, some risk managers prefer to use *loss exposure* instead, which is "any situation or circumstance in which a loss is possible, regardless of whether a loss actually occurs" (Rejda & McNamara, 2013, p. 44).

According to Oldfield & Santomero (1997) managers of financial institutions can categorize the risks the organization is facing into three main types; risks that can be eliminated or mitigated through simple business practices, risks that can be transferred to others, and risks that can be managed at the firm level. Santomero & Babbel (1997) further divides risk that an insurer faces into six categories; *systematic, actuarial, liquidity, credit, operational* and *legal*. *Systematic* risks are nondiversifiable and refer to changes to the macro-economic environment, which includes factors such as inflation, interest rates and exchange rates, affecting all companies in the economy. Within the realms of the insurance industry, systematic risks affect the investment performance. In order to mitigate the negative effects associated with systematic risks, insurers can attempt to forecast the macro-economic environment including the impact of the risk factors. Hence, insurance companies can develop and implement strategies that can hedge against unforeseeable macro-economic events to a certain extent (Santomero & Babbel, 1997; Oscar Akotey & Abar, 2013).

Further, *actuarial* risks refer to the risk that the firm is not receiving or paying the correct price. For instance, there is a risk that the insurer has received an inadequate amount for the risks they have agreed to cover. Actuarial risks affect the long-run profitability as they have a direct impact on the underwriting functions and overpricing of their liabilities. *Liquidity* risks concern funding crises due to an unexpected large amount of claims, loss of confidence, write-down of assets or a legal crisis. These factors result in an insurer's liabilities being more liquid. In addition, mismanagement of liquidity risks can lead to solvency issues, making a solvent insurer insolvent. *Operational* and *legal* risks include mishandling of policy documents, claims procedures, system issues as well as non-compliance of regulations. Lastly, *credit* risks refer to the probability that a borrower is unable to pay its debt on time or default on the payment all together (Santomero & Babbel, 1997; Sinkey, 2002; Oscar Akotey

& Abar, 2013). There are two issues with credit risk that insurers need to concern. Firstly, there is a possibility of reinsurers defaulting due to a sudden surge in claims as a result of natural catastrophic events. Secondly, borrowers may default on payments due to solvency issues or an unfortunate macro-economic environment (Santomero & Babbel, 1997; Oscar Akotey & Abar, 2013).

2.5 The Risk Management Process

Research on the risk management process has gained increasing popularity within corporate practice and literature (Abor, 2005). Risk management can be defined as "a process that identifies loss exposures faced by an organization and selects the most appropriate techniques for treating such exposures" (Rejda & McNamara, 2013, p.44). Further, Schmit & Roth (1990) describe risk management as the process of performing activities in order to minimize the negative impact (cost) of uncertainty (risk) in terms of potential losses. According to Odonkor et al. (2011), adverse impacts on the organization, such as financial distress, resulting from risk and uncertainty can prompt senior management to prioritize the implementation of an effective risk management process. However, according to Gupta (2011) risks should no longer be viewed as threats to the organization, but rather as potential opportunities for expansion and value maximization. Risk management practices intend to aid in other management activities as well as in the achievement of an organization's objectives (Tchankova, 2002).

Rejda & McNamara (2013) has identified two main objectives for risk management practices; *pre-loss* and *post-loss*. The former objective involves identifying and preparing for potential losses in a way that is deemed most economical, which includes analyzing the different costs. Further, this objective entails reducing anxiety and fear for risk managers and other senior executives. Ensuring that legal obligations and regulations are met are also part of the pre-loss objective. The post-loss objective entails ensuring survival of the organization, continued operations, financial stability, continued growth as well as social responsibility. Some firms view the firm survival and the ability to continue operation after a major loss has occurred as the most important objective. It is also important for risk managers to address the social responsibility they have on external parties in the sense that the effects on employees, customers, suppliers and society in general are minimized to the extent possible (Rejda & McNamara, 2013). Fatemi & Glaum (2000) share a similar view on the objectives of risk management. The authors also identified survival of the firm to be one of the core objectives,

however, they placed greater emphasis on the financial aspects of the firm, which includes minimizing foreign exchange losses, reducing cash flow and earnings volatility as well as ensuring profitability.

Moreover, according to Rejda & McNamara (2013), there are four main steps in the risk management process; *identify loss exposures, measure and analyze the loss exposures, select loss exposure techniques*, and *implement and monitor the risk management strategy*. Other researchers have identified similar steps to an effective risk management process although using different terminology (Manuj & Mentzer, 2008; Kasap & Kaymak, 2007; Sodhi & Tang, 2012). For instance, Sodhi & Tang (2012) created a framework for the process of supply chain risk management for physical goods, in which four steps were identified: *identifying risks, assessing the risks, mitigating risks* and *developing a response strategy*. The first three steps are preventative activities that take place prior to the disruption or event, and the last step is applicable to during or after the event (Sodhi & Tang, 2012).

The first step is to identify all risks or loss exposure a firm is subject to, including both major and minor loss exposures such as business income, human resources and foreign loss exposures. In order to identify loss exposures, a risk manager can utilize several sources of information, including questionnaires, physical inspection and financial data. A risk manager needs to have a good understanding of industry trends and market changes that can lead to new loss exposures and concerns for the firm (Rejda & McNamara, 2013; Sodhi & Tang, 2012; Manuj & Mentzer, 2008). Further, in terms of supply chain risk management, Sodhi & Tang (2012) have categorized the type of risk into *Delays* and *Disruptions*. Delays in material flows can arise from various factors, including shifts in transportation modes, lengthy handling procedures or the supplier's inability to adapt to changes in demand due to excessive utilization or inflexibility (Sodhi & Tang, 2012). However, delays of physical products are not applicable given that this thesis is focused on the insurance industry. Disruptions include natural disasters, labor strikes, terrorism and fires, which all call for the need for different approaches depending on the circumstances. Sodhi & Tang (2012) further distinguish between supply, process, demand and corporate-level risks in order to understand what department should be responsible for preventing the particular risk. However, the risks that are most prominent in the insurance industry have been outlined in chapter 2.5 above, which are similar to the risks highlighted in Sodhi & Tang (2012) and Rejda & McNamara (2013) but more specific to the insurance operations.

The second step in the process involves assessing, quantifying and analyzing the loss exposures (Rejda & McNamara, 2013; Sodhi & Tang, 2012). Risk assessment is a vital step in the risk management process as the outcome can impact the final decision regarding prioritization and resource allocation (Sodhi & Tang, 2012). A risk manager needs to estimate the loss frequency and loss severity of the risks in order to rank them according to their relative importance and hence applying appropriate techniques (Rejda & McNamara, 2013; Kasap & Kaymak, 2007). Sodhi & Tang (2012) suggest that in order to assess and prioritize risks, companies should consider the probability of the risk of occurring as well as the possible impact. Historical data can also be used to understand and analyze the behavior of risk probability distributions, however, may be unavailable, insufficient or unreliable (Manuj & Mentzer, 2008). Sodhi & Tang (2012) distinguishes between normal and abnormal risks, where the former, such as fluctuations in material costs and exchange rates, are excluded from supply chain risk assessment practices. These types of risks are managed on a continuous basis as part of the supply chain management rather than supply chain risk management. Abnormal risks, such as natural disasters and sudden system failures, are hard to assess due to the lack of historical data. It is difficult to predict and assess a risk that has not happened in the past but may happen in the future, hence, these types of risks need to fall under the domain of supply chain risk management (Sodhi & Tang, 2012).

The third step of the risk management process entails selecting and applying the appropriate technique or combination of techniques, which can be broken down into two main techniques; *risk control* and *risk financing*. The former technique is an umbrella term for reducing the frequency or severity of the loss, whereas the latter technique involves facilitating the funding of these losses. This includes retention, non-insurance transfers and finding appropriate commercial insurance for the business operations (Rejda & McNamara, 2013). Further, Kasap & Kaymak, 2007 and Sodhi & Tang (2012) have identified similar approaches to risk; accepting, avoiding or mitigating the risk. Accepting the risk, similar to risk financing, entails that the firm takes full responsibility for the consequences in case the risk takes place, or transferring some of the consequences to an insurance company (Kasap & Kaymak, 2007; Sodhi & Tang, 2012). This approach, however, does not mitigate the impact of the risk to a large extent. In addition, it can give rise to moral hazard, where the firm is more prone to risk-taking activities as it can transfer some of the risk and financial consequences to the insurance company. Avoiding risks entails taking steps to prevent undesirable incidents from occurring, which includes creating fail-safe systems and

implementing quality-based principles to ensure a timely detection of risks that can have devastating effects. Risk mitigation involves taking steps to minimize the consequences of a risk incident as well as reducing the probability (Sodhi & Tang, 2012; Kasap & Kaymak, 2007).

The final step of Rejda & McNamara's (2013) risk management process involves the implementation and monitoring of the selected risk management technique, which begins with creating a risk management policy statement outlining the firm's risk management objectives. This policy serves to educate senior executives on the risk management processes, clarify the role and responsibility of the risk manager and performance standards. A risk manual can also be implemented as a tool for new employees, supervisors and training managers. It includes general information regarding who to contact when a loss occurs including emergency contact numbers as well as insurance and broker information. In order to ensure effective risk management practices including the achievement of objectives, the risk management policy and program must be reviewed on a continuous basis (Rejda & McNamara, 2013). However, the last step of Sodhi & Tang's (2012) risk management process involves creating a response strategy, which takes place during and after the disruption. Hence, we consider these two stages to be separate steps in the risk management process outlined below, where the former occurs prior to the disruption and the latter during and/or after the disruption.

With rare events or disruptions, such as the Covid-19 Pandemic, firms may be reluctant to invest in good preventative measures given the uncertainty regarding the future business environment. However, it is important that firms become more inclined to develop strategies to respond to risk incidents more efficiently through a quick response approach as described by Sodhi & Tang (2012). The authors have developed a "3-D Framework", which includes the steps *detect, design* and *deploy,* to ensure effective responsiveness to the disaster. The detection phase can be reduced through implementing mechanisms to rapidly detect or predict a disruption or risk incident before it occurs. It is also important that companies develop effective ways to share this information across the supply chain. The design time can be shortened if the firm and its partners can create a contingent recovery plan that includes strategies for various types of disruptions in advance. Reducing the deployment time can be achieved through enhancing communication and coordination along the supply chain (Sodhi & Tang, 2013). The diagram below summarizes the main steps of the risk management process as primarily described by Sodhi & Tang (2013) and Rejda & McNamara (2013).

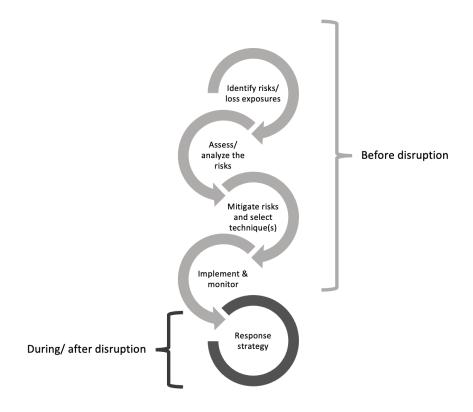


Figure 3 - Risk Management Process (own illustration, based on Sodhi & Tang (2012) and Rejda & McNamara (2013))

2.5.1 Service Supply Chain Risk Management

Although supply chain management primarily concerns the input part of the value chain, it still acts a supportive role throughout the entire value chain (Scannel et al., 2013). Risk management is vital for the functioning of supply chains, however, risk management within the service supply chain is relatively unexplored, which gives rise to a new research area (Wang et al., 2015; Vilko & Ritala, 2014). Vilko & Ritala (2014) define service supply chain risk management as the "identification, analysis, and mitigation of risks in the service supply chain, involving the whole service supply chain system" (p. 115). Given that services possess certain attributes (IHIP) as discussed in chapter 2.1, service supply chain risk management entails a more proactive and intuitive approach in order to identify, analyze and control risks as compared to traditional (product) supply chain risk management. As there are no standard inputs and outputs in the service supply chain due to the high level of heterogeneity, there is a significant variation in quality, risks and management processes. Hence, the risk management process needs to be flexible in the sense of identifying and analyzing the heterogeneity, customer uniqueness, and the potential uncertainty of how customer value is generated (Vilko & Ritala, 2014).

Additionally, the perishability attribute remains a significant issue in terms of risk management. Both the information and the services themselves are perishable. Knowledge is constantly evolving and highly dependent on the context and actors, which present challenges in managing and reducing risks in the service supply chain (Onkvisit & Shaw, 1991; Vilko & Ritala, 2014). Services require a flexible and real-time approach to risk management, rather than only a pre-planned standardized one, which is the case for traditional (product) supply chains (Vilko & Ritala, 2014). This is because the execution of the service offering occurs at the same time as the management of potential risks. According to de Waart & Kemper (2004), it is crucial to have a full understanding of the impact of the core processes on the overall performance of the service supply chain. Without a thorough understanding of the processes, assessing potential risks becomes nearly impossible. Nevertheless, most studies are concentrated on the service-oriented manufacturing supply chain, which does not fully consider the nature of the services (Vilko & Ritala, 2014). To solve this, Vilko & Ritala (2014) have created a framework for service supply chain risk management practices based on the IHIP attributes of services:

Service Attribute	Risk Management Approach
Intangibility	intuitive, knowledge-based
Heterogeneity	unique, customer-specific
Inseparability	simultaneous, real-time execution of risk management activities (risk identification, analysis and control)
Perishability	flexible, rather than standardized

Table 1 - Service supply risk management approaches based on the IHIP attributes (Vilko & Ritala, 2014, p.117-118)

Research on risk management within the insurance sector is fairly limited and dated, nevertheless, Oldfield & Santamero (1997) argue that financial institutions need to adopt an effective risk management strategy that is integrated, comprehensive as well as monitored on a regular basis, which contribute to an organization's long term-success and stability. Hull (2007) further highlights that risk management for insurers entails a clear understanding of the portfolio of risk that an insurer is currently facing and the range of risks it is willing to take in the future. Moreover, Sinkey (2002) identifies that the risk management process in the financial service sector can be decomposed into five steps; identify, measure, price, monitor and control, which are similar to the steps identified in *Chapter 2.5*.

2.5.2 Enterprise Risk Management

Enterprise Risk Management (ERM) has recently gained significant importance across multiple industries on a global scale (Oscar Akotey & Abar, 2013; Rejda & McNamara, 2013). The term ERM has various definitions, but most emphasize the holistic approach to identifying, assessing and managing risks across an organization and its value chain (COSO, 2004). The Committee of Sponsoring Organizations and the World Business Council for Sustainable Development (COSO & WBCSD, 2018, p.5) define ERM as "the culture, capabilities and practices, integrated with strategy-setting and performance, that organizations rely on to manage risk in creating, preserving and realizing value". Waters (2007) further describes ERM as the focus of senior managers on ensuring survival and viability of their firms in the event of a severe disruption. The COSO ERM Framework provides a common language that can be spread throughout the organization and adapted to suit various industries and sizes to effectively manage risks. The framework consists of five main components needed to effectively identify, assess and manage risks: Governance & Culture, Strategy & Objective-Setting, Performance, Review & Revision and Information, Communication & Reporting (COSO & WBCSD, 2018).

Not only does ERM primarily focus on improving a company's ability to respond to risk and preserving value, but also to create value and exploit opportunities (Wang & Faber, 2006). Scannell et al. (2013) highlighted the importance of identifying and evaluating risks in order to develop risk mitigation strategies. Risk management is the responsibility of senior management, however, ERM needs to be integrated at all levels and within the firm's culture, strategy and processes. The authors found that the complexity and size of global supply chains call for the need for effective collaboration among supply chain partners to ensure that a culture of risk management is built throughout the organization as well as the entire supply chain (Scannell et al., 2013). Moreover, ERM combines all major risks that a firm is subject to into a single treatment action program, allowing the firm to offset one risk against another. This in turn reduces the overall risk given that the risks are not perfectly correlated (Rejda & McNamara, 2013). ERM can also be viewed as a value-added tool that allows insurers to develop their competitive advantage through creating innovative and unique services. Lam (2003), for instance, highlights how ERM increases effectiveness within the organization and business performance as well as improving the quality of risk reporting.

Further, an insurance company's competitive advantage can be developed by focusing on taking on the more acceptable risks rather than avoiding the unacceptable ones (Cater et al., 2009). Various rating agencies, such as Standard & Poor's (S&P), utilize ERM as a significant factor in evaluating the level of risk associated with the companies, especially those in the financial sector, such as insurance companies. According to Standard & Poor's (2007), an insurance company is deemed excellent in ERM when they possess "extremely strong capabilities to consistently identify, measure and manage risk exposures and losses within the company's predetermined tolerance guidelines". Further, evaluating an insurer's ERM provides an indication of an insurer's potential risk profile and how this may be affected by changes in risk drivers. It also allows for an evaluation on whether the insurer employs risk management practices in a systematic and consistent manner across the entire organization. In addition, ERM evaluates whether the insurer is achieving its business goals and objectives through ensuring that its risk management practices are within the limits of its risk appetite (S&P Global, 2023).

2.6 Integrated Theoretical Perspective

Given that risk management within the service industry is still in its infancy, we have constructed our own integrated theoretical model based on the above existing theoretical contributions, which combines disruptions to the value chain with the concepts of risk management. In order to address the research question of this thesis, 'How can the insurance industry manage risks and global disruptions to the insurance value chain?' Figure 4 integrates different streams of literature, demonstrating how risk management practices can be implemented to manage disruptions. However, current literature fails to address the connection between risk management and value chain disruptions in the service industry, specifically the insurance industry. Therefore, we want to extend the term <u>supply</u> chain risk management to <u>value</u> chain risk management in order to incorporate the effects on the value chain activities associated with a service or intangible product. This latter term can be modified and applied to the insurance industry, hence, we have developed the term insurance value chain risk and disruption management.

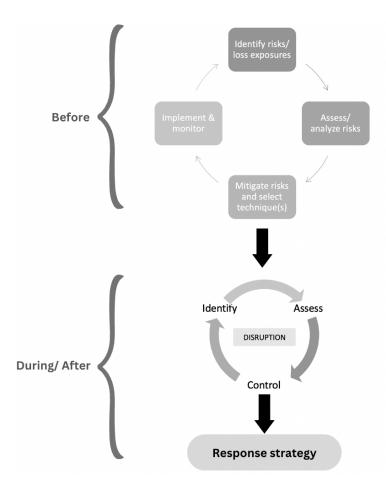


Figure 4 - Insurance Value Chain Risk and Disruption Management Process (own illustration, based on Chapter 2)

The value chain risk management process, based on the frameworks of Sodhi & Tang (2012) and Rejda & McNamara (2013), begins with identifying the particular risks that an insurer may be facing, which are outlined by Santomero & Babbel (1997). Further, this step entails developing a clear understanding of the portfolio of risk that an insurer is currently facing and the range of risks it is willing to take in the future (Hull, 2007). After identification, these risks need to be assessed and analyzed in order to allocate resources and select the appropriate techniques to manage these risks. With services and intangible products, it is essential that a proactive and intuitive approach is adopted when identifying and analyzing risks. Additionally, given that risks related to services are not easily quantifiable and assessable, it is essential to ensure that risk-related knowledge is shared with different stakeholders (Vilko & Ritala, 2014). Given that the service supply chain is wide horizontally with many stakeholders, it is important to ensure close coordination among the stakeholders in the event a disruption occurs (Wang et al., 2015). Hence, the fourth step in the risk management process below is to implement and monitor the selected techniques as well as

ensuring that the risk management objectives are communicated throughout the firm (Rejda & McNamara, 2013).

These first four steps are an iterative process that should not be viewed as a chain of activities but rather as a cyclical process involving multiple stakeholders in order to achieve the pre-loss objectives as introduced by Rejda & McNamara (2013). Additionally, as specified in the COSO ERM framework, it is essential that a common language regarding the risk management procedures is developed and spread throughout the organization, ensuring survival and viability of the firm if a disruption or crisis were to occur. Thus, the pre-disruption steps are heavily focused on developing and embedding the risk management objectives and procedures within the firm's culture, strategy and processes (COSO & WBCSD, 2018). Furthermore, according to Vilko & Ritala (2014), the inseparable and perishable nature of services entails that a flexible and real-time execution of risk management activities is needed to effectively manage risks, which includes the steps of identifying, assessing and controlling risks. Thus, these steps are also executed during the disruption phase to ensure that the risk management process is adapted to the specific disruption.

According to Sodhi & Tang (2012), it is essential that firms become more inclined to develop strategies to respond to unforeseen disasters more efficiently through a quick response approach. However, a weakness with the model above is that it fails to address how the insurance industry should develop a response in order to manage such disasters and achieve the post-loss objectives given that the insurance value chain differs from a typical (manufacturing) value chain. Therefore, the following sections of this thesis will analyze how the multinational insurance actors have responded to and managed the Covid-19 Pandemic in the hope of extending this integrated theoretical model to include feasible strategies for the industry that can be applied to manage future risks and disruptions.

3.0 Methodology

This chapter provides a comprehensive overview of the approach taken to conduct this study. The research method adopted to answer our research question is first presented, which includes the research nature of our study. This is then followed by the data collection method, which describes the selection of cases, our interview design and how the empirical data will be analyzed. The chapter concludes with information about the research quality and ethical considerations.

3.1 Research Method

The purpose of this research is to obtain an enhanced understanding of how the industry is managing risks and disruptions to the value chain, which in turn will enable us to develop a framework that will lead to both managerial and theoretical implications. Due to the lack of existing research on the studied subject, the research is classified as exploratory. A quantitative approach can be used to increase generalizability and the ability to replicate. However, such an approach would compromise the flexibility and in-depth knowledge of a response (Bell et al., 2019; Yin, 1994). A qualitative approach was adopted and considered the most appropriate since it allows us to acquire a deeper understanding of the research topic. Additionally, the epistemological position is that social reality is understood by exploring individuals' interpretations of the world. The ontological position suggests that society is subjective and constructed by the interactions that occur between individuals. This means that society is naturally constructed where people are actively creating the social world through their behaviors and interactions (Bell et al., 2019). By conducting a qualitative study, it allowed us to gain a deeper understanding of the viewpoints of the main actors present in the insurance industry. Furthermore, a qualitative approach is used to gain insights on a specific topic by conducting interviews with key informants regarding their personal experience and expertise (Hammarberg et al., 2016).

According to Dubois & Gadde (2002), an abductive approach has the potential to yield more than an inductive approach, which is due to the ability to capture and utilize both the systematic character of the empirical world and that of the theoretical models. Using abductive reasoning, potential explanations can be developed and possible hypotheses can be formed by iteratively using empirical data and theory (Bell et al., 2019). We, as researchers, were able to continuously move between established theory and our own empirical findings

in order to expand and validate the theory. By using an abductive approach, we could circumvent the limitations associated with the inductive and deductive approach where using only empirical data may not be sufficient to develop a theory and strictly theory-testing may be invalid if an initial premise is incorrect. Our theoretical chapter culminated in the creation of an integrated theoretical model that synthesized prior research on service supply chains, insurance value chains, and service supply chain risk management. The theoretical framework developed in Chapter 2 was used as a basis for our interview guide. Throughout the data collection and analysis phases, we consistently referred back to our theoretical framework and integrated theoretical model, extending, modifying and verifying our model. This resulted in a final version of our integrated theoretical model that merges established theory and our empirical findings, as illustrated in Figure 4. The following figure demonstrates our research process, where we constantly revisited our theoretical framework in order to ensure that the research is grounded in existing knowledge and theories as well as compare and contrast our findings and theory. This allowed us as researchers to reflect upon the already established theory and identify areas where theory can be extended and developed with our own empirical findings.

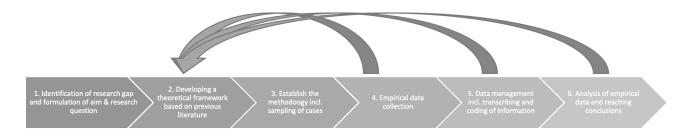


Figure 5 - Research Process (own illustration)

3.2 Data Collection

The empirical data that was collected and analyzed for this study consisted solely of primary data and was acquired from various participants with different expertise and experiences. The purpose of this research is to obtain an in-depth understanding of the studied phenomena and not to make generalizations. Therefore, a multiple-case study design was implemented since it enables the acquisition of rich empirical insights of managing risks and disruptions due to the Covid-19 pandemic. This approach has allowed us to compare and contrast the results from each participant, which ultimately lead us to find common patterns across the sample and unique features of each case (Bell et al., 2019). The empirical qualitative data was

derived from semi-structured interviews with 14 employees of mid- and senior management positions as well as specialist positions from nine insurance companies and insurance brokers. This allowed us to gain a broader and more extensive understanding of the insurance industry. Insurance brokers are vital to the insurance value chain given that they often are the sole distributor of insurance products to business clients. They have developed strong and valuable relationships with the clients, which the insurance companies can benefit from. Moreover, brokers have immense knowledge and insights due to their daily contact with clients. The input from both clients and brokers is subsequently communicated to the insurance companies, which in turn contributes to product development and improvements.

Since the international actors in the insurance industry are heavily concentrated in Stockholm, Sweden, the study focused on organizations that have a branch established in this particular city (Banco de España, 2023). We contacted a total of ten insurance companies and four brokers that we found suitable for our study, however, three insurance companies and two brokers declined to participate. The case companies were chosen due to their large size and international presence in terms of established subsidiaries or global partners. The companies were found to be suitable to our research since they all are specialized within commercial insurance products, specifically offering global insurance packages to their multinational clients, and consequently participating in a global insurance value chain. To offer a comprehensive depiction of the insurance industry, we have incorporated both major global corporations and smaller companies that complement each other well in terms of organizational structure, client base and the degree of internationalization.

Although our study could have been conducted with other insurance actors, we believe that the outcome would remain fundamentally unchanged. The insurance industry is exceedingly connected where all the actors are heavily dependent on each other. Hence, the impact of the pandemic and the risk management strategies implemented would have been largely similar. Furthermore, interviewing respondents from other geographical parts of the world could have yielded different responses to an extent, as the experience of the pandemic likely differed depending on the laws and regulations implemented by their respective governments. Nevertheless, we believe that we still would have arrived at the same core conclusions. Considering the interconnectedness of the insurance value chain, the gathered data from the interviews contributed to relevant and valuable information on effectively managing global disruptions to the value chain.

We made use of a non-random purposive sampling technique in order to ensure the inclusion of specific categories of cases in the final sample of our study (Robinson, 2014). We identified the majority of our respondents through LinkedIn, while a few were sourced from our personal networks. We considered candidates that had the words *manager*, *risk*, *president*, *head* and *senior* in their professional titles. One main criterion for selecting candidates was that they needed to have a good understanding of the insurance industry on an international level. Although a majority of the respondents were Swedish, they all have extensive experience in the insurance industry and work in an international environment on a daily basis. Some respondents work internationally due to their global client base, while some have job roles that often include additional countries. Therefore, we perceived them as suitable respondents with significant knowledge and insights.

Further, we utilized a snowball sampling technique where we asked our initial interviewees if they could provide contact information for additional suitable candidates whose knowledge is of relevance for our study (Bell et al., 2019; Emerson, 2015). This resulted in the addition of four interviewees who possessed valuable expertise and insights to our study. Following the eleventh interview, it became apparent that the subsequent respondents provided similar responses without offering any further perspectives and input to our study. As a result, our final sample consists of 14 interviewees from a total of nine companies. The titles of the respondents varied in terms of seniority and responsibility; ranging from CEO to Senior Broker.

3.2.1 Overview of Respondents

The following table summarizes the respondents representing each case company as well as the details of each interview, of which most were conducted via Zoom, Webex or Teams. Companies A-G are insurance companies, while H-I are insurance broker companies. The managerial level of each respondent corresponds to the extent to which the respondent has knowledge about the overall organization's operations and internal risk management procedures. The managerial levels have been divided into three; *Senior Management, Middle Management,* and *Specialists*. Senior Management refers to positions such as CEO, CFO and Presidents. Middle Management includes General Managers and 'Head of' various operational functions, such as risk management and sales. Specialists consist of employees who do not oversee others' work but are still a vital part of the day-to-day operations, such as Senior Brokers and Risk Engineers.

Company	Respondent	Managerial Level	Interview Format	Date and Duration
Company A	A1	Middle Management	Zoom	2023-03-06 45 min
Company B	B1	Senior Management	Zoom	2023-03-14 36 min
	B2	Specialist	Zoom	2023-03-30 25 min
Company C	C1	Senior Management	Zoom	2023-03-20 34 min
	C2	Senior Management	Zoom	2023-03-21 48 min
Company D	D1	Senior Management	Microsoft Teams	2023-03-22 45 min
Company E	E1	Senior Management	Zoom	2023-03-22 50 min
Company F	F1	Senior Management	Zoom	2023-03-30 50 min
Company G	G1	Senior Management	Cisco Webex	2023-03-29 37 min
	G2	Senior Management	Cisco Webex	
Company H	H1	Middle Management	In-person	2023-03-10 42 min
	H2	Middle Management	In-person	
Company I	I1	Specialist	Zoom	2023-03-17 35 min
	12	Senior Management	In-person	2023-03-28 40 min

Table 2 - Managerial Level of Respondent and Interview Details

Company A is an insurance provider that primarily operates in the Nordic market, offering both private and commercial insurance products and services. Although the company's main client base is SMEs, it operates globally through an extensive network of partnerships to create insurance solutions for their multinational clients. Respondent R1 is a Middle Manager and is a part of Company A's risk committee. They have an extensive knowledge of the insurance industry given that they have worked within the industry for almost three decades, of which 25 years were in a leadership position. The respondent has worked at Company A

for approximately seven years and has previously worked within different functions of several insurance companies as well as an insurance broker.

Company B is an insurance provider with offices in Northern and Eastern Europe, however, operates globally through participating in international networks. The company provides private and commercial insurance with relatively less emphasis on the industrial sector. We interviewed two current employees at Company B in two separate interview sessions through Zoom. The first respondent, B1, is a senior manager in Sweden with over 20 years of experience in the insurance industry. They oversee the daily operations of the company, which includes risk management practices. Respondent B2 is a risk engineer based in Denmark and has over 13 years of experience with risk management within the insurance industry.

Company C is an insurance company that mainly has offices in a handful of countries in Europe. They offer insurance solutions for both consumers and businesses of all sizes. However, the company's commercial client base mainly consists of SMEs with Nordic operations. Respondent C1 is a senior manager with 15 years of experience in the insurance industry. They are responsible for all operations in Sweden and Finland, including premium setting, claims service and risk management. Respondent C2 is a senior manager responsible for the growth and development of the company in multiple countries. They have worked within the insurance industry for over 15 years and have been in numerous manager rolls overseeing the underwriting and sales functions. We conducted interviews with the two respondents separately through Zoom.

Company D is a global insurance company offering multi-line products to individuals, small businesses as well as large multinational corporations with a strong presence in Europe, North America and Asia-Pacific. With a global presence, Company D is able to provide insurance solutions that are tailored to their clients' needs. We conducted a digital interview with a senior manager who is responsible for Company D's risk management function. They have over 15 years of experience within the insurance industry and have worked at multiple insurance companies focusing on internal risk management and actuary.

Company E is an insurance company with a large presence in the Scandinavian and Baltic regions. The company offers a wide variety of insurance products aimed at both individuals and businesses. They cater to large multinational corporations headquartered in the Nordics and operate on a global scale by being a part of an extensive network, enabling them to

create international insurance programmes. During a Zoom interview, we spoke with a senior manager at Company E who is responsible for overseeing the risk management function in Sweden. They have over sixteen years of experience within the insurance industry and an additional 10 years within risk management consulting.

Company F is a global insurance carrier with a strong presence in Europe, North America and Australia. They provide a range of insurance products and services tailored to individuals and businesses. They support large multinational corporations through designing tailored insurance programmes with a global reach. We interviewed Respondent F1 on Zoom, a senior manager for the Nordic region. They have over 25 years of experience within the insurance industry and their expertise spans across insurance broking as well as several senior management positions.

Company G is one of the world's largest property and casualty insurance companies offering a range of insurance products and services to both individuals and businesses. The interview was conducted digitally with two senior managers at Company G's office in Sweden. Respondent G1 has over 15 years of experience within the insurance industry and is responsible for overseeing all lines of business as well as the underwriting function. Respondent G2 has 13 years of experience within the insurance industry and has a background in project management and consulting. Both respondents have valuable insights as to how the pandemic has affected Company G and their risk management approach as well as the overall impact on the insurance industry.

Company H is a global insurance broker offering solutions in risk management. The company operates in over 100 countries worldwide and is a part of various networks that extend globally. They have a wide portfolio of large multinational clients, but they also cater their services to smaller business segments. The interview took place in person at Company H's office in Sweden. The individuals interviewed were two middle managers, both are experts in the international segment. Although the respondents lacked insights into the details of Company H's risk management practices on a global scale, both respondents have over 30 years of experience within the insurance industry combined. They provided valuable information regarding Company H's value creation, the effects of the pandemic and the overall risk management strategies implemented on a local level.

Company I is an international insurance broker company that offers insurance solutions and risk management services to individuals and businesses globally. With a worldwide presence,

it caters its services to multinational clients in various industries. We interviewed two current employees at Company I in two separate interview sessions. The first interview was conducted via Zoom with Respondent I1 who has worked at Company I since last year, however, has nearly ten years of experience within the insurance industry. They have extensive knowledge of how the pandemic impacted and shaped the insurance industry. The second interview was conducted in-person with Respondent I2 at Company I's office in Sweden. Respondent I2 has over 24 years of experience within the insurance industry and is currently working as a senior manager.

3.2.2 Interview Design

As the research is focused on the interviewees' personal experiences and expertise on the Covid-19 effects on the insurance industry, qualitative interviewing was adopted in the form of semi-structured interviews. This enabled respondents to digress from the questions in some cases and speak more freely while still ensuring consistency between all respondents. Subsequently, it contributed to insights into the respondents' perspectives and what they considered significant and pertinent to the subject (Bell et al., 2019). Semi-structured interviews, as described by Bell et al. (2019), feature specific and easily structured questions, which can be arranged in the form of a guide. Although the order in which the questions are asked may vary, it is crucial to cover the same topics during each interview. In contrast, structured interviews are more restrictive. Researchers must strictly adhere to a fixed set of questions, which risks stifling valuable contributions to the empirical data (Brinkmann, 2014).

We structured our interview based on the interview guide, which contained the main topic questions, and adapted each interview to cater to each individual respondent. Our full interview guide can be found in Appendix A. Our primary focus during the interviews was to gather information about the case companies' management structures and processes, and to understand the effect of the pandemic on their operations and how they handled this unprecedented disruption. We followed Kvale's (1996) guidelines and made sure to include a combination of the nine types of questions in order to diversify our interview questions. Although the order and the formulation of the questions differed in each interview, we ensured to address the same main topics with each interviewee. To thoroughly address our research question, we organized our interview questions into five blocks as follows:

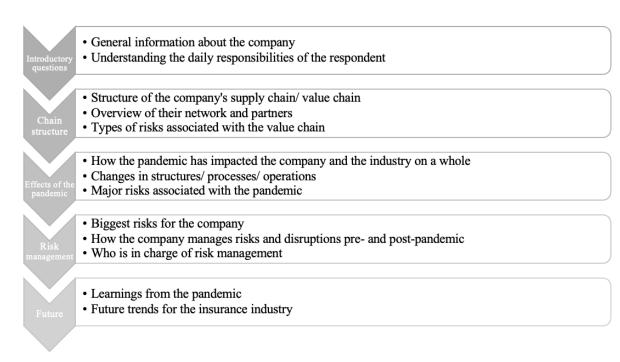


Figure 6 - Interview Structure (own illustration)

We initially aimed to do as many interviews in-person as possible in order to achieve rapport with the respondent, which facilitates and encourages the respondent's willingness to fully participate in the interview and contribute to the study (Bell et al, 2019). However, most interviews were conducted via Zoom or Teams due to convenience and the inability to travel. The majority of the interviewees were based in Stockholm and we were based in Gothenburg at the time of writing. According to Oliffe et al. (2021), video call interviews can provide a comparable level of connection and also bring about more convenience in terms of time and costs. Additionally, with the advancement of technology, communication on platforms, such as Zoom or Skype, has increased in popularity and become a widely accepted norm (Bell et al., 2019). However, we did notice that the in-person interviews facilitated the development of rapport with the interviewee. Further, it allowed us to observe non-verbal cues with better communication quality as we did, on a few occasions, experience issues with internet connectivity and other disturbances. Moreover, a majority of the interviews were conducted in Swedish since it allowed the respondents to express themselves more freely, hence constructing more authentic and nuanced responses. Furthermore, interviewing in the native language can also lead to establishing rapport with the interviewee, creating a smoother dialogue between the two parties (Welch & Piekkari, 2006). All interviews were recorded using our phones, which was consented by all candidates. During the interviews, one of us researchers asked the questions while the other one was taking notes of the respondents' answers. The main points derived from each interview were then sent to the respondent to verify that we have correctly understood their viewpoints and to allow them to edit any quotations if necessary.

3.3 Data Analysis

The most challenging aspect of a qualitative study is the analysis of the empirical data due to the nature of qualitative data obtained from interviews, participant observation, or documents. These consist of a large amount of unstructured text and they cannot be analyzed in a straightforward manner. Unlike quantitative data analysis, there is no strict set of guidelines for conducting qualitative data analysis (Thorne, 2000; Bell et al., 2019). Throughout the course of conducting the interviews, we continuously analyzed the collected data, constantly referring back to the empirical findings and our theoretical framework. We employed a thematic analysis in order to identify common patterns and themes among our participants (Ryan & Bernard, 2003; Bell et al., 2019). As explained by Ryan & Bernard (2003), the aim of a thematic analysis is to identify and understand the experiences, perspectives and attitudes of the respondents, which allows the researchers to identify themes that emerge from the empirical data. After conducting each interview, we transcribed it using Microsoft Word and highlighted all parts of the answers that were of relevance to our theoretical framework and our research question, which allowed us to code the information in an appropriate manner. We also generated summaries in the form of bullet points after each interview, which were sent to each respondent for their confirmation. We re-listened to each interview and re-read the transcriptions to ensure that our understanding and coding of the information was correct.

3.4 Quality of Research

It is important to ensure a high level of trustworthiness of our study, thus, we need to take into account the reliability and validity of our research. In qualitative research, there is a greater focus on capturing the viewpoint of the interviewee (Bell et al., 2019). Thus, as explained by Bell et al. (2019) and Lincoln & Guba (1985), we will assess the trustworthiness of our research against four criteria; *credibility, transferability, dependability* and *confirmability*.

Credibility entails ensuring that there is a high level of accuracy of the researcher's understanding of the interviewees' response. To ensure respondent validation, we actively involved the participants in the research process by asking for their feedback. We provided each participant with an account of what was said during the interview in the form of bullet

points, which highlighted the main points that will be further used for the analysis phase of the thesis. We also offered to send the full transcript to each respondent if desired, which allowed the respondent to edit, remove or add any comments. We achieved triangulation by interviewing more than one employee at each firm, which increased the credibility of our empirical findings (Bell et al., 2019).

Transferability refers to the external validity as described in Bell et al. (2019). In qualitative research, the focus is to thoroughly examine a specific group or individuals who share similar characteristics, rather than a more generalized study, which is the case for quantitative research. Due to this, qualitative findings are often unique to the specific context of the social phenomenon being studied, which emphasizes capturing the contextual significance of the subject, rather than attempting to generalize results to be applied to a larger population (Bell et al., 2019). This results in creating detailed and comprehensive descriptions, referred to as "thick descriptions" by Geertz (1973) of the studied phenomenon, which provide nuanced understandings of the specific subject, allowing other researchers to assess the transferability of the empirical data to other contexts (Lincoln & Guba, 1985). To ensure transferability in our study to the greatest extent possible for qualitative studies, i.e. in the form of "thick descriptions", we presented our empirical findings and analysis in a clear and thorough manner as well as constantly referring back to previous literature.

Dependability concerns the reliability of qualitative research. As described by Bell et al. (2019), dependability involves, similar to the practice of auditing, keeping a complete record of all aspects of the research process, such as the problem formulation, case sampling, field notes and how the empirical data was analyzed. These records should be transparent and be accessible to participants and peers. We documented each step in the research process presented in section 3.1. To ensure transparency, we provided a copy of the interview guide to each participant before the interview, which allowed them to better understand our research purpose and the questions being asked. This can lead to more reliable data as well as strengthen the overall credibility of our research findings (Bell et al., 2019; Lincoln & Guba, 1985).

The final criteria to assess the trustworthiness of qualitative data is *confirmability*, which refers to ensuring that the researcher has acted with integrity and unbiasedness in conducting the study and presenting the findings. Although complete objectivity is unattainable in business research, confirmability aims to show that the researcher has not let their personal

values or biases influence the research process or the findings (Bell et al., 2019). Lincoln & Guba (1985) further suggest that the confirmability of a study should be increased through peer reviews. We participated in progress seminars along with other thesis students throughout the semester, where we presented all aspects of the research process and our findings so far. This allowed our peers to understand how our study was conducted and give us valuable insights and recommendations to enhance our work. This in turn reduced our research bias.

3.5 Method Limitations

The methodology used in this study is subject to various limitations. Firstly, the interviews were conducted in pairs. According to Bell et al. (2019), having multiple interviewers can result in inter-interviewer variability, meaning that the questions asked or answers recorded may differ between interviewers. To mitigate this, one interviewer was designated as the main interviewer while the other was responsible for taking notes, in order to ensure consistent and coherent questioning.

Another limitation is the fact that most of our interviewees were Swedish employees, which restricts the scope of our study since we wish to investigate the global insurance market. However, we made sure to select participants who have a thorough understanding of the international insurance market, and who are involved in tasks such as risk management and decision-making. Additionally, some of our interviewees had international work experience within the insurance industry, which provided us with valuable insights. However, a small fraction of the interviews were conducted with non-managerial employees due to convenience and their willingness to participate in our study. These employees, such as risk engineers and senior insurance brokers, are vital to the functioning of the organizations and possess extensive knowledge about the international insurance market, but they lack insights into the risk management processes implemented on a global scale.

Furthermore, we sent the main interview questions to each respondent in advance to promote transparency and allow them to prepare thorough answers to the questions. However, receiving the main interview questions prior to the interviewer may encourage the respondent to overthink and overanalyze their answers instead of providing an intuitive response to the questions. They may also present an answer that enhances the image of the company or benefits our study to an unrealistic extent. Furthermore, on some occasions, we received responses that rendered some of our planned questions as irrelevant, which is an issue

described by Bell et al. (2019). This created a challenge for us to generate new questions and rephrase existing ones on the spot, which resulted in an awkward atmosphere during the interviews. Nevertheless, we promptly shifted the focus to the next topic to prevent prolonging the uncomfortable silence.

In addition, the use of snowball sampling to identify additional respondents has been criticized by Emerson (2015). The author argues that this method tends to attract participants who share common characteristics or belong to similar groups, which could lead to a biased representation of the findings and not accurately reflect reality. Moreover, the majority of the interviews were conducted in Swedish since this is the respondents' mother tongue and the language they felt more comfortable using. Although it provided the respondents with a more comfortable and unrestricted means of answering the interview questions, we had to allocate extra time for the translation of the interview questions and their responses, where certain elements could have been lost in translation. Childlow et al. (2014) argue that this can lead to questionable findings as some terms may have different meanings depending on the context. However, since the topic of this research is factual and objective in nature, which is not based on emotional and expressive language, we do not believe that this is a major limitation of our method. Additionally, we defined and clarified words that were unclear to the participants.

3.6 Ethical Considerations

Given that the commercial insurance market in Sweden, as well as the rest of the Nordic countries, is relatively concentrated and competitive, most of our case companies were very wary that confidential information would be leaked (Sampo Group, 2023). We ensured that we only asked questions that guaranteed the anonymity of the respondent in terms of place of employment and position within the company. Furthermore, the interview guide was sent out to each respondent to ensure transparency and allow the respondent to reflect upon each question prior to the interview. To further promote transparency post-interview, we sent out the main points of each interview that will be used in our thesis, to the corresponding participant, which allowed the participant to amend quotations if needed. As described by Bell et al. (2019), researchers need to value the integrity and anonymity of the respondents. This is further explained by the European Commission (2013), which emphasizes the significance of participants fully understanding the goal of our research. When we first contacted each respondent, we made sure to inform them of the goals and objectives of the study to allow them to make an informed decision on the degree of their participation. In

addition, prior to conducting the interview, all respondents were asked if they would consent to the interview being recorded, which all agreed to. We also proposed to provide each respondent with the final draft of this thesis upon completion.

4.0 Empirical Data

This following chapter presents the empirical findings from conducting interviews with the case companies as described in Chapter 3.0 Methodology. The presentation of the empirical results follows the main topics discussed during the interview, which include Value Creation and Value Chain Structure, the Effects of the Covid-19 Pandemic, Risk Management, Managing the Covid-19 Pandemic, and Learnings and Future Outlook.

4.1 Value Creation and the Value Chain Structure

When asked about how the company creates value for its customers, a majority of the insurance companies highlighted how they aid in stabilizing economic fluctuations for its clients by accepting some of their internal risks for a certain period of time, usually one year, and allowing freedom in business activities. Company C, along with Companies B, D, E, F and G emphasized how the insurance industry enables predicting and planning for the future by providing financial stability. They have a strong focus on being more efficient with better quality and better at cooperating than their competitors. Company B added that they create value for its customers by "offering them financial security and stability just like any other insurance company. We are a mainstay in society. Companies would not have the ability and capacity to make the investments they do if we did not exist". Respondent B1 further describes how Company B is a relatively small player on the Swedish market, however, they want to challenge the norms in the insurance industry and not "let the large corporations increase their wealth at the expense of consumers". The company contributes to maintaining a healthy balance in the insurance market.

Company A's response, on the other hand, was heavily focused on their customer service function, which, according to Respondent A1, is one of the best in the insurance industry. They are highly knowledgeable and respond quickly to customer queries. Further, Company A has a strong focus on sustainability and corporate social responsibility, which has been heavily incorporated in their business model. Respondent A1 also mentioned digitalization as a means of creating value for its customers and partners. They have improved their value chain through implementing more digitized solutions such as the ability to buy various insurance coverages online with a few simple clicks. The insurance industry, including insurance brokers and carriers, possess extensive information about different insurance solutions so that their clients do not need to figure out the details on their own. The insurance

broker Company I, for instance, provides help within risk management, including conducting risk analyses and assessments, implementing risk prevention measures and educating clients about insurance solutions. Similarly, Company H, helps their clients identify and assess what risks they face and how they can be covered. Respondent H1 explained how Company H should not be viewed as "just a transaction" but rather as risk experts who can aid in risk management and transfer risks. In addition, their knowledge and expertise is what makes Company H unique. They have a lot of generalists but also specialists, which allows them to cater to different clients operating in various industries and with different insurance needs.

Furthermore, the larger insurance actors who operate on a global scale provide value to their customers by possessing or having the ability to connect to an international network that can service their multinational clients and their operations. With thousands of employees and a presence in over 100 countries globally, Company H ensures that they have a viable insurance solution for their clients no matter the size and international presence of the company. Respondent H2 emphasized the importance of "providing continuous support for the client throughout their entire journey in Sweden and out into the world". Similarly, the larger global insurance carriers Company D, F and G provide insurance solutions stretched across the globe including multiple local policies for their multinational clients, providing financial security and flexibility on an international scale. For Company D, most of their knowledge is in-house due to the company's large global presence and networks. Companies A and E, that do not have a presence in every part of the world, rely on an external network to offer global insurance programs to their multinational clients.

The insurance value chain is highly dependent on close cooperation between the insurance carrier, broker and client. All insurance companies utilize insurance brokers as their main distribution channel, where Companies B, C and F's distribution channel solely consists of insurance brokers. For Companies A, D, E and G, their biggest distribution channel is through insurance brokers as well as different associations, hence it is important to establish meaningful partnerships with external actors that play a pivotal role in their value chain. Insurance brokers play a pivotal role in the insurance value chain acting as the intermediary between the client and the insurance provider. Respondents H1 and H2 expressed the importance of getting to know the client and understanding their business operations on a very detailed level. This includes conducting an analysis of their client's needs and their risks, which in turn allows Company H to find an insurance carrier that is willing to accept the transferred risk and offer the suitable insurance coverages that ensure that the client is

protected in uncertain and unforeseeable events. The respondents also expressed the importance of creating valuable partnerships and networks to increase brand image but also their own personal image. In order to fulfill the role as an insurance intermediary, Company H needs to create meaningful connections with both the clients and the insurance companies. Similarly, building and maintaining client relationships is crucial for Company I as the insurance industry heavily relies on relationship building and close cooperation. Additionally, Company A is actively involved in creating value for society in general, they have multiple partnerships that support various sectors of society, such as mental health and safety initiatives.

A good and valuable relationship can also translate into the development of new and existing insurance products. According to respondent B1, the brokers represent the clients' wants and needs, which in turn leads to the development of new and existing insurance products that are in accordance with the clients' business operations. For instance, Cyber insurance is a relatively new insurance product that has gained more attention in recent years due to the advancements of technology as well as the increase in the prevalence of cyber attacks. Furthermore, Company C's value chain begins with assessing and underwriting risks including setting premiums, which is then marketed by a broker to the client. Company C handles and processes all the claims. Company C's strategy does not include being a product developer, however, they receive input from brokers and clients regarding new types of risk. Creating valuable relationships is very important, especially with brokers since they are the ones selling their products. Company C's business idea is grounded in creating unique relationships with external actors. Company H also has a strong focus on product development of new insurance solutions with several insurance carriers based on the input and the needs of their clients. For instance, Company H has developed a special insurance for mobile phones and found an insurance carrier willing to underwrite this type of risk. Furthermore, they have created various "facilities", where they have drafted the wording and terms and have assembled a panel of insurance carriers to see who is willing to accept these terms. Company I takes a similar approach by placing significant emphasis on enhancing their current products by modifying insurance terms and adding extensions to align with their clients' business operations.

Furthermore, Company G has a continuous product development process that is aligned with market demand and competitors' offerings. Despite being a traditional industry, the company aims to develop new insurance products frequently. Company A's product development stage

is based on an "outside-in" principle, where the wants and needs of their clients are the main driver in the designing of new insurance products and services, which is similar to Company B, D and E's product development processes. Respondent E1, receives various product requests to "cover certain insurance gaps". Similarly, Company D receives input from brokers and their network regarding how the insurance market should develop to better cater to their clients. In addition, Company A has several internal "improvement forums", which are heavily focused on the customer service function as they receive daily input from clients on how to improve their offerings.

4.2 Effects of the Covid-19 Pandemic

During the outbreak of the pandemic in Sweden, all case companies swiftly transitioned into a work-from-home arrangement and banned all international travel to reduce the infection rate. Initially, Company C felt very worried as they did not know what to expect given that a pandemic has never occurred at such a global scale in this modern time. Company A quickly communicated that all employees must work from home with immediate effect, which led to the rise of online communication and meetings. Similarly, Company C, along with the rest of the world, quickly transitioned and adapted to contactless communication such as the Teams application. They found that some things were much easier and more efficient to do via Teams instead of face-to-face. According to Respondent H1, at first, remote work was a bit uncomfortable but it quickly became a habit and it is still a habit today as the pandemic restrictions are subsiding.

Initially, all companies placed significant focus and resources on ensuring that all employees could perform their duties remotely by providing them with the necessary equipment. Company G displayed a great deal of flexibility and was able to resolve this within a week. Although Company E encountered some initial challenges with the technology and VPN, once these were resolved, their business operations proceeded smoothly. Prior to the pandemic, Company B had already established a hybrid working arrangement, which included conducting meetings on Teams. As a result, they did not need to make substantial changes and were able to carry on with their work seamlessly. Likewise, Company D had preliminary discussions about implementing a hybrid working model before the pandemic and had tested this arrangement with smaller groups. However, given that the insurance industry is comparatively dated and slow, respondent A1 was very surprised to see how fast the whole industry switched to digital solutions.

Although switching to digital meetings both internally and externally proved to be very efficient for many of the case companies, a majority of the respondents commented on the loss of organizational culture as a result of the remote work. Company C's organizational culture and the social interaction took a big hit, which led to developments and innovation impeding, much like the impact experienced by Companies B and F. Respondent F1 highlighted that the pandemic negatively impacted the organizational culture as it is heavily reliant on regular physical meetings. Respondent C1 highlighted the importance of being at the office and receiving stimuli from the outside in order to have a meaningful discussion and team work. When onboarding new recruitments, this is extremely important since the new employees need someone physically present to teach them. Respondent H2 expressed that it sometimes was hard spending an excessive amount of time at home and not being able to experience the company culture. Respondent H1 started at a new company a couple of weeks before all employees were sent home in March of 2020. It was very difficult for Respondent H1 to get to know their colleagues and to be submerged into the company culture. This led to difficulties for them to do their daily job duties as they did not know how everything works and who to contact when needing help with different tasks.

A significant challenge that arose among some case companies was how to perform remote risk assessments of their clients' facilities, a task that is heavily reliant on physical assessments. This proved to be a particular issue for their larger multinational clients, who have global operations and sites in various parts of the world. For company H, all forms of travel were suspended, including the travel of risk engineers, which is an essential part of their job. Company H has a team of 18 full-time risk engineers who regularly travel to their clients' business operation sites to evaluate potential risks. The travel suspension posed significant challenges for these risk engineers to perform their job duties. To solve this, Company E and H performed desktop surveillance and utilized GoPros to perform risk assessments. They dispatched GoPro cameras to their clients located worldwide, enabling them to perform virtual tours of their factories and sites. Based on this, the risk engineers conducted risk assessments to the best of their abilities and under the given circumstances. According to Respondent E1, this solution worked surprisingly well with minimal issues. Similarly, Company I allowed their clients to record and photograph their sites in the event physical inspections were not possible.

In terms of operations and financial performance, a majority of the companies did not observe significant changes. According to respondent B1, certain departments faced some

challenges with efficiency, however, client management and customer service continued to remain at a high level. Company B experienced revenue and profit growth during the pandemic, which was an outcome experienced by several other insurance companies. Respondent C2 commented on the investment risks associated with the pandemic. They placed significant focus on the stocks and bonds market given their volatility. According to Respondent I1, there was a decrease in claims related to business trips and auto as people were not traveling as much. The insurance market experienced a hardening trend during the pandemic, which has led to an increase in premiums and more stringent underwriting requirements. Company H did not suffer any deficiencies in the financial performance of the organization and they were able to retain a high client retention rate. According to many respondents, it was initially expected that the insurance industry would suffer a lot more claims during the pandemic, however, many companies did not experience this. Although they anticipated stricter regulations and more stringent terms and conditions, they were surprised to find that the industry remained largely unchanged. According to Respondents H1 and H2, there were no changes in the grounds or steps of the insurance value chain, however, the way of conducting business changed given the travel restrictions.

Furthermore, according to Respondent II, the pandemic had a large effect on their clients, consequently affecting Company I. Due to the pandemic being an unprecedented event that resulted in significant changes to their clients' business operations, Respondent I1 had an increased workload. Given that Company I is an insurance brokerage company that has an advisory role, they had to address various queries related to handling the pandemic and assessing risks in a new way. Numerous clients operate in the manufacturing industry, which was severely impacted by supply chain disruptions, material shortages and warehouse challenges. Consequently, this triggered various insurance coverages as their clients were unable to carry out their daily operations and deliver their products to their customers. The other insurance brokerage firm that was interviewed, Company H, had a similar experience with regards to workload. During the pandemic, the insurance market was very tough, which entailed much more work for Company H. Respondents H1 and H2, expressed that they had much more time during the pandemic to do their work as they did not have to travel to and from work and were not being interrupted by coffee breaks with colleagues. From an efficiency perspective, employees could handle a lot more work during the pandemic. With the return to the office, employees have the same amount of work but a lot less time to complete this work.

However, Company A initially suffered a drastic drop in sales following the implementation of the work from home solution mainly due to the change in the work environment. The pandemic had also impacted Company F negatively in terms of financial effects. Respondent F1 noted that they experienced a decrease in new business. Respondent A1 explained that, prior to the pandemic, the customer service department at the office had a lively atmosphere with motivated employees. However, when all employees were sent home at the beginning of the pandemic, this high energy atmosphere was lost. This gave rise to another major issue faced by all case companies. The largest internal risk Company A faced during the pandemic was mental health and working environment concerns. Given that managers and team leaders did not see their employees everyday, it was difficult for the leaders to determine the state of their wellbeing. This led to every manager setting up Teams meetings two to three times a week with their employees to check in on them and ask how they are finding their work environment. It was also mandatory to have cameras on during all meetings in order to physically see if a co-worker is unwell mentally in their home environment, especially those who live alone. Since many employees are young and still live at home with their parents and younger siblings, it was nearly impossible for them to concentrate on their work responsibilities and were given the opportunity to return back to the office.

Company D, G and H shared similar issues with remote working. Ensuring employee wellbeing was challenging when everyone was working from home and there was limited face-to-face interaction. Company H highlighted the importance of protecting the wellbeing of their employees as their knowledge, competence and expertise are their key assets. Additionally, physical meetings with external partners and clients were prohibited. Company B dedicated a significant amount of effort to external communication in order to maintain a strong presence with the brokers. Since physical meetings were not possible, they started sending out monthly informative letters to external partners. Company A still conducts a majority of their client and broker meetings on Teams and even some of their inspections are conducted digitally. However, respondent A1 emphasized the importance of finding a balance between physical meetings and digital ones. They highlighted the necessity of an initial in-person meeting with new clients to establish a more natural connection and build a rapport.

4.3 Risk Management

According to Respondent C1, their main objective is to remove the risk completely, which is not always possible. If it is not possible, the objective is to mitigate the consequences as

much as possible. Similarly, Company A implements risk management strategies that are in line with avoiding and mitigating risks, rather than accepting them as they want to protect their finances and ensure business continuity. Insurance companies divide their risks into internal risks and clients' risks that they insure. Company A has divided their risk management process into pre-, during and post-loss. Respondent A1 emphasized the importance of having a thorough plan in place before a disaster occurs. This is especially important when it involves saving lives, such as in fire disasters. Many case companies share a similar view on having a clear contingency plan in the event of a crisis. Respondent I1 stressed the importance of guaranteeing that there is a contingency plan if an employee were to resign or fall ill. For risks and losses that are associated with the clients' exposures, a principal project leader is assigned and responsible for guiding the insured from when the disaster occurs till when it is restored. After the loss, it is important to have meetings with the client where they discuss how they have handled the situation and what they could have done differently. This allows Company A to reflect internally and evaluate how they can improve their products and services to reflect the clients' expectations.

Underwriting risks are seen as a prominent risk for all insurers. When assessing the risks of insuring various clients and their business operations, it is important to understand all the possible exposures. Hence, Company A employs risk engineers who are heavily involved in the risk identification and assessment processes of their clients' risks, and they conduct inspections on a regular basis since risks can change over time to ensure that the risks are within their appetite. Similarly, Company G must consider risks related to contracts that do not align with their intentions and risk appetite. There is also a risk of insuring something unintentionally, which could lead to not having adequate reinsurance such as treaties. Company B, C, D, E and F share a similar view on the most significant risks. According to Respondent B1, the biggest internal risks facing Company B are highly correlated with making the "right business decisions" that benefits the company on a whole. Although attracting new clients is crucial for achieving profitability and growth, it can sometimes lead to the risk of unforeseen problems and negative consequences. According to respondent C1, It is vital to not underwrite and bind risks that are not within their reinsurance contracts. Further, Company A is subject to a wide range of risks, such as risks associated with the American stock market. There exists thorough documents and routines on how to manage different types of risks identified by the risk committee.

Another prominent risk for insurers and insurance brokers is related to their personnel. According to Respondent C1, the biggest internal risks they manage is in relation to their personnel. "It is important to onboard the right people but also to retain the right people". Company C gave a similar response when questioned about their biggest internal risks they face. Similarly, given that Company H as well as other insurance actors do not operate in the production of physical goods, the company is heavily reliant on knowledge, competence and expertise. The recruitment process of new employees entails finding individuals that possess the right competences but also the right personalities. Company H has various values of which each potential candidate needs to adhere to. Company I shares a similar view, where according to Respondent I1, the most significant risks that Company I must contemplate are those associated with their "tools", which are vital for performing their work correctly. These tools encompass their expertise, knowledge, time, and effective programs, systems and templates that enable them to execute their tasks efficiently. Insurance brokers play a similar role to consultants, where they advise on risk management and loss prevention tailored to their clients' businesses. Therefore, it is crucial to regularly enhance their competence and knowledge.

Furthermore, one of the largest risks Company H has to consider on a daily basis is the legal and regulatory risks associated with different agreements and contracts. Proofreading and ensuring the accuracy of contracts are among their responsibilities. However, it is crucial that they do not overstep their role and act as a legal agency. If clients request that they review a particular contract, it is essential for Company H to refrain from offering legal advice, but they may provide their expert opinion. Respondent H2 commented that it is important to define their role and not to step outside their responsibilities. As Company I and H are insurance broker firms, one of their biggest risks is related to their "consultant responsibility", which means that there is a risk that they are giving their clients the wrong advice. GDPR is another significant risk for Company C, where an employee may be saving personal data illegally to be used for illicit purposes. Additionally, Company D and E have taken a macroeconomic approach to risks and have recognized climate risks as a significant threat to the insurance industry as well as the rising inflation. According to Respondent D1, "It is important to acknowledge the effects of the climate crisis on supply chains and on individual countries".

While all the case companies acknowledged the significance of compliance and documentation, Company D was the only one that focused on the importance of adhering to

legal frameworks and legislation concerning the risk management process. According to Respondent D1, all insurance companies need to comply with the Solvency II Framework established by the European Union. This framework outlines specific guidelines on how the risk management process should be implemented and structured. Based on the company's risk appetite, Company D defines their risk tolerance and limits. In addition, their enterprise risk management structure includes comprehensive policy frameworks, incident management framework, risk controls and business contingency plans. Respondent H2 explained that their company employs a compliance officer who is responsible for the risk development and ensuring that all regulatory requirements are met. They further highlighted that it is essential to create a strong organizational culture with a coherent compliance structure throughout the whole organization.

Companies such as Company B and G have quarterly meetings to discuss newly identified internal as well as external risks and how to assess them. Company C also has their own processes for speculating different scenarios and identifying, assessing and mitigating risks. Company A and F have more frequent risk meetings, which occur every month to discuss new risks and conduct internal controls. Company E and F's risk management processes are evaluated on a continuous basis on a group and individual office level. This includes both top-down and bottom-up assessments to ensure an effective risk management process. Company F has appointed a Chief Risk Officer to conduct internal controls and implement stringent processes. Further, Company E employs frequent brainstorming sessions in order for various employees to contribute to the risk identification process.

Company A has an extensive procedure for their internal risk management practices. The company has assigned a risk committee that identifies and assesses all types of risks the organization is subject to. The committee meets every month to discuss new risks and developments. Once every quarter, the committee meets to evaluate every risk and categorize them as either 'green', 'yellow' or 'red', where red is assigned to the most harmful risks. Company B has a similar risk assessment approach, where they assign different colors to each risk depending on the severity. They also assign each risk into different categories such as financial impact, brand impact as well as legal and compliance risks, which gives a more thorough understanding of the identified risk. Other companies, such as Company C, D and G assess and prioritize risks based on the probability and financial effect. They create a matrix with these two parameters in order to identify which risks are the most significant and allocate the appropriate resources to mitigate these. Company D has a well-defined limit in

the matrix, where risks that are 'red' are defined as high risk are given higher priority and stricter deadlines. In addition to the more frequent meetings, many case companies have one larger risk meeting once a year. Company C and E carry out internal controls once a year, which is conducted both internally and by external partners. They also perform stress tests on a monthly basis or more frequently if needed, similarly to Company D.

Company I's risk management procedures involve working in larger teams to ensure the four-eyes principle. The risk management strategies are formulated on a local level, however, the parent company in the UK also cascades risk management information down to individual countries. Although Company I enjoys a considerable degree of autonomy in decision-making, they receive exceptional support from their parent company. There are various routines and procedures related to administrative tasks, work processes, conduct, and compliance. Company I offers compliance training on both a local and regional level, which is overseen by the Vice President. Similarly, Company H's local risk management strategies are formulated by the senior management group in the Stockholm office. On the other hand, risks that have a global impact and are relevant to multiple countries are centrally managed and communicated by the group CEO based in the UK. The risk management strategies are then disseminated to the senior management team in each country and subsequently cascaded down to individual team leaders who then relay the information to their respective teams.

The responses provided by Company D take a distinct approach compared to the other case companies. Respondent D1 explains how risk management is divided into first line, second and third line of defense, where the first line includes operational functions such as the underwriters or claims personnel. These are the owners of the risks as they are the closest to the processes and activities that generate the risks and have the most knowledge about them. Respondent D1, as part of the second line of defense, controls these risks and owns the risk frameworks. They ensure that the first line identifies the risk, conducts risk reports, monitors and documents. Respondent D1 emphasized the importance of aligning the risk management process with the company's risk appetite and risk tolerance. This ultimately allows the company to develop a better understanding of its risks and how they relate to the overall functioning of the business. The company also ensures that the risk management process is evaluated each year, which is a legal requirement. This risk management process is in line with the Solvency II Framework, thus this is not a unique process as many other insurance companies follow this framework.

After identifying and assessing the risks, Company A ensures that they have mitigating processes and activities implemented throughout the organization. These processes are then communicated to other parts of the organization through the respective leadership teams of each department. Moreover, they have an internal network of 'Risk Coordinators' tasked with communicating risk management protocols on a team level, ensuring compliance, and evaluating their effectiveness. They also assist in detecting newly identified risks by the teams and effectively communicate them back to the leadership teams. Every month, as the person responsible for risk management, B1 receives a report containing all newly identified events that may pose a risk to the company. Although most risks are concerned with the Swedish market, Company B also takes into account the risks associated with the international macroeconomic environment, such as the current financial market as well as the Covid-19 Pandemic with widespread effects globally.

Company G implements guidelines, peer review processes, and formalities to ensure that risks underwritten align with the company's overall risk appetite, similar to the process of Company E. Underwriting authority is delegated from top management to underwriters, and peer review processes evaluate and control the implementation of these risk management practices. The compliance team, together with internal audit, handles reporting and following up on deviations from underwriting authority. Ultimately, Company G aims to create a culture of learning to avoid repeating mistakes. Company E conducts several internal audits every year and ensures that everything is well documented and saved in an appropriate manner in accordance with internal guidelines. Company A has a very clear delegation system when it comes to communication and responsibility of the identified risks. The risks identified by the risk committee are sent to the CEO, who delegates responsibility of each risk to different heads of departments, who then communicate this to the individual teams.

The effectiveness of Company H's risk management strategy lies in its formulation and rapid communication to each and every employee. They have a very advanced intranet where all employees receive communication. The respondents H1 and H2 describe their Group CEO as "very active and a good communicator on various communication platforms". Respondent D1 has also expressed the importance of good risk communication and building a "risk culture". Further, they emphasized that the risk management function should not be viewed as a separate entity from the first line of defense but rather be recognized as an advisory function. Respondent D1 commented that "risk management cannot be built on fear". It is crucial to have transparency, openness and a thorough comprehension of incident reporting,

such as accidentally sending an email to the wrong recipient. Risk culture is also a key performance indicator for Company D, as it ensures that risk awareness is not only the responsibility of the senior management team, but is also cascaded down to each and every employee.

4.4 Managing the Covid-19 Pandemic

When asked about the risk management process during the Covid-19 pandemic, all case companies commented that they were very flexible and adapted quickly to the pandemic. Due to Company E's extensive international client base, they were able to receive information about the pandemic at a very early stage, which enabled the company to quickly formulate response strategies. Respondent I1 shared a similar experience and noted that the company was very proactive and quickly transitioned to online communication during the outbreak, and that compliance measures have since evolved in response to the pandemic. They were very quick to inform their clients regarding insurance coverages as well as sending questions to insurance companies. During the early emergence of the Covid-19 pandemic, the UK Headquarters quickly sent out clear instructions to all employees informing them that they need to work from home. Company I received similar orders from their head office in the UK, however, Respondent I2 commented that each subsidiary office had "local interpretations of central orders". Hence, each office handled the pandemic differently, where Respondent I2's office had no restrictions on coming into the office given its small size. Company E also allowed employees who preferred working from the office to do so, but enforced a maximum occupancy limit as well as strict sanitation regulations.

A majority of the respondents highlighted that the most significant risks with the pandemic were those related to the work environment as well as employee wellbeing. Company F had a very people-oriented approach, which ensured the wellbeing of their employees at home. They also implemented a new digital platform for the employees to use. When the pandemic first hit Sweden, Company A appointed a 'Corona General' who, together with a special project group, was in charge of the logistics of switching to home offices. They closely cooperated with the risk committee to identify risks associated with mental health and wellbeing. Company C adopted a similar approach to the pandemic. Company C quickly developed a project initiative where they identified and assessed different "focus areas", including predicting how the pandemic will affect their insurance risks, their employees and the work environment. A significant question that popped up was "What would we do if

everyone were to be sick at the same time?". This was a very practical solution that delivered standards on how to proceed, which led to the situation being less chaotic. Many respondents commented that the same question was a major concern for their organization during the outbreak of the pandemic. According to H2, their risk management strategies prioritize the protection of employees given that this industry heavily relies on human capital and knowledge-based work. Moreover, Company D contacted various governments in order to discuss how they could support both their employees as well as their clients. This focus on the well-being of the personnel became particularly crucial during the Covid-19 Pandemic.

In order to ensure robustness and business continuity during this global disruption, all case companies had contingency plans in place prior to the outbreak of the pandemic. Although not specified towards a global pandemic, companies such as Company B, C, F, I and G had business continuity plans for remote working in the case of the office burning down, long power outage or if many employees were to fall ill at the same time. Company G's plan even included a pandemic as one of the scenarios but it was not the most prominent one. The plan placed greater emphasis on the aforementioned scenarios. Company D also included pandemics as one of the possible scenarios when conducting risk analyses. Similarly, Company B, C and E did not have a clear crisis plan for pandemics, however, they did have a contingency plan in place based on foreseeable events. This allowed Company B to quickly adapt to the pandemic to ensure business continuity. Company E had a clear crisis plan prior to the pandemic, which includes a Head of Security as well as a Head of Business Contingency. The risk management process remained unchanged given that it is a very clear and structured process, however, their crisis plan has since been updated. Additionally, all departments received weekly updates regarding the pandemic and the necessary actions to be taken, which allowed each function to adapt accordingly and in a timely manner.

According to Respondent C1, "No one was really prepared for a pandemic in 2020". Nevertheless, they did have a good risk management structure, which is very flat and includes numerous people of different departments. This allowed for the development of a quick and proactive response strategy. Initially, Company C invested a lot of time and resources into understanding the situation, and later formulated a response strategy based on their understandings and predictions. They identified and assessed the risks associated with the pandemic and constructed action plans on how to mitigate these risks and how to control them. The majority of the identified scenarios and risks were never realized and hence Company C did not have to do much. In addition, each employee served as a backup for their

colleague's accounts in case of severe illness to ensure that business remained uninterrupted. Which is similar to Company H and I's risk management approach regarding co-workers falling ill in order to ensure continued service to their clients.

The biggest risks Company B faced, according to Respondent B1, was their clients' business operations and their performance. They were concerned about the possibility of their clients experiencing significant revenue losses or even bankruptcy. This in turn can lead to negative impacts on Company B in the sense that the market is shrinking as a result of a lot of businesses exiting. There was also a risk of insurance fraud within industries with low profit margins. Company E was also concerned with their clients' risks as their supply chains were heavily compromised due to issues with containers for instance. This was also observed by Company I, who placed greater focus on the risks associated with their clients' supply chains. According to Respondent I1, the pandemic has provided valuable insights on how to handle and prepare for supply chain disruptions.

To ensure uninterrupted business operations, many case companies supplied essential office equipment such as screens, desks, and chairs. Company H was very clear in the sense that they wanted the home work environment to be comfortable and suitable for each organizational function, allowing business to continue on a remote basis. However, both respondents expressed that it was difficult for them to adapt to the new circumstances given that this is such a unique event. They underestimated the pandemic as they did not have a time perspective of the situation. Initially, they believed they were only being sent home for a couple weeks and not for an entire year. However, some case companies overestimated the pandemic. Respondent C1 commented that there was a slight change in their risk management procedures and strategies, with a stronger focus on creating a strong team despite the online communication. Their day-to-day operative activities entails close cooperation between different units and teams, which was a major challenge during the pandemic. Hence, this was at the top of the agenda during their risk meetings.

Once all employees had the necessary office equipment, Company G focused on quantifying the changes in conditions and how they affected their product offerings. They explored questions related to what the possible losses could be for each product, directly as well as indirectly. They standardized wordings on multiple products to increase control and shifted meetings to digital communication platforms. Company H also observed that multiple insurance carriers standardized wordings and issued pandemic exclusions. Furthermore, the

pandemic highlighted the need for Company F to carefully review their wordings as well as explore how to handle claims regarding business disruption. Majority of Company G's business is conducted through brokers, which calls for the need for frequent meetings to negotiate terms. These meetings were shifted to digital communication platforms, which was a learning process. Prior to the pandemic, Company G was in an expansion phase and therefore required frequent external communication to improve their brand image. However, transitioning all communication to online platforms and creating a new meeting culture proved to be a challenging task initially, but improved with time.

4.5 Learnings and Future Outlook

The final section of the interviews included questions regarding the participants' predictions about the future of the insurance industry as we are now entering the aftermath of the pandemic. The questions asked were central to the key takeaways and learnings from the pandemic as well as the risk management strategies that were implemented. For instance, Respondent B1 mentioned that one of the key takeaways from the pandemic was the importance of being more open to trial and error when it comes to adapting to unforeseen circumstances. Company F emphasized the significance of being vulnerable to risks and creating an "internal risk thinking" within the organizational culture. Further, Respondent H2 commented that "if we were to experience another pandemic, we would be much more ready and know what to do this time". They expressed that "everything they thought would not work actually ended up working". Many other respondents shared the same perspective. Respondent H1 noted that everything that they anticipated at the outbreak of the pandemic did not actually occur. It is also important to have a broad perspective and to understand that this situation is not just affecting "me and my company", but it is affecting the whole world too. This can lead to being more daring and trying new things during uncertain times as they have now recognized that the rest of the world has the ability to adapt over time. Further, Company G highlighted that everything is possible regarding flexibility in working from home, however, it is essential to prioritize wellbeing when adopting a remote working structure.

Company A has learnt the importance of risk management and planning for the unknown. The company had a clear and thorough crisis plan for how to handle disasters prior to the outbreak of the Covid-19 virus. Since the pandemic was such a unique event, it was difficult to assess if the risk management strategy was good or bad. However, many case companies,

such as Company A, value the importance of learning from experience and hence they have updated their crisis management plan based on the outcome of the pandemic. Respondent C1 questioned how organizations can expand and advance on a remote basis, having gained knowledge from experimenting with new strategies and action plans in an unprecedented situation. Further, they shared insights on managing personnel in a "new-normal" scenario, specifically, implementing hybrid work solutions. They discovered disparities in communication channels, with face-to-face interactions differing from online interactions via email and Teams messages. This led to questioning the ideal working environment, including considerations such as whether employees should have the option to work remotely and to what extent, as well as whether mandatory office days should be enforced.

The issue of whether to maintain remote work was a prevalent topic on the meeting agendas of numerous case companies. Some companies, such as Companies A, B, E, F, G and H, still promote a hybrid working model to some extent even after the restrictions have been lifted. According to respondent H1, "all employees do not need to be physically present everyday since we do not have fixed workplaces in the office". In addition, they have become much more understanding of people's individual needs when it comes to their preferred working environment. They have learnt that relationships can still be maintained remotely and how to communicate effectively online via Teams both internally and externally. Respondent I1 also commented that they hope to see more digital tools being used on their day-to-day operations now that we are entering the aftermath of the pandemic.

Company C, on the other hand, made sure to highlight to their employees that the work from home solution was only temporary during the pandemic. They are currently facing problems with getting people to come back to the office as many prefer to work from home. Several companies have emphasized the importance of developing an organizational culture, which can only be done in person. Many employees are still very used to the remote working environment, which is hindering the growth of the company culture. According to Respondent A1, it is very important that employees are physically present at the office and in meetings as it is impossible to build a meaningful work culture on Teams or any other digital platform. Hence, Company A has enforced the three day rule, where employees must be at the office at least three days a week. According to Respondent I1 and F1, it was very difficult for new employees to be a part of the company culture when working remotely. The loss of company culture also led to many employees switching jobs. It is essential to strike a balance

between physical and digital meetings to avoid an increased sense of impersonality as emphasized by Company A.

When asked about the future of the insurance value chain, many respondents, such as Companies D, E and F, highlighted the use of AI and increased digitalization of the value chain in the near future. However, Respondent C1 believes that the commercial insurance industry lags behind in the adoption of AI. In addition, Respondent A1 believed that there will be an increased focus on sustainability, which is an expectation from clients, partners as well as internal pressures. For example, when they restore buildings after fires or other disasters, it is important to choose construction partners that have embedded sustainable practices into their business activities. Respondent B1 stated that they believe the insurance value chain will continue to undergo significant digitization and automation in the future, a process that has already begun to some extent. They believe that the service processes will develop and become more automated in the near future. The insurance industry faces challenges in terms of innovation, as it must provide value to the customer in order to remain relevant. Companies H and I believe that it is important to digitize certain parts of the insurance value chain to some extent such as client meetings and negotiations. However, it is also important to maintain some physical aspects. For instance, controls and inspections need to be conducted manually and physically to ensure a correct assessment of the risk.

Moreover, Respondent H1 commented that the industry is very slow in terms of developments. The function of the industry is to put a price on risk, and Respondent H1 does not anticipate this underlying function to change in the next couple of years. Respondent H2 added that the biggest change to come is the addition of certain coverage restrictions such as pandemic exemptions. According to Respondent I1, while the property insurance market is expected to continue hardening, other insurance products are beginning to soften as we are entering the aftermath of the pandemic. They anticipate a potential "yo-yo effect" in which markets will alternately harden and soften over time. Respondent I1 believes that premium levels for insurance products may not return to their pre-pandemic levels. Additionally, Company C believes that the future of the insurance industry will entail more focus on the environment as well as increasing risk control including imposing more stringent requirements on the needed information. Respondent D1, however, focused their answer on the development of legal frameworks. They believe that the emergence of AI will lead to new laws and regulations in different markets in relation to ethics and technology.

4.6 Summary of Empirical Data

The following table summarizes the empirical data collected from our semi-structured interviews with the nine case companies. Summaries of each case company can be found in Appendix B.

THE INSURANCE VALUE CHAIN

- ❖ Consists of three key actors: insurance carriers, insurance brokers and clients
- ❖ The insurance industry creates value through stabilizing economic fluctuations and facilitating planning for the future
- ❖ Brokers aid in risk identification and assessment, and educating clients
- Global insurance actors have the ability to provide help and coverage wherever their clients' business operations are located
- ❖ The insurance value chain is highly dependent on close cooperation and communication between insurer, broker and client
- ❖ Some companies' distribution channel consists solely of brokers
- ❖ The insurance industry provides unique solutions for their clients, including the development of new and existing products

IMPACT OF THE COVID-19 PANDEMIC

- ❖ Quickly transitioned into a work-from-home arrangement
- ❖ Necessary equipment was sent home to each employee
- Contactless communication (such as Teams) was used both internally and externally
- ❖ Loss of organizational culture due to lack of face-to-face communication
- Problems with conducting risk assessments as traveling was banned
- ❖ Majority did not experience significant changes to financial performance
- The insurance industry remained fairly unchanged despite the large effect on their clients
- External communication between brokers and insurers was maintained

RISK MANAGEMENT PROCESS

- Objective is to avoid and mitigate internal risks, rather than accepting
- ❖ Underwriting, personnel and legal risks are seen as the most prominent
- ❖ Vital to not underwrite risks that fall outside the risk appetite
- Risk engineers are crucial for risk identification and assessment of clients' risks
- Regular meetings (monthly or quarterly) are conducted to identify and assess risks
- Risk management processes are evaluated on a continuous basis, including top-down and bottom-up assessments
- Risks and assessed and prioritized through matrix of probability and financial effect
- ❖ Important to communicate risk management practices to other parts of the organization
- Guidelines, peer reviews and formalities allow for adherence to risk appetite
- ❖ Internal audits ensure that everything is well documented in terms of compliance
- * Rapid communication across the organization allow for an effective risk management
- * Risk management should not only be the responsibility of the senior management team, but also integrated throughout the entire organization

MANAGING THE PANDEMIC

- Adopted flexible approaches to managing the pandemic, resulted in quick adaptation
- ❖ Global networks allowed for early communication and swift management
- ❖ Allowed to implement local solutions and strategies
- ❖ Employee well-being and risks related to the work environment were the most significant risks faced by the case companies during the pandemic
- ❖ Had contingency plans in place prior to pandemic, but not specified to a pandemic
- ❖ Made use of scenario-planning methods to construct action plans
- Clients' business operations and performance was also a major risk
- Risk management procedures and strategies require a stronger focus on team cooperation between different units
- ❖ Maintaining external communication and market presence was challenging at first

LEARNINGS & FUTURE OUTLOOK

- ❖ Important to be more open to flexible approaches, including trial and error
- ❖ Valuable to create an organizational culture that fosters internal risk thinking
- Have a broad outlook
- Need to learn from past experiences and update current plans
- Understand employees individual needs regarding work environments
- ❖ Developing an organizational culture still requires physical presence
- Relationships can be maintained and nurtured on a remote basis
- ❖ There will be an increasing trend of AI and digitalization of the value chain

5.0 Analysis

In this chapter, the empirical findings are examined in the light of the theoretical framework established in chapter 2 of this thesis. The analysis chapter begins with defining and confirming the structure of the insurance value chain, followed by the general risk management process of the insurance value chain. Next, a thematic analysis is presented, providing an overview of the four main themes that have been identified to ensure an effective risk management process for the insurance value chain in times of disruptions. Finally, this chapter concludes with revisiting and revising our integrated theoretical model based on our empirical findings.

5.1 The Structure of the Insurance Value Chain

As insurance is an intangible product, the insurance value chain differs to a certain extent from the traditional value chain. To have effective risk management practices, it is essential to establish a profound understanding of the structure of the insurance value chain since it enables organizations to acknowledge the functions, processes and actors involved in the value chain. Moreover, the overall performance of the chain is dependent on fully comprehending the impact of core processes. Understanding the chain structure enables organizations to determine appropriate management procedures and strategies as well as identify and assess potential risks while effectively managing relationships with both horizontally and vertically involved stakeholders (de Waart & Kemper, 2004; Wang et al., 2015). All the participating companies seemed to have a good understanding of the structure of their value chains and recognize the significance of doing so. Additionally, the chains appear to be structured in an equivalent manner where the insurance companies, the brokers as well as the clients are involved.

Furthermore, all case companies involved in this research have an international presence where various business activities are conducted in separate physical locations. As a result, the firms engage in cross-border networks with external organizations to produce their products (Arndt & Kierzkowski, 2001). In addition to external networks, the companies are also involved in internal networks due to the widespread geographical locations of business activities. Participation in these cross-border networks is evident as the insurance companies develop and improve their products using input and feedback from both brokers and clients, where the latters' insights can be obtained either directly from the client or through the

brokers. Since in-house knowledge is used in combination with external knowledge from brokers and clients in the product development processes, the companies have acknowledged the significance of including the consumers as a source of valuable information (Feller et al., 2006). The insurance companies also follow their clients and offer insurance products that are modified according to the clients. Company A, B, D, E, F and I emphasized that they use their networks to satisfy the client's needs if a client is conducting business in a location where the firm is not. This indicates that they are attentive and considerate of their clients' value chains and inputs. Utilizing the networks and the consumers' valuable insights can in turn increase efficiency and contribute to enhanced competitive advantage (Porter, 1985).

The creation of value depends on the parties involved in the exchange and can differ between B2B and B2C. Transactions between B2B generates three forms of value where technical value is represented by the provided resource, in this case, the organization's knowledge and capabilities. Organizational value arises from context factors, such as brand image and reputation, whereas personal value emerges through personal interactions (Feller et al., 2006). All case companies recognize that their knowledge and capabilities essentially are the source of value that they offer to the clients. In addition, the significance of nurturing the employees' development and well-being is acknowledged as well since the people are crucial for the firms. Building and maintaining strong relationships within the insurance industry is also frequently mentioned among the respondents since the industry is dependent on relationships. Company H also expressed that the industry is relatively small, therefore, it is significant for the company to maintain a good image as well as reputation. Thus, technical value, organizational value and personal value that are generated when transactions between B2B occur are found to be present and in accordance with Feller et al. (2004).

On the other hand, value creation consists of three layers for B2C where the first layer is product value, second one is services that results in additional benefits and third layer is represented by "Wow" value where enhanced services contribute to added value and focuses on making the consumers successful (Clemmer, 1990; Feller et al., 2006). Since the focus is on commercial insurance, or B2B, it may not be expected that the third layer is present. However, when the insurance companies were asked about value, all firms emphasized how they create value for their clients by providing financial security and advisory services. The insurance companies are thus supporting their clients and enabling them to explore and invest in various opportunities that further expand the clients' businesses. This is further demonstrated by the case companies' willingness to follow their clients and determination to

find appropriate solutions and satisfy all clients' needs. Thus, it appears that the added "Wow" value is present in B2B exchanges as well. This could be an indication that transactions between B2B and B2C are being conducted in an increasingly similar manner.

Moreover, Figure 2 in Chapter 2 that was developed by merging the more traditional insurance value chain and the extended insurance value chain appears to be an accurate description of how the insurance value chain is structured and the key value-adding activities that are involved. The two initial functions, product design/development and marketing/sales distribution channels (brokers), are based on Wang (2019) whereas the latter three functions are derived from Accenture Insurance (2018), Deloitte (2023) and Lorenz et al. (2020). Wang (2019) describes the insurance value chain as an insurance company's series of activities, such as product design, product development and after-sales activities. The insurer, insurance intermediaries and the insured are key actors and facilitate the movement of information, products and value. Additionally, a core function of the value chain is close and efficient cooperation between insurance companies and brokers (Wang, 2019). The empirical findings conform with the literature where the key activities are dependent on the movement of product, information and value between the key actors. The need for close collaboration between insurance companies and brokers is evident as insurers are reliant on brokers as a distribution channel as well as a source of valuable information and knowledge. Company F also mentioned that innovation emerges from collaboration using both the internal and the external network.

The three latter functions described by Accenture Insurance (2018), Deloitte (2023) and Lorenz et al. (2020) include the underwriting process, servicing & policy administration and claims management. Insurance companies need to obtain as much information as possible on clients in order to identify and evaluate the associated risks, develop a suitable insurance policy and accurately compute the premium level. Company A, B, D, F, H and I expressed that the insurance products are designed and adapted according to the client. Therefore, clients act as a source of information and provide value to each link in the insurance value chain. On the other hand, Company C only uses brokers to distribute their products and stated that they rely on brokers' input to know what to include in the clients' insurance which points to the significance of their role in the insurance value chain. As brokers are the sole distribution channels for some insurers, such as Company B, C and F, and thus the only ones directly communicating with the clients, their role becomes even more pivotal.

5.2 The Risk Management Process

Given that the core function of the insurance industry is to provide financial stability for individuals, businesses and societies by absorbing some of their risks as highlighted by several of our case companies, it is important for the insurance actors to adopt risk management strategies that mitigate risks and even avoid them in its entirety. Hence, avoiding financial losses, which allows insurers to provide financial stability to their clients in times of loss (Svensk Försäkring, 2023). Tchankova (2002) further describes how risk management practices aid in other management activities including achieving organizational objectives, which is highly valuable to the management of the insurance value chain since it is wide horizontally with multiple stakeholders and departments participating in various value adding activities (Wang et al., 2015).

According to all the respondents, the insurance industry is highly dependent on creating meaningful relationships between insurers, brokers and clients in order to ensure that the industry is operating effectively. For some insurance companies, brokers are their only distribution source, hence highlighting the importance of relationship building. Respondents B1, H1 and H2 further emphasizes how a good cooperation between the actors can lead to the development of new and existing insurance products, creating new sources of risk and problems for the insurers as highlighted by Company B. Many respondents expressed that they have defined a clear risk appetite that aligns with their overall organizational goals whilst also maintaining profitability. Company B has a strong focus on making "the right business decisions" that entail significant benefits for the company on a whole, which is similar to Company G's view on not underwriting risks that do not align with their organizational risk appetite. This could result in severe financial repercussions if they do not have adequate reinsurance coverage. As described by Fatemi & Glaum (2000), the survival of the firm, focusing on the financial aspects, is a core objective for many of the case companies, which is also a core aspect of the ERM framework.

Based on our theoretical framework, the five main steps of risk management can be summed up into *identify, assess, mitigate, implement and create a response strategy*, where the first four steps are conducted regularly before a potential disruption and the final step during or after the disruption (Sodhi & Tang, 2012; Rejda & McNamara, 2013). We can deduce from our empirical findings that all case companies execute similar steps when managing risks and disruptions to some extent as very few respondents provided detailed information about the

entire process. Company A, for instance, has further divided their risk management process into pre-, during and post-loss, such details have not been explicitly given by any other respondent. However, all companies conduct regular risk meetings on either a monthly or quarterly basis to discuss current risks and threats to their organizations.

5.2.1 Identifying Risks

As stated above, all case companies have regular meetings to identify and assess current and potential risks each organization is subject to. According to the literature, insurers can categorize risks into *systematic, actuarial, liquidity, credit, operational* and *legal* (Santomero & Babbel, 1997; Oscar Akotey & Abar, 2013). Our results indicate that insurers and insurance brokers have a similar view on risks, however, they do not explicitly divide them into these categories nor did they address all of them. They firstly distinguish between internal and external risks, also known as client-related, given that insurers need to assess risks twice as described by Oscar Akotey & Abar (2013). Many respondents commented on risks related to underwriting, macro-economic variables, compliance as well as risks associated with employees.

Insurers primarily need to assess and underwrite the policyholders' risks (Oscar Akotey & Abar, 2013). As stated by most of the respondents, underwriting risks are a significant risk for insurers as it is important to stay within their predetermined risk appetite and limits. These findings are consistent with Hull (2007), who emphasizes the importance of insurers having a comprehensive understanding of their current risk portfolio and the range of risks they are prepared to accept in the future. This understanding serves as a foundation for effective risk management practices for insurance companies. According to Vilko & Ritala (2014), risk management of service products needs a flexible, unique and real-time approach, which is further confirmed by our empirical data. Many case companies stated that they use risk engineers to aid in the identification and assessment of client-specific risks, where they regularly conduct inspections of facilities and sites given that risks are dynamic. Thus, they ensure that the risks they underwrite are within their own risk appetite through regularly conducting inspections. Vilko & Ritala (2014) advocate for a real-time approach to risk management given that the service offering and the management of the possible risks occur simultaneously. Our empirical findings support the conclusions of Vilko and Ritala (2014) that a pre-planned approach to risk management is not sufficient to effectively manage risks. The fact that the risk is absorbed by the insurer at the same time as the insurance policy is in effect highlights the need for insurers to have the ability to act on and manage possible risks in real-time as they occur.

Furthermore, companies such as Company G and E delegate underwriting authority and have thorough guidelines as well as peer review processes to ensure that all risks are within the companies' risk appetites. Moreover, respondent A1 shared detailed information about their internal risk management process, which includes having a risk committee to identify and assess all types of risks the company faces. The committee meets every month to discuss new risks and developments. In addition, individual teams at Company A take part in the risk identification process, with risk coordinators aiding in the transmission of these newly identified risks to senior management.

Oscar Akotey & Akbar's (2013) second approach to risk is related to the investment of premium and equity capital. None of the respondents disclosed any detailed information about their internal premium and capital investments. However, Company C stated that they account for investment risks when identifying new risks, which were remarkably relevant during the pandemic as the bond and stock markets were very volatile during this time period. Companies C, D and E also take a macroeconomic approach when identifying risks, which is in line with Santomero & Babbel (1997) and Oscar Akotey & Abar (2013). Currently, there are many concerns regarding the rising inflation as well as climate risks. Furthermore, the insurance industry is heavily regulated and requires all actors to comply with laws and regulations (Santomero & Babbel, 1997; Sinkey, 2002; Oscar Akotey & Abar, 2013). The case companies placed great emphasis on compliance and abiding by legal frameworks as well as the risks associated with non-compliance. Particularly, Company D's responses to the majority of the questions were heavily centered around legal frameworks and compliance.

Our empirical findings suggest that risks related to employee well-being receive much more attention compared to what the literature states. Since insurance products are intangible and do not require the use of production machines, employees and their knowledge play a crucial role in the industry. While the literature touches upon employee risks, including operational and legal risks such as mishandling of policy documentation or non-compliance of legal frameworks, it fails to highlight the importance of employee well-being in the effective operation of the company (Santomero & Babbel, 1997). All companies discussed employee well-being, employee retention as well as the recruitment of new employees. It is highly important to find individuals who possess the right expertise and personalities. Furthermore,

it is equally important to ensure that the company retains this talent by investing resources into preserving their well-being. This became increasingly important during times of crises and distress such as the Covid-19 Pandemic.

5.2.2 Assessing Risks

According to our theoretical framework, the second step in the risk management process is to assess and quantify the identified risks (Rejda & McNamara, 2013; Sodhi & Tang, 2012). This is crucial in prioritizing risks and subsequently in allocating resources accordingly (Sodhi & Tang, 2012). Several methods can be applied to assess and prioritize risks. Firstly, Manuj & Mentzer (2008) suggest that historical data can be utilized to analyze the behavior of risk probability distribution, however, this method may be unreliable, insufficient or unavailable. None of the case companies stated that they use historical data to a large extent to assess their risks. This method is inadequate in assessing abnormal risks since they have never occurred before and there is no historical data on them (Sodhi & Tang, 2012).

Instead, most of the case companies use a matrix consisting of the probability of the risk occurring and the possible financial impact, which is similar to the approach stated by Sodhi & Tang (2012). A matrix of the two parameters is created to identify the most significant risks, which is used as the basis for the appropriate resource allocation. Company A and B simply label the different risks 'green', 'yellow' or 'red' depending on the severity of the risk. Company B further assesses their risks based on their relative financial impact, brand impact as well as legal and compliance risks. Similarly, Company D also utilizes color coding as well as the probability-impact matrix as a means of prioritizing the most urgent risks and allocating resources accordingly. The empirical findings indicate that it is important to take a systematic approach to assessing and prioritizing risks, which is especially important in an industry that deals with and underwrites a wide range of risks on a daily basis. It can also be valuable to not also take into account additional parameters when evaluating risks, similar to the approach adopted by Company B, as this provides a more comprehensive understanding of the risk.

5.2.3 Selecting Techniques

The third step of the risk management process involves selecting the appropriate technique or combination of techniques to accept, mitigate or completely avoid the risk (Kasap & Kaymak, 2007; Sodhi & Tang, 2012). Insurance or broker companies may choose to mitigate

or avoid a risk based on its type and potential impact. Majority of the case companies have a stronger focus on mitigating and avoiding internal risks, rather than accepting them without taking steps to minimize the possibility of them occurring. According to Sodhi & Tang (2012) and Kasap & Kaymak (2007), fully accepting the risk does not reduce the impact of the risk and can encourage moral hazard behaviors if the risk is transferred to an insurance company. Companies A and C shared that their main internal risk objective is to avoid and mitigate risks to the best of their ability in order to protect their finances and ensure business continuity, which is in accordance with Rejda & McNamara (2013) and Fatemi & Glaum (2000).

Some companies did not explicitly express whether they accept, mitigate or avoid risks. However, insurers work with risks on a daily basis and they stressed the importance of adhering to a predetermined risk appetite when underwriting new risks. Underwriting new risks is a form of accepting risk as described by Sodhi & Tang (2012) and Kasap & Kaymak (2007). Insurers transfer some of this accepted risk to a re-insurer, which is a form of risk financing (Rejda & McNamara, 2013). However, as clearly emphasized by the majority of our respondents, it is very important to only underwrite risk that is within their risk appetite and their reinsurance agreements as well as apply appropriate exclusions. Sodhi & Tang (2012) and Kasap & Kaymak (2007) highlight the importance of implementing systems and principles within an organization to enable early identification of new risks, which can then facilitate the development of a viable risk management response. Failure to identify such risks in a timely manner could result in devastating and long-lasting effects. Company G implements guidelines, peer review processes, and formalities to ensure that risks underwritten align with the company's overall risk appetite, similar to the process of Company E.

5.2.4 Implementation and Monitoring

According to Oldfield & Santamero (1997), it is vital that financial institutions have risk management practices that are effective in the sense that they can be seamlessly integrated within the organization and allow for long-term success and stability. The authors further highlight the need for the risk management strategies to be monitored and evaluated on a regular basis. Similarly, Rejda & McNamara (2013) also emphasize the importance of reviewing and evaluating the risk management practice continuously. Internal audits are crucial for verifying that the risk management strategies have been implemented across the

organization as well as monitoring compliance. Company E, for instance, conducts several internal audits every year and ensures that everything is well documented and saved in an appropriate manner in accordance with internal guidelines. Company E and Company F continuously evaluate their risk management processes at both the group and individual local office levels through a combination of top-down and bottom-up assessments. Company F has appointed a Chief Risk Officer to conduct internal controls and implement rigorous processes.

Our empirical data revealed that communication plays an essential role in developing an effective risk management process, which was not as emphasized in the literature review. Whilst Rejda & McNamara underscore the importance of creating a risk management policy statement to be shared across the organization, they did not address how to ensure that communication with regards to risk is effectively received and integrated into everyday work life. Although none of the case companies reported having a formal risk management statement that outlines their risk management objectives, all of them confirmed that risk thinking exists at all levels within the organization, which is not unusual considering that the core objective of the insurance industry is to mitigate the financial burden of risks. In the case of Company H, the effectiveness of their risk management practices results from the rapid and efficient communication among their employees.

Further, as highlighted by Scannell et al. (2013), it is important that effective communication starts at the top of the organization, which can be confirmed by Company H. According to the responses of Respondents H1 and H2, their CEO based in the UK is described as a proactive and effective communicator, utilizing various communication platforms. Further, Company A ensures that they have effective risk communication along the entire value chain as well as throughout the entire loss procedure. A project leader is appointed to oversee and guide the insured from the time of the disaster until the restoration process is completed. Following the loss, it is crucial to hold meetings with the broker and client to discuss their experience and explore possible areas for improvement within the functions of the organization. Comprehending the advantages and weaknesses of the value chain activities allows Company A to reflect internally and evaluate how they can enhance their products and services to better align with the expectations of their brokers and clients, which is in line with the findings of de Waart & Kemper (2004) and Wang et al. (2015).

As described by Scannell et al. (2013), although senior management is responsible for the risk management processes, it is important that ERM is embedded within the firm's organizational culture, which was evident across all of the case companies. The risk management process is primarily centralized, where all companies have a risk management group of senior managers discussing the potential risks the company is facing. However, risks are identified and managed on a team-level as well given that this industry is essentially selling solutions for risk management. Company E regularly holds brainstorming sessions to encourage contributions from employees towards the risk identification process. Company D's ERM structure is centered around building a risk culture, which includes comprehensive policy frameworks, incident management framework, risk controls and business contingency plans. Respondent D1 explains how risk management is divided into first line, second and third line of defense. According to respondent D1, "risk management cannot be built on fear", which is in line with Gupta (2011), who stated that risks should not be seen as threats to the business, but rather as opportunities for growth and value maximization. Similarly, the ERM framework allows for value creation and exploiting opportunities, which could lead to developing a competitive advantage (Wang & Faber, 2006; Cater et al., 2009). In order to identify areas of growth and realize the growth journey, it is essential to have transparent risk management practices as described by respondent D1.

Even though the remaining companies did not explicitly discuss their ERM practices, they displayed elements of the ERM framework when describing their internal risk culture. Company H ensures that they continue to develop a strong and compliant risk culture throughout the whole organization, similar to the one in Company D. Company E ensures that risk is embedded within the organizational culture through having both top-down and bottom-up flows of information. Similarly, in Company A, a well-defined delegation system exists for the responsibility of the identified risks. The risk committee sends the identified risks to the CEO, who delegates the responsibility of each risk to different department heads. These department heads then communicate the delegated responsibilities to their respective teams. In addition, respondent G1 expressed that it is essential to create a culture of risk understanding including learning from mistakes. Risk culture is also a key performance indicator for Company D, which is also measured and rated by Standard and Poor's (2007). It ensures that risk awareness and understanding of the company's risk appetite is not only the responsibility of the senior management team, but is also cascaded down to every employee. As a result, the company can gain a more comprehensive understanding of its risks and how

they impact the overall operation of the business, creating a risk culture that is intuitive and aligned with Vilko & Ritala's (2014) conclusions regarding a proactive risk management approach.

5.3 Managing Risks during a Global Disruption

The insurance industry demonstrated remarkable robustness during the pandemic, where even some case companies expressed that they experienced levels of growth and profitability like never before. Despite it being characterized as slow and outdated, the insurance industry swiftly adapted to the unique circumstances, as per the feedback received from the respondents. This rapid adjustment can be attributed to the efficacy of the implementation of a suitable response strategy, as introduced by Sodhi & Tang (2012). The final step of Sodhi & Tang's (2012) risk management process, creating a response strategy, is separated from the first four steps analyzed above, as it occurs during or after the disruption. The authors have introduced a '3-D Framework', which effectivizes and streamlines the entire response strategy development step. Current literature, however, does not explore how the insurance industry should formulate such a response strategy during a global disruption. Furthermore, risk management within the service sector is still in its infancy, specifically within the insurance value chain. Although the structure of the insurance value chain is complex and spans across the globe, our empirical findings highlight the need for a pragmatic risk management approach that is implemented on an organizational level. Hence, we have identified the following four themes that we deem are essential to managing the insurance value chain effectively during a global disruption such as the Covid-19 Pandemic.

5.3.1 Theme 1: "Have a people-perspective"

As described by Rejda and McNamara (2013), social responsibility is a part of the post-loss objectives and should be addressed by risk managers. Company A, in particular, has invested a significant amount of resources into their corporate social responsibility practices. It is important to ensure that the effects of a loss on external parties such as employees, customers and society in general are minimized. Although some case companies had the objective of maintaining robust financials, there was consensus on ensuring the well-being of their employees above all else, which was not evident in previous literature. This was also a part of ensuring business continuity remotely, which also included investing resources into maintaining relationships between insurers and brokers as well as brokers and clients. Company C launched an initiative consisting of five focus areas where the employees'

well-being was one of them. The company found that working from home increased flexibility and efficiency, however, the team's development came to a standstill and the organizational culture gradually faded. As a result, the company decided to focus more on how to preserve the organizational culture while also nurturing the employees' development. This was a shared perspective with Company F who also emphasized the significance of empowering employees while being transparent and having a flat organizational structure.

Moreover, people's well-being was the most significant aspect for Company D as well during the pandemic. The company had to make various decisions related to working remotely to ensure that the employees felt safe and protected and had a good working environment at home. This was similar to Company G who provided employees with all necessary resources to work remotely. Additionally, Company D were also in contact with various governments and discussed how they could support both personnel and clients. As the companies moved towards working from home, Company E's trust in their employees increased and they found that people enjoyed having more responsibilities and more freedom. As the empirical findings suggests, all participating firms initially focused on the employees' well-being and found that to be the most significant aspect in an organization, especially in a global disruption such as the Covid-19 pandemic where people no longer could see each other and had to work from home. The case companies provided continued support to the employees throughout the whole pandemic which ensured business continuity and financial stability along the entire insurance value chain.

5.3.2 Theme 2: "Be flexible and creative"

The majority of the respondents had pre-existing business continuity or contingency plans in place prior to the pandemic outbreak, but these plans did not specifically account for a global pandemic. This is likely due to the fact that many respondents did not anticipate such an event occurring in modern times, leading to a lack of specific contingency plans for pandemics. As described by Sodhi & Tang (2012), the Design time of the response strategy can be reduced if the firm can create a contingent recovery plan that includes strategies for various types of disruptions in advance. The case companies had contingency plans in place for a variety of disruptions that they believed were likely to occur. For instance, they had plans for remote working in case of serious illnesses or offices burning down, which proved to be very useful and applicable to the pandemic. This ultimately allowed the companies to

quickly adapt to the pandemic and ensure business continuity, which is in line with the findings of Sodhi & Tang (2012).

At the beginning of the pandemic, many people thought that it would pass relatively fast, such as Company I. All companies quickly shifted from working at the offices to working from home in accordance with the local regulations at the time. Smaller offices with less employees could continue going into the offices whereas larger offices had to be temporarily closed. In addition to having to identify and assess their own risks, the firms also had to do the same with the clients' risks. However, the case companies managed to do so and did not have any significant issues since they regularly assess and prioritize potential risks. The respondents frequently mentioned that pre-existing contingency plans and prior well-structured risk management processes aided in efficiently managing the unforeseen pandemic. As the pandemic continued in the following months, many firms acknowledged that it is possible to work from home and can be more efficient since there are no travel times and meetings can be conducted digitally. As a result, the companies implemented a hybrid format where employees have the option to work remotely.

Moreover, to successfully respond to the pandemic in a short amount of time, the case companies recognized the significance of flexibility and creativity. Since insurance companies assume the clients' risks, insurers need to have a clear understanding of the current risk portfolio and potential future risks they are willing to take to ensure that total risks do not exceed their own risk appetite (Hull, 2007). As company C and F acknowledged, one of the most significant internal risks is the accumulation of risks. Therefore, insurers must conduct inspections to have an accurate overview of the clients' risks. Due to the pandemic, the risk engineers were no longer able to physically execute the inspections which required the case companies to be creative. The companies had to turn to digital solutions, such as Company E and H who conducted inspections by allowing clients to walk around and film with a GoPro. Additionally, Company F acknowledged that being flexible is a competitive advantage in the insurance industry. Creativity and flexibility allows organizations to create value and exploit opportunities, which in turn enhances a firm's competitive advantage (Wang & Faber, 2006; Cater et al., 2009).

5.3.3 Theme 3: "Communication is key"

By establishing mechanisms and procedures to quickly detect or predict a disruption or risk before it happens, the Detection phase can be significantly shortened (Sodhi & Tang, 2012).

As the world had not encountered a pandemic of this magnitude before, the case companies did not anticipate that one would occur in 2020. Despite not predicting the occurrence of a pandemic, the case companies were able to prepare in advance due to the global interconnectedness of the insurance value chain, as they engage in international business with global clients and partners on a regular basis. This regular cross border communication allowed them to obtain information about the pandemic at an early stage and make necessary preparations to ensure business survival.

Furthermore, the Deployment time can be significantly reduced through effective communication and coordination across the supply chain (Sodhi & Tang, 2012). Given that the insurance sector heavily depends on creating relationships and networking, it was essential to keep all parties involved in the insurance value chain informed of the necessary measures taken to mitigate the impact of the pandemic. Company I, for instance, was very quick to inform their network and clients regarding the impact of the pandemic on various insurance coverages, which conforms with the ERM framework (Scannel et al., 2013). Although risk management is the responsibility of the top management team, some case companies reported that the risk management structure is very flat and there was some local autonomy regarding risk management during the pandemic (Scannell et al., 2013). According to Respondent I2, the senior management based at the headquarters promptly issued directives to all subsidiaries concerning the pandemic. However, each office formulated its own local interpretation of these instructions. Other case companies reported a similar risk management structure. They received instructions from headquarters to shift work to remote settings, while some companies were allowed to make local decisions and even allowed office operations but under strict regulations regarding sanitation and maximum number of employees. For Company C, their flat and inclusive risk management structure allowed for quick and effective communication throughout the entire organization as well as the value chain. This in turn led to the development of a proactive response strategy that ensured the robustness of the company.

Moreover, business continuity included maintaining external communication along the value chain even though international travel and physical meetings were banned. For the insurance companies, it was very important to maintain a strong presence with the brokers as they act as their distribution channel by bringing in new business opportunities. During the pandemic, the case companies reported that all external meetings were switched to digital solutions such as Teams, which created a new way of conducting business as described by Company H. This

solution proved to be very efficient as the respondents were able to maintain their external relationships to a great extent. This in turn allowed for continued partnerships, which ultimately led to new business opportunities and enabled the insurance industry to maintain strong financial performance throughout the pandemic. Hence, we can deduce that effective communication is not only vital between departments within an organization but also along the entire insurance value chain.

5.3.4 Theme 4: "Learn, reflect and adapt"

Previous literature does not include the importance of learning from mistakes and adapting the risk management process accordingly, which was heavily discussed by our respondents. None of the case companies had a clear plan in the case of a pandemic since it was a highly unforeseen occurrence, however, their experiences of the pandemic resulted in various lessons learned for all participants. Our empirical findings revealed that it is important to adopt a global perspective considering that the pandemic impacted the whole world, not just the individual companies. Thus, as explained by Respondent H2, it is important to trust the process, as everything that they thought would not work ultimately proved to be successful. Company B emphasized the importance of not being afraid to be flexible and to try new methods in unfamiliar situations, as the world has the ability to adapt over time.

Furthermore, many respondents reported that the learnings that they have acquired from experiencing the pandemic has enabled them to be more prepared for future disruptions or crises. An example is Company A, which places a significant emphasis on reviewing and adjusting their risk management structures and protocols, drawing from insights acquired from prior events, to prepare them for potential future disturbances. Many case companies, such as Company G, aim to create a culture of learning, where mistakes are evaluated, ensuring that they will not be repeated. Hence, creating a mechanism embedded within the organizational culture for mitigating and avoiding risks, in other words, having a risk-aware culture. Although the companies may not have specific contingency plans for unpredictable future disruptions, the insights and lessons gained from managing prior crises provide them with a foundation for managing the next one.

5.4 Revised Integrated Theoretical Model

In order to explore our research question, 'How can the insurance industry manage risks and global disruptions to the insurance value chain?', we developed an integrated theoretical

model based on different streams of literature. The discussion above has highlighted the need for adjustments to our original model developed in Chapter 2.5. Although the fundamental steps of the risk management process appear to conform with those identified by Sodhi & Tang (2012) and Rejda & McNamara (2013), our empirical findings have revealed that managing risks and disruptions within the insurance value chain require a different focus and approach. Furthermore, our empirical results validate the findings of Vilko & Ritala (2014) that service supply risk management requires an approach that is intuitive, unique, flexible and in real-time. We can also draw parallels between our empirical results and ERM, where both stress the importance of integrating risk management within the firm's organizational culture.

Nonetheless, through conducting interviews with insurers and insurance brokers regarding their risk management strategies during global disruptions, we have extended this model to be more tailored to the insurance sector. The majority of our companies successfully managed the pandemic with minimal impact and demonstrated remarkable robustness throughout the course of the pandemic, where some even experienced increased growth and profitability. In chapter 5.3, we have presented four main themes or approaches that need to be incorporated into the risk management process in order to ensure its effectiveness. We argue that the themes are intertwined and do not allow for an effective risk management if they exist in isolation. For instance, having a people-perspective requires good communication practices and being flexible. Additionally, our case companies continually evaluate and adapt previous risk responses and strategies in order to improve the risk management process. As discussed above, there is a lack of previous literature on how the insurance industry should create an effective response strategy in order to manage disruptions such as the Covid-19 Pandemic. Based on our empirical findings, we can deduce that the response strategy also needs to reflect the four themes or approaches identified. As the insurance value chain is heavily dependent on the formation of external relationships to create value, it is essential for the response strategy to be creative and prioritize maintaining these relationships, which requires having a people-perspective both internally and externally.

Hence, our integrated theoretical model on how the insurance industry should manage risks and disruptions within the insurance value chain can be summarized and illustrated in Figure 7 below. The three first themes that we identified: *people-perspective*, *flexibility/creativity* and *communication*, are essential to integrate throughout the whole risk management process to effectively manage risks and disruptions. According to Sodhi & Tang (2012) and Rejda &

McNamara (2013), it is crucial to have an iterative risk management process that identifies and assesses various risks on a regular basis, such as monthly or every quarter as reported by our case companies. In the case of a significant disruption or crises, such as the Covid-19 pandemic, it is important to have a real-time approach to managing risks, which is in accordance with Vilko & Ritala (2014). Our empirical findings have emphasized the importance of evaluating and improving the risk management process, which was not highlighted by previous literature. This has led us to add a sixth step to our integrated theoretical model; *Evaluate and adapt*. It is essential to assess both the risk management process and response strategy to the disruption, enabling adaptation for future risks and disruptions, and increased preparedness. This in turn allows for greater robustness of the insurance value chain.

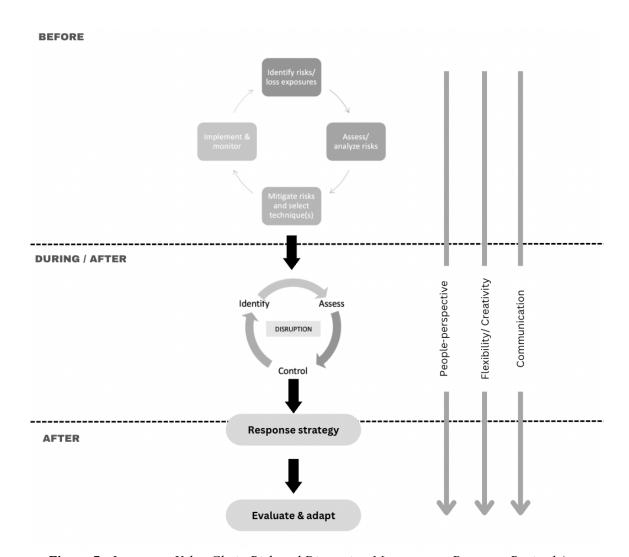


Figure 7 - Insurance Value Chain Risk and Disruption Management Process - Revised (own illustration, based on Chapter 2 and empirical findings)

6.0 Conclusion

Due to the growing complexity of value chains spreading across multiple countries, they have become increasingly vulnerable to disruptions, as exemplified by the Covid-19 Pandemic. The current body of literature on risk management in the service industries is relatively undeveloped, with little research conducted on the insurance value chain. Furthermore, given the unprecedented nature of the pandemic, there is limited available research on the impact on risk management. Hence, our thesis sought to answer the following research question, How can the insurance industry manage risks and global disruptions to the insurance value chain?. We developed an integrated theoretical perspective based on existing literature on insurance value chains, service supply chains and risk management, which was presented in Chapter 2 of this thesis. Following this, we carried out a multiple-case study through conducting 14 interviews with specialists, middle and senior management from seven insurance carriers and two global insurance brokers. The empirical data gathered was then analyzed against our theoretical framework in terms of the insurance value chain structure, the risk management process and the management of the pandemic. By incorporating our empirical findings, we were able to conduct a thematic analysis, which led us to revise our original integrated theoretical model and tailor it to the insurance value chain.

Drawing on our empirical findings, we were able to further develop our integrated theoretical model to better reflect the insurance value chain, hence answering our research question and fulfilling the aim of this thesis. Risk management is an iterative process that is conducted on a regular basis. Although pre-planned risk management processes and contingency plans are valuable and vital in handling disruptions, it still necessitates a real-time flexible approach, particularly in the case of unforeseen events like the unprecedented Covid-19 Pandemic. The key differences between figures 4 and 7 arise from the fundamental approach to risk management as demonstrated by our four identified themes as well as the addition of an evaluation phase that takes place after a disruption or crisis.

In conclusion, insurers and insurance brokers need to have a distinct approach to managing risks and global disruptions that extends beyond the current literature. Since effective communication and cooperation are critical to value creation along the intangible insurance value chain, a people-focused perspective is essential to establish and sustain relationships during times of distress. Furthermore, the ability to be flexible and creative is a significant factor when managing risks and disruptions, which also requires effective communication

both within and outside the organization. Companies must also foster an organizational culture, where risk management activities permeate the daily responsibilities of all employees through peer reviews, compliance and adherence to guidelines. This in turn allows for a quick and flexible response to the disruption, minimizing the overall impact. Further, our empirical findings have highlighted the importance of continuously enhancing the risk management process and revising response strategies, which requires the need for continuous evaluation and learning from past experiences, especially following a significant global disaster.

6.1 Managerial Implications

Risk management is an integral part of every organization and commonly consists of extensive processes in order to successfully identify, assess and control various risks. An unexpected disruption can significantly impact risk management, resulting in difficulties for managers when navigating through such disruptions. Managing risks when encountered by an unforeseen occurrence can be facilitated when managers have the four identified themes in consideration. Companies can enhance their competitive advantage by establishing a people-perspective throughout the organization where nurturing employees' development and ensuring their well-being are pivotal. This is especially pertinent in knowledge-intensive industries where knowledge is the source of value creation, such as in the insurance industry.

Managers can ensure employee development by offering training and additional opportunities that can lead to development, such as being flexible and allowing people to take more responsibility. Moreover, being flexible and encouraging creativity can result in innovation and enables firms to quickly respond to various unanticipated disturbances as well as other organizational risks that may emerge. Due to the complexity of insurance value chains, effective communication is crucial among actors in the insurance value chain in order to promptly respond. Management should aspire to create a transparent culture with a focus on effective communication. Additionally, learning and reflecting on prior experiences are essential since it allows organizations to revise their existing risk management processes and thus increase preparedness for any future unexpected disruptions.

6.2 Theoretical Contributions

This thesis investigated risk and disruption management in the insurance value chain, with a focus on how the insurance industry managed the Covid-19 Pandemic. This industry's value chain has previously been overlooked by international business researchers due to the

intangible nature of their products. Notwithstanding the intangibility, the insurance value chain is similarly structured to the traditional global value chain and supply chain as they participate in cross-border networks across the world. Additionally, insurance carriers and brokers act as an external risk management function when there is a lack of knowledge and expertise.

By studying this subject and developing an integrated theoretical perspective, we contribute to the scarce existing literature on risk management for service industries with intangible products as well as managing unexpected disruptions to global value chains. This research has revealed that the insurance industry needs to move beyond traditional risk management approaches and adopt a more people-centric outlook focusing on communication, flexibility and learnings. Additionally, we contribute to the field of international business by highlighting the significance of the insurance industry in conducting international business. Insurance is essential for all companies, regardless of size and industry, as they provide financial stability and protection in times of distress. Without a robust insurance industry that can provide financial security during disruptive occurrences, further expansion and the ability to pursue global business opportunities would not be possible for MNCs.

6.3 Future Research

Several research areas have been identified for future exploration regarding risk management in the insurance industry. Since the concept of risk is fundamental to the insurance industry at all organizational levels, this study could be further extended by not only interviewing middle and senior managers but also the general staff in various functions. This could provide a more comprehensive understanding of how risk management is integrated throughout the organization, with a greater emphasis on different perspectives and roles. Given the limited time frame, we were only able to conduct interviews with employees located in the Nordics. However, it would be valuable to conduct interviews with employees in various offices worldwide to gain a more international perspective and explore potential variations in risk management practices based on location. This would be particularly intriguing considering the varying approaches countries have adopted in response to the pandemic.

Further, given that there is a rise in artificial intelligence and digitalization as identified by our respondents, it would be interesting to explore the potential effect this has on the risk management process in terms of automation, reliability and efficiency. Another potential area of future research is to investigate how the consumer side of insurance handled the pandemic

and compare the findings with this thesis. Although the same company can provide both consumer and commercial insurance solutions, the risk exposures and products are quite different, thus, insinuating a different risk management approach.

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Appendix A

Interview Guide

General information about company and respondent:

- To what extent is *your company* present on an international scale? Are different functions located in other parts of the world?
- What is your position within *your company* and what are your main responsibilities?
- Briefly describe your experience within the insurance industry.

Structure of value chain:

- How does *your company* create value?
- How is the value chain structured? What role does *your company* play?
- What does the product development process look like? (How do you improve/ from where do you get input?)
- How important is networking/ creating partnerships with external actors for *your company*? Can you give examples of this?
- What are the biggest risks you/ *your company* have to account for on a regular basis in terms of the value chain?

Effects of the Covid-19 Pandemic:

- How did the Covid-19 pandemic affect *your company's* daily operations? (local and global perspective)
- How did *your company* adapt to the pandemic?
- What was the most challenging aspect for *your company*?
- How has the pandemic impacted the insurance industry in general?

Risk management:

- What risk management strategies/ processes are implemented in *your organization*?
 What are your pre-loss objectives? (proactive or reactive/accepting, avoiding, mitigating)
- Which factors are crucial for effectively managing and enduring a crisis?
- Does *your company* follow a general risk management process of identifying, assessing, mitigating and monitoring risks? How do you prioritize different risks?
- How is the risk management strategy evaluated?

- How is *your company's* risk management strategy developed? (Who is involved?)
- How does *your company* ensure that risk management is part of the overall organizational culture? How is it communicated?

Risk management strategies during/ post-Pandemic:

- Given that the pandemic is such a unique event, did *your company's* risk management strategy change? If so, what changes did you implement?
- How fast did *your company* react to the pandemic? How are changes implemented?
- How flexible is your company in terms of implementation of risk management strategies?

Future outlook:

- What have you/ your company learnt from the pandemic?
- What would you/ *your company* do differently if another pandemic/ crisis were to occur?
- From your perspective, how will the insurance value chain develop in the next coming years? Short-term vs. Long-term. Any trends you have noticed?

Appendix B

Highlights of each Case Company

COMPANY A

- Heavily focused on digitizing the value chain and increase convenience for their clients
- ❖ A superior customer service function is key to value creation
- Sales decreased as employees began working from home (loss of work culture and lively atmosphere)
- ❖ Lack of socialization between co-workers led to increased worries about mental health and wellbeing
- Traveling has decreased and digital meetings are still very prominent due to convenience and efficiency
- * Risk management strategy is to avoid and mitigate internal risks
- Risk committee meetings every month and larger meetings every quarter to identify and categorize risks as 'green', 'yellow' or 'red'.
- ❖ Clear system of delegating risks throughout the organization
- Special 'Corona project committee' set up to identify risks associated with the home working environment, mental health and wellbeing
- ❖ Important to plan for the unknown and have a clear risk management plan in place before a disaster occurs
- Essential to learn from experience and update risk and crisis management plans accordingly

COMPANY B

- Company B wants to challenge the insurance industry and balance out the market.
- ❖ The company creates value for their clients by providing financial security, manage risks and ensuring that they are always available for their clients.
- ❖ Significant internal risks are associated with personnel and their knowledge.
- Quickly transitioned into a work-from-home arrangement when the pandemic first reached Sweden.
- Respondent B2's group were used to conducting digital meetings due to the widespread geographical locations of the employees.
- Risk committee meetings every quarter and larger meetings once a year to identify and categorize risks as 'green', 'yellow' or 'red' depending on the severity.
- ❖ 'Risk Coordinators' are tasked with communicating risk management protocols on a team level and ensuring compliance.
- No crisis plan for pandemics specifically was in place before the pandemic, nevertheless, they managed to quickly adapt.
- * Risk management strategies are communicated through a top-down hierarchy.
- ❖ Accidents significantly decreased during the pandemic.
- * Risk management strategy remained unchanged during the pandemic.
- ❖ The insurance industry will continue to undergo digitization and automation in the near future where the role of people's minds and attitudes will increase.

COMPANY C

- Company C creates value for clients and society by stabilizing economic fluctuations, enabling prediction and managing risks
- ❖ They prioritize efficiency, quality and unique collaborations
- Their value chain is heavily dependent on insurance brokers as they are their only distribution channel
- Company C strives to remove risks completely, and if not possible, mitigating consequences
- The company controls for internal risks every years and conducts stress tests on a monthly basis and more frequently when necessary
- During the pandemic, they quickly developed a project initiative to assess risks and identify focus areas
- They quickly adapted to a work-from-home solution but experienced a loss of company culture, development and innovation
- ❖ A significant internal risk is related to accumulation of risks, such as when numerous clients are affected by the same event
- ❖ A clear crisis plan for pandemics was not in place beforehand but they had a good and efficient risk management structure
- ❖ Takeaways from the pandemic include being transparent and communicating with the personnel while ensuring their wellbeing
- ❖ The demand to access information and sustainability issues will increase in the insurance industry and business in general

COMPANY D

- Company D creates value for clients and society by providing financial security, freedom in business activities and managing risks
- ❖ They prioritize building strong relationships with the clients and partners
- ♦ Most knowledge is in-house due to the company's global presence and networks
- ❖ The company manages risks and conducts controls in accordance with legislation
- Establishing a risk culture that is transparent and communicated throughout the company is essential
- Personnel wellbeing is extremely significant which became more apparent during the pandemic
- Company D had already discussed working remotely before the pandemic which enabled them to quickly adapt
- * Risks related to cyber security emerged as personnel began to work from home
- ❖ The company had contingency plans in place beforehand, however, it was different when the pandemic actually occurred
- ❖ Takeaways from the pandemic include the significance of access to information when decision making and acting in accordance with the organizational culture
- New laws and regulations are being discussed in relation to ethics and technology, including the use of AI

COMPANY E

- ❖ Company E creates value for their partners and clients by providing financial security, extensive knowledge and renowned claims handling
- ❖ Building strong relationships with clients and partners is essential
- Significant risks are related to the protection of clients and ensuring that the various implemented processes are being followed
- ❖ Essential to have regular internal audits, risk analyses and follow-ups
- The risk culture is communicated throughout the company by having both topdown and bottom-up flows of information as well as brainstorming sessions
- Transition to working from home worked surprisingly well and communication remained efficient, even with clients
- ❖ The company had a clear crisis plan before the pandemic which has now been revised and includes both a Head of Security and a Head of Business Contingency
- ❖ Due to the global client base, company E acknowledged the pandemic early on
- ❖ Managers have learned how to manage their team remotely, it is essential to have a high degree of trust while giving the team more autonomy and responsibility
- ❖ The significance of local actors became more evident since the pandemic heavily restricted traveling
- ❖ The insurance industry will become increasingly automated and digitalized where AI will be more prevalent

COMPANY F

- Company F creates value for its clients by providing financial security through their knowledge, capabilities and offerings.
- ❖ Dependent on maintaining strong relationships with brokers since they are the only distribution channel.
- ❖ Innovation is accomplished by using the company's global presence and network. including working with external partners.
- Company F's most significant risks are associated with regulatory risks, the undertaking of clients' risks and the accumulation of risks.
- ❖ Internal risk controls and evaluations are conducted regularly.
- The company had a very people-oriented approach when the pandemic hit and quickly adapted to working remotely.
- ❖ Due to the pandemic, the industry has become more digitized and more efficient but it is significant to maintain the organizational culture.
- ❖ Company F had a clear business contingency plan in place beforehand.
- No significant changes were made related to risk management, however, there is more focus on the terms.
- Awareness of risks has increased and the company focuses more on employees' well-being.
- ❖ The industry will move towards digitalization and will likely become more segmented as well as differentiated.

COMPANY G

- Company G creates value for its clients through its financial strength, which allows it to take on consumer risks effectively without being very volatile compared to its competitors.
- ❖ Their geographical spread allows them to service their clients in the countries where they have operations.
- ❖ Company G has a continuous product development process that is in line with market needs and competitors' offerings.
- ❖ Contract risks, where the contract does not align with the intentions and risk appetite, are one of the biggest internal risks to consider.
- Company G has implemented guidelines, peer review processes, and formalities for deviating from certain wordings.
- ❖ The peer review process is led by the respondent, and internal audit and compliance teams help ensure that risk management practices are implemented and followed.
- ❖ It is important to create a culture of learning to avoid repeating the same mistakes.
- Guidelines are developed centrally based on each line of business, and underwriting authority is delegated from top management to underwriters.
- Risks are prioritized based on their financial effect and probability. Meetings are held quarterly to discuss and evaluate risks and to evaluate the chosen mitigation strategy.
- ❖ In March 2020, Company G focused on ensuring that every employee could continue working remotely, which was resolved within a week.
- ❖ The company focused on quantifying the changes in conditions and how they affected their product offerings as a result of the pandemic.
- Wordings for multiple products became standardized to increase control
- ❖ Internal and external meetings shifted to digital communication platforms, which was a difficult transition at first
- The primary risks during the pandemic were increased financial claims and employee well-being, including feasible working environments and mental health.
- ❖ A clear crisis plan/business continuity plan was in place for remote working, though not specifically for a pandemic.

COMPANY H

- ❖ Their global presence and extensive expertise create value for their clients.
- ❖ Highly important to get to know the client and understand their needs and risks.
- Creating valuable partnerships and networks is key to value and product creation.
- Financial performance and client retention rate did not suffer during the pandemic.
- Risk management is highly concentrated on the wellbeing of employees- important to protect the knowledge, competence and expertise.
- Working from home resulted in higher efficiency rates and digital communication was not seen as a problem.
- Group CEO manages significant global risks and effectively communicates them to individual employees through a well-defined hierarchical structure.
- Risk management processes quickly adapted to the pandemic to maintain business continuity.
- ❖ Hybrid model has been adopted to cater to employees' different preferences.
- * Relationships can still be maintained without the presence of physical interaction.
- ❖ The underlying function of the insurance industry will not change in the near future.

COMPANY I

- ❖ Company I creates value for its clients through three channels: conducting risk analysis and assessment, implementing risk prevention measures, and educating clients about insurance solutions.
- ❖ Building and maintaining client relationships is crucial for the insurance industry.
- ❖ A significant internal risk is associated with risk advisory.
- ❖ It is essential to have a strong organizational culture with a coherent compliance structure throughout the whole group.
- Company I's most significant risks are associated with their "tools" (expertise, knowledge, templates, and effective programs & systems).
- Central risk management directives were communicated from the group where local adjustments were made.
- The company quickly transitioned to online communication when the pandemic hit and compliance measures evolved in response to the pandemic.
- ❖ Discussions regarding pandemic insurance became more prevalent throughout the whole industry and will likely be developed in the future.
- ❖ The pandemic demonstrated the feasibility of remote work, however, the organizational culture is lacking.
- ❖ There may be an increased trend towards digitalization, but personal interaction should not be completely replaced.