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Purchasing and Supply Management

Master Thesis

The Future of Global Sourcing: a Buyer's Perspective Through the Lens of the Dynamic Capabilities Theory

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List of Abbreviations

CSR	Corporate Social Responsibility
DCT	Dynamic Capability Theory
TCE	Transaction Costs Economics
RBV	Resource Based View
JIT	Just-in-Time
NRBV	Natural Resource Based View
CSDD	Corporate Social Due Diligence
EU	European Union
US	United States
ZDC	Zero Deforestation Commitment

Abstract

Firms have the opportunity to benefit from global sourcing, as opposed to local sourcing. These advantages range from cost savings or superior quality, to improved availability or reduced overreliance on existing suppliers. However, global sourcing firms have experienced challenges in recent years, such as logistical issues, new regulations regarding social responsibility and geopolitical tensions. This prompts the question of whether global sourcing can continue, or if firms will decrease global sourcing and increase sourcing from local suppliers. 13 semi-structured interviews are conducted to examine the dynamics of global sourcing with recent developments. The study also examines Dynamic Capabilities Theory to examine which dynamic capabilities can facilitate global sourcing. Findings show that firms are impacted differently by the risk factors. Though the risk factors can pose a reason to reduce global sourcing, this is not the case for every company. The extent to which firms are affected depends on product characteristics, firm-specific developments, the dynamics of the supply market and the developed dynamic capabilities. It is found that firms can mitigate the negative effects of risk factors if the required dynamic capabilities are developed.

Keywords: global sourcing, dynamic capabilities, corporate social due diligence directive, geopolitical risk, logistical risk

Scientific Management Summary

This thesis examines the future of global sourcing. Scientific research pointed out that the advantages of global sourcing are somewhat overestimated. For example, companies that spend larger percentages of their turnover on global sourcing are not necessarily more successful. Furthermore, recent years have been accompanied by several risk factors. Firstly, companies were confronted with supply disruptions, such as natural disasters and COVID-19. Secondly, the Corporate Social Due Diligence directive of the European Union requires managers to crack down on illicit behaviour in the entire value chain. As a result, European buyers must increase due diligence efforts and should also consider a supplier's supplier. A third challenge for global purchasers is fostered by geopolitical events. Weaponised conflicts, as well as trade wars, can change the way that purchasers conduct business. By conducting interviews with 13 purchasers, this research examined whether these three risk factors cause a change in global sourcing practices.

Though the risk factors formed a reason to decrease global sourcing for some companies, the interviews revealed that the three risk factors impacted the firms differently. The extent to which a company was affected by a risk factor depended on the product characteristics, production processes, the way the product was transported, the supplier and the dynamics of the market. The interviews also elicited that firms can develop capabilities to mitigate the negative effects of the risk factors. These dynamic capabilities can be grouped into sensing, seizing and reconfiguring capabilities. Sensing capabilities allow a company to identify market opportunities and threats in the early stages. The purchasers in this study stressed that it was vital to always be informed about prices, logistics, disruptions or delays, innovations and new suppliers. Seizing capabilities are focused on implementing a strategy based on opportunities or threats that were identified in the sensing stage. Reconfiguring capabilities focus on adjusting the organisation to successfully implement the adjusted strategy. The reconfiguring stage includes implementing new technologies, modifying the product, or adjusting the supply base.

Firms can focus their attention on developing a combination of sensing, seizing and reconfiguring capabilities to address challenges they encounter. For example, extensive market research during the sensing phase could discover that customers increasingly value the sustainability of the products. Seizing capabilities include improving the buyer's position towards the supplier and setting up collaborations with suppliers to ensure the supply of

sustainable products. The company uses its seizing capabilities to position itself in the market as a sustainable choice and ensures that the supply chain is able to live up to customers' expectations. Finally, reconfiguring capabilities allow the company to adjust the supply base and only select suppliers capable of delivering sustainable products. That may include selecting suppliers in new regions or returning to local suppliers. Companies can also implement new technologies, such as a certification system, to implement new supply chain practices.

The findings of this study are depicted in Figure 4. The model shows the decision-making process of global sourcing and starts with a business case analysis of where the product can best be produced, based on product characteristics, logistics and suppliers. If a global supplier is preferred, the question is whether the risk factors put pressure on the sourcing process, for example, because logistic costs rise or because a supplier is unable to comply with sustainability regulations. The interviews showed that each firm is confronted with the risk factors differently, with some companies experiencing major difficulties, while other companies were able to continue operations without problems. A thorough analysis needs to be conducted on how the risks impact the firm and what the consequences of these impacts are for the firm.

If the risk factors do pose a reason to search for different suppliers, the company should examine whether alternative suppliers are available. For certain products, production facilities were located in clusters with no alternative suppliers available. If alternatives are not available, a buyer stays with the current supplier. However, if alternatives are available, the question is whether the firm possesses the required dynamic capabilities. In the absence of these capabilities, a firm is forced to return to local suppliers. If the capabilities are present, global sourcing can become a dynamic process. Buyers can switch between suppliers and sourcing can be global at times, but local when risk factors intensify.

The research shows that the decision-making process of global sourcing is different for every firm. Even though risk factors can pose challenges for businesses, purchasers can focus on developing dynamic capabilities to facilitate global sourcing. The dynamic capabilities that were elicited in the interviews are summarised in Table 3. Global sourcing can be particularly challenging in the absence of the required dynamic capabilities. Companies should, therefore, pay attention to developing the dynamic capabilities that are required for global sourcing.

1. Introduction: A Shift from Global to Local

On June 5th, 2023, VDL, a major Dutch industrial family company, announced to relocate the production of bicycle frames back to the Netherlands[1]. This relocation meant that VDL started producing the frames, instead of sourcing the frames from Asian suppliers. VDL had long benefited from the lower prices of the Asian supplier, but the longer delivery times, expensive and polluting transport and sizeable inventories provided a cogent repudiation of the offshore production. Until 2026, 50.000 frames will be produced on VDL's fully automated production line. Many bicycle brands have expressed interest in VDL's 'homegrown' frames.

VDL's move is an interesting development from a Purchasing and Supply Management perspective. Global sourcing, sourcing from suppliers located in other countries, can accompany cost advantages, fosters competition in the supply market and provides access to products not available in the domestic market[2]. However, the downsides of global sourcing have also been pointed out[3]. These downsides, together with recent challenges of global sourcing that European firms have been confronted with, can lead to more firms moving back production processes[4]. This research, therefore, focuses on the transcontinental part of global sourcing. Previous research has already examined a possible turning point in global sourcing[5]. However, a combined analysis of multiple risk factors has not been conducted. Therefore, this research examines the future of global sourcing by considering a variety of risks. It examines whether firms remain sourcing on a global scale, or if other companies follow a path similar to VDL, with production moved back to the continent where the firm is located.

A variety of recent challenges can foster a decrease in global sourcing. Companies are increasingly being forced to implement transparency in their value chain, as a result of new regulations of the European Union[6]. Furthermore, value chains have been impacted by several supply-disrupting events, such as COVID-19[7]. Finally, firms can also be impacted by recent geopolitical risks, such as weaponised conflicts and trade wars[8]. These factors

[1] https://www.vdletg.com/en/news/archief/2023/vdl-groep-to-produce-bicycle-frames
[2] See Monczka, Handfield, Giunipero, and Patterson (2021, pp. 375-377)
[3] See Vos, Scheffler, Schiele, and Horn (2016, p. 345)
[4] See Martínez-Mora and Merino (2021, p. 2)
[5] See Koerber and Schiele (2022, p. 220)
[6] https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=OJ:L_202401760
[7] See Moosavi, Fathollahi-Fard, and Dulebenets (2022, pp. 1-2)
[8] See Ha and Ngoc Thang (2023, p. 1044)

could mark a turning point in global sourcing for European firms, with a period of decreasing global sourcing. This study examines how the decision-making of purchasing is affected by recent developments and how supply chain managers can mitigate the negative effects of these developments. Therefore, the following research questions arise:

RQ1: *How do recent developments impact the global sourcing decision-making of European firms?*

RQ2: *What are capabilities that enable global sourcing and which capabilities are yet to be developed in order to facilitate sourcing on a global scale?*

The research questions are answered by both a comprehensive literature review and 13 semi-structured interviews conducted with purchasing professionals from companies from various industries. The interviews shed light on how the influencing factors distinguished in the scientific literature affected the decision-making of purchasers and which capabilities can be developed to address the challenges.

The results show that the three factors have a higher impact on the sourcing decision-making process than in previous periods, but that different firms are impacted differently by the three influencing factors. Also, sensing, seizing and reconfiguring capabilities are found to be effective in mitigating the negative effects of the influencing factors. Finally, a decision-making tool regarding the global sourcing decision is provided.

This study contributes to the scientific literature twofold. First, the study explores how the decision-making of purchasers is affected by different factors. Previous research examined a possible turning point in global sourcing in relation to COVID-19[9]. Other studies examined the effect of economic sanctions on global sourcing[10], or explored Corporate Social Responsibility (CSR) in the global value chain[11]. However, these studies examine these factors in relation to global sourcing in isolation. This study provides a detailed perspective on the future of global sourcing and considers multiple influencing factors. Second, it considers global sourcing through the lens of the Dynamic Capabilities Theory (DCT) to analyse the capabilities that enable global sourcing. Even though global sourcing can lead to several benefits[12], previous studies have found that the benefits of global sourcing are

[9] See Koerber and Schiele (2022)
[10] See Ha and Ngoc Thang (2023)
[11] See Herkenhoff, Krautheim, Semrau, and Steglich (2024)
[12] See Monczka et al. (2021, pp. 375-377)

somewhat overestimated[13]. Dynamic capabilities can facilitate global sourcing and can help organisations utilise the full potential of global sourcing decisions.

This paper will first provide a theoretical framework, covering strategic decision-making in supply chain management and a framework of global sourcing, discussing the antecedents, drivers, barriers and effects of global sourcing. This theoretical framework forms the basis of the interview guide. After the theoretical framework, the methodology is described, followed by a summary and analysis of the results. The summary of results follows the same structure as the interview guide. The analysis focuses on the dynamic capabilities and provides a decision-making framework for global sourcing.

2. Theoretical Background: Evolving Global Sourcing Practices

2.1 History and Evolution of Supply Chain Management

The purchasing function is often confounded with the term 'Supply Chain Management'. However, a distinction needs to be made between the two. The purchasing function is known as the 'acquisition of raw materials, components, goods and services for conversion, consumption or resale'[14]. Supply Chain Management, on the other hand, refers to a much broader concept, namely 'a strategic training approach to planning for and acquiring the organisation's current and future needs through effectively managing the supply base, utilizing a process orientation in conjunction with cross-functional teams to achieve an organisation's mission'[15]. This makes the purchasing function merely a part of Supply Chain Management, but it cannot be considered the same.

The origin of Supply Chain Management can be traced back to military logistics practices[16]. The ability to supply troops largely decided the outcome of battles, such as the invasion of Napoleon in Russia[17]. The origin of the modern purchasing function, on the other hand, cannot be traced back to military practices[18]. The purchasing function was often fulfilled by a selling agent and other departments, such as Finance or Marketing were considered more important[19]. An exception to the indifferent attitude towards procurement can be found in

[13] See Vos et al. (2016), Horn, Schiele, and Werner (2013), Steinle and Schiele (2008)
[14] See Lysons and Farrington (2000, p. 4)
[15] See Monczka et al. (2021, p. 11)
[16] See Cousins, Lamming, Lawson, and Squire (2007, p. 11)
[17] See Toole (2011, p. 27)
[18] See Monczka et al. (2021, p. 25)
[19] See Ballou (2007, p. 333)

the railway companies of the United States[20]. Here, the development of the railway network was considered vital for the economic development and the purchasing manager had top management status.

After the Second World War, the attention to logistics and supply increased. A study about air freight in 1956 would be the first to consider total cost concepts[21]. During the 1970s, businesses often considered purchasing to be an administrative function, but the large Work In Progress caused managers to pay attention to the supply chain[22]. External events, such as the Vietnam war and the oil shortages also forced businesses to become more efficient, hence the increasing attention towards supply.

During the 1980s, purchasing's importance gained widespread acknowledgment and was included in Porter's five forces[23]. The term 'Supply Chain Management' was coined in the 1980s by consultants and the increased attention to the concept allowed for strategic integration of the concept. The urge for outsourcing also became widespread throughout the 1980s, with companies learning 'how not to make things'[24]. Instead of producing the majority of the product in-house, companies were increasingly sourcing the non-core components at the end of the century. A large part of sourcing was spent on companies in low-cost countries, such as China, leading to an increase in global sourcing. In 1990, global transactions grew three times as great as a typical economy[25]. Global sourcing was not only driven by cost reduction, differentiation also played a role for organisations that sourced globally[26]. The exploitation of technological supremacy elsewhere could also be a driver for global sourcing[27].

Not only did suppliers become responsible of larger parts of the final product, suppliers also accounted for the majority of innovations. The buyer-supplier relationship has therefore evolved to a key concept of firm strategy, leading to more sophisticated supply chain practices[28]. New advanced technology is also being integrated into supply chain management, known as Industry 4.0[29]. The implementation of Industry 4.0 will lead to better

[20] See Monczka et al. (2021, p. 25)
[21] See Ballou (2007, p. 334)
[22] See Mehmeti (2016, p. 3)
[23] See Porter (1980b, p. 4)
[24] See Cavusgil, Yaprak, and Yeoh (1993, p. 143)
[25] See Bowersox and Calantone (1998, p. 83)
[26] See Arnold (1989, p. 26)
[27] See Fagan (1991, p. 22)
[28] See Monczka et al. (2021, p. 28)
[29] See Lasi, Fettke, Kemper, Feld, and Hoffmann (2014, p. 239)

performance of supply chains by creating better-connected chains that are also more transparent[30]. Research has also found that the introduction of Industry 4.0 technologies requires new purchasing roles. These roles include Data Analyst, Master Data Manager, Process Automation Manager, Supplier Onboarding Manager, System Innovation Scout, Legislation specialist and Chief Happiness Officer[31]. Although purchasers are highly skilled and specialised, new technologies will require more specialised purchasers and make generalist roles less relevant.

The evolution of Purchasing and Supply Chain Management has gone from being an administrative function to an integrated strategic tool. The evolution of both functions is depicted in Figure 1. The alignment of the purchasing function with the corporate strategy receives more attention and becomes more important. The next chapter discusses the various decisions that firms are confronted with while aligning corporate and purchasing strategies.

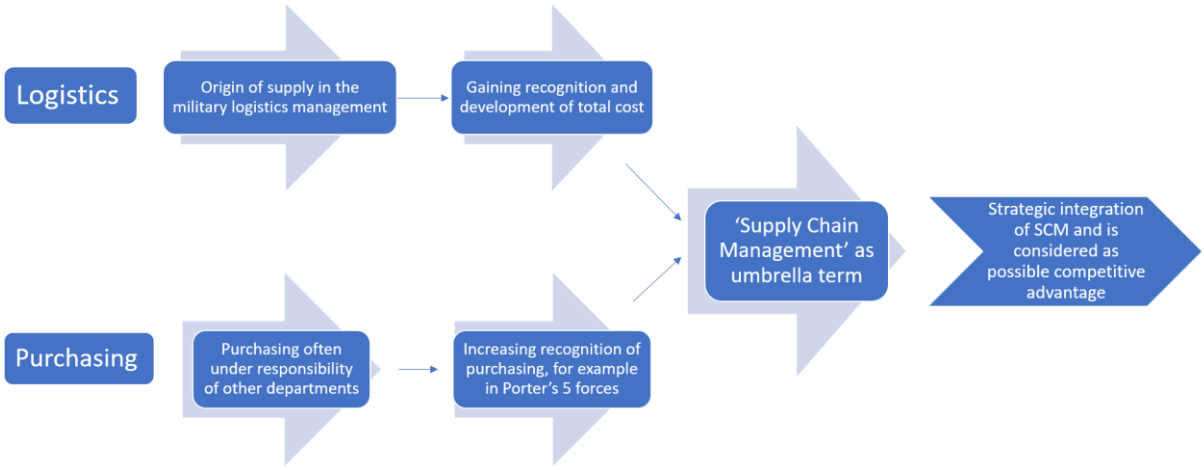

Figure 1-The evolution of Purchasing and Logistics

2.2 Strategic Decision-Making in Purchasing & Supply Management

Porter determined three dominant strategies for companies to pursue a competitive advantage[32]. These are the cost leadership strategy, the differentiation strategy and the focus strategy. It has been found that the alignment of the purchasing strategy and corporate

[30] See Fatorachian and Kazemi (2021, p. 1)
[31] See Delke, Schiele, Buchholz, and Kelly (2023, pp. 7-8)
[32] See Porter (1980a, p. 35)

strategy is correlated to increased financial performance of a firm[33]. The following section explains different concepts in the strategic decision-making of purchasing.

2.2.1 Make-or-Buy Decision

Firms are first confronted with the decision whether to produce the product part themselves, or to outsource it. This make-buy decision can be viewed through the Transaction Cost Economics (TCE) approach, or the Resource-Based View (RBV)[34]. The TCE approach is often seen of as one of efficiency and as a way to minimise transaction costs. The RBV approach, on the other hand, is more subjective and considers the core capabilities of a firm. There are also more practical considerations, such as a firm's demand levels it can stably meet, any existing contracts, its financial situation, the market dynamics and the way that the make or buy decision affects the autonomy of the firm[35]. Although outsourcing can lead to increased product quality and lower production costs, firms can also experience negative impacts when vital product parts are outsourced. This 'over-outsourcing' can be problematic, as was highlighted during the production of the Boeing 787[36]. Boeing imitated the outsourcing practices of Toyota, where up to 70% of the production was outsourced from a group of trustworthy suppliers. However, this strategy was not successful in the Boeing case, because suppliers were located more remotely. As a result, the delivery of airplanes was delayed several times and safety issues occurred more frequently.

2.2.2 Category Management

Firms outsource a large part of the final product. Given the importance of purchasing, a broad range of sourcing strategies has arisen. One of the widely used frameworks that supply researchers refer to is the Kraljic matrix[37]. The Kraljic framework distinguishes four product categories and allows a firm to distinguish different product sourcing strategies. Which category a product belongs to depends on the complexity of its supply market and its strategic importance. The Kraljic matrix was one of the first to examine the concept of segmentation. Most purchasing portfolios are now based on the matrix of Kraljic[38]. Recent literature has also pointed out that purchasing professionals use a combination of tactical

[33] See Baier, Hartmann, and Moser (2008, p. 45)
[34] See Cousins et al. (2007, pp. 27-38)
[35] See Ivanov, Schönberger, and Tsipoulanidis (2016, p. 132)
[36] See R. Li and Lu (2020, p. 510)
[37] See Kraljic (1983, p. 111)
[38] See Montgomery, Ogden, and Boehmke (2017, p. 201)

sourcing levers[39]. The Kraljic matrix has four categories and each category has specific actions available[40].

Routine products have a low strategic importance. These products can be sourced from different suppliers. Purchasing efforts should be reduced and purchasing volumes can be increased to reduce the number of items in this category. Purchasing in this category can also be automated by using electronic tools.

Bottleneck products also have low strategic importance, but the supply market has fewer suppliers. The complexity of the market requires different actions than for routine products. For bottleneck products, the continuity of supply is paramount, but since the product is of low strategic importance, costs are reduced by competitive bidding. After the bidding, specific agreements with the supplier allow for a streamlined supply. Supplier risk can be reduced by widening the specifications of the product and by developing new suppliers.

Leverage products do not have a complex supply market, but the strategic importance of the products is high. For leverage products, quality optimisation is paramount, since multiple suppliers can be addressed. High-performing suppliers can be rewarded by awarding multi-year contracts. Since there are more suitable suppliers, a firm can exploit the supply market by promoting competition among suppliers.

Critical products offer a chance to create competitive advantage. Both the complexity of the supplier market and the value of the product are high, which makes critical products key for profitability and operations. Suppliers of these products are considered strategic and the relationship with the supplier needs to be optimised by higher levels of information sharing and supplier integration programmes.

The purchasing strategy can be specified by sourcing levers for the different categories[41]. Seven popular sourcing levers have been distinguished[42];

The pooling of demand and volume bundling. Companies can choose to bundle volume and buy large quantities from suppliers. A firm achieves a better bargaining position and can

[39] See Hesping and Schiele (2016, p. 101)
[40] See Monczka et al. (2021, pp. 221-225)
[41] See Karjalainen and Salmi (2013, p. 113)
[42] See Schiele, Horn, and Vos (2011, pp. 322-323)

attain order quantity discounts by bundling its volumes. Demand pooling can be done within and between companies[43].

Price evaluation through enhanced negotiation concepts. Firms can use enhanced negotiation concepts to get a better price from suppliers. Examples of these are auctions and price regression analysis. Firms can also try to enhance competition between suppliers or try to collaborate with the suppliers to reduce costs[44].

Product optimisation. By optimising the product, firms hope to reduce costs. This can be done by target costing, which is a technique where a firm sets a desired selling price, subtracts the desired profit margin, and designs the product to meet the resulting cost.

Process optimisation. The process between the buyer and supplier does not always go without problems and can be improved. This can be the case for the communication between the buyer and supplier. Firms can make investments in electronic interfaces to improve communication with their supplier.

Supplier integration strategies. Companies increasingly rely on suppliers for innovations. Given that buyers compete for the resources of a supplier with capacity restraints, being a preferred customer is vital for competitive advantage. Open-book policies, exchanging cost data between buyers and sellers, are a key aspect of supplier integration and can improve a buyer's position in the market.

Commodity-spanning levers; Cost reduction in one commodity group may result in increased costs in another, leading to a potential rise in the overall cost per page. This can be the case if cheaper production costs are accompanied by higher product failures and errors. This underscores the importance of analysing "commodity-spanning levers" to understand the interplay and potential trade-offs between different materials or services.

Global sourcing. If firms cannot find suitable suppliers in the vicinity, firms can search internationally for suppliers that can deliver the required product for a beneficial price.

2.2.3 Local or Global Sourcing

The location of suppliers can also be of interest to firms, because there can be benefits or risks related to the location of the supplier. Due to lower labour costs, suppliers located in low-cost countries can sometimes offer better prices than local suppliers and offer cost-

[43] See Silbermayr and Gerchak (2019, p. 381)
[44] See C. Li and Wan (2017, p. 2460)

saving opportunities[45]. Also, a supplier can be located around a specialised cluster that allows the supplier to offer products of higher quality. Nowadays, since a considerable share of firms in developed countries have switched from manufacturing to providing services, sourcing final products from other countries becomes inevitable[46]. However, several problems are also associated with global sourcing. The topic of global sourcing is further elaborated on in chapter three.

2.2.4 Single Sourcing

Firms have different options to design the supply base. One involves the question of how large the supply base should be. Firms can choose to stick close to one supplier. This is called 'single sourcing' and means that the buying firm 'has chosen to purchase all of its requirements for that item from one vendor[47]'. Single sourcing can be used to reduce the supply base, leading to lower transaction costs. Ordering a large volume from one supplier, instead of buying the quantity from two different suppliers, can also lead to order quantity discounts. However, single sourcing is mostly conducted for bottleneck and critical products, according to the Kraljic matrix[48]. Therefore, relationships tend to be focused on the longer term when firms are single sourcing, making it easier to exchange ideas, modify products and create cost transparency[49]. Companies have the opportunity to invest in improving the connection and relationship between buyers and suppliers. Recent research highlighted potential drawbacks to such investments. This occurs when a firm chooses to invest in a supplier that is already heavily reliant on the firm. In such instances, additional investments can result in a 'lock-in effect,' diminishing the impact of relationship-specific investments[50]. Therefore, reliance from both the buyer and the supplier on the other party can have negative consequences.

2.2.5 Multiple Sourcing

The absence of sourcing alternatives poses a downside to the single-sourcing strategy. If no alternatives are available, a disruption in the supplier's production causes difficulties for downstream firms. Also, smaller firms have more difficulties with altering the production allocations of their suppliers[51]. A small firm that only sources from one supplier is

[45] See Monczka et al. (2021, p. 370)
[46] See Zhaohui Zeng (2000, p. 222)
[47] See Treleven (1987, p. 19)
[48] See Kraljic (1983, p. 111)
[49] See Cousins et al. (2007, p. 53)
[50] See Pulles, Ellegaard, and Veldman (2023, p. 1430)
[51] See Inderst (2008, p. 199)

completely dependent on the direction that the supplier is going. Therefore, dual-sourcing practices can be of value to buyers. This is especially true for firms that source from overseas locations. Firms in this situation can choose to dual source, with one remote and one local supplier[52]. However, strategic alliances are mostly formed in single-source relationships[53]. Dual sourcing strategies can therefore create more shallow relationships and might hinder firms from viewing suppliers as strategic assets. Also, the costs can be higher in the case of multiple sourcing. That is because a firm has to manage multiple relationships and because prices charged by a single supplier are lower than prices charged when multiple suppliers exist[54].

2.2.6 Delegated Sourcing

Delegated sourcing is the case when a supplier is made responsible for delivering an entire sub-assembly[55]. In this case, the supplier becomes a contract manager. This reduces daily transaction costs for the firm because of a reduction of the supply base. It can also enhance the collaboration between the firm and the selected supplier. However, not all research sees the benefits of delegated sourcing. Some research, for example, states that the negative impact of the information asymmetry is greater when a contract manager exists than if the firm directly sources its parts[56]. Therefore, companies can choose for guided delegation. In this situation, a firm delegates its supplier, but keeps a higher level of control by either auditing the contract manager or providing financial incentives. However, profits are not always higher compared to full delegation. That is because costs are associated with auditing and because a contract manager might consider the audits and the possible subsequent penalties, resulting in a higher price[57]. The effects of (guided) delegation, thus, are not without discussion.

2.2.7 Parallel Sourcing

Parallel sourcing means that two suppliers with similar capabilities serve as single-source suppliers for identical parts[58]. Parallel sourcing was first observed in the Japanese automotive industry. This method tries to get the best out of both single and multiple sourcing. It allows a firm to maintain a good relationship with each component supplier

[52] See Niu, Xie, and Chen (2024, p. 12)
[53] See Blome and Henke (2009, p. 125)
[54] See Costantino and Pellegrino (2010, p. 36)
[55] See Cousins et al. (2007, p. 54)
[56] See Chen, Xu, and Zhou (2020, p. 7005)
[57] See Tang and Song (2023, p. 2330)
[58] See Richardson (1993, p. 341)

within a product group, but allows the firm to maintain a multiple-sourced relationship across product groups[59].

2.2.8 Purchasing Structure

If a firm has multiple offices, it must decide whether it centralises the purchasing strategy or keeps its purchasing structure decentralised. A misfit between a company's strategy and its purchasing structure is found to negatively influence a firm's purchasing performance and innovation[60]. Centralised purchasing structures are characterised by a majority of purchases that are managed by a central purchasing team. The benefit is that such a central purchasing team captures all the synergies and can benefit from economies of scale. The purchasing performance is therefore found to be higher when a firm adopts a centralised purchasing structure[61]. The downside is that the purchasers can fail to oversee local needs. A decentralised purchasing structure, therefore, makes the central structure more responsive to demand fluctuations and is associated with greater speed[62]. So, in a fast-changing environment, a decentralised structure is dominant. However, other research challenges the common belief that decentralisation leads to better performance[63]. A hybrid form is also available. Since both the centralised and the decentralised structures have their downsides, the hybrid structure could mitigate these downsides by benefitting from economies of scale if possible, but by taking into account the specific needs of local offices.

2.2.9 Supplier Development

In the light of increasing competition, firms are increasingly trying to benefit from their network[64]. Also, the increased recognition of the importance of the purchasing function made the management of suppliers a main concern[65]. Supplier development can improve the quality of the focal firm's products and can reduce costs. However, suppliers can view a buyer's attempt to develop the relationship as a way to lower prices in a way that possible savings due to the development program do not result in a higher profit margin of the supplier[66]. A wide range of actions is available to improve the buyer-supplier performance. These actions include enhancing competition, extensive evaluation, training and

[59] See Cousins et al. (2007, p. 56)
[60] See Akın Ateş, van Raaij, and Wynstra (2018, p. 68)
[61] See Richter, Schlaegel, Midgley, and Tressin (2019, p. 18)
[62] See Frödell, Josephson, and Koch (2013, p. 47)
[63] See Richter et al. (2019, p. 18)
[64] See Cousins et al. (2007, p. 75)
[65] See Humphreys, Li, and Chan (2004, p. 131)
[66] See Monczka et al. (2021, p. 342)

certification, investments and collaboration to develop new products[67]. To ensure higher quality or lower costs, a firm can also approach a supplier's supplier[68]. This can incentivise the supplier to perform better, but may alter the relationship dynamics between parties.

2.2.10 Attaining Preferred Customer Status

In industries where suppliers face capacity constraints, firms can choose which firms to sell to and buying firms battle for resources from the same supplier[69]. During this process, suppliers selectively choose the most attractive firms and form alliances[70]. This contradicts the classical assumptions of suppliers battling for buyers[71]. During the 1990s, firms started to increasingly rely on suppliers for innovations. For strategic products, firms can, therefore, try to ally with a supplier to ensure supply and develop innovations. Various frameworks have been proposed to attain the preferred customer status. In a recent framework[72], the process initiates with the establishment of an appealing customer profile. Subsequently, the buying firms segment different products to define strategic suppliers. Step three includes generating supplier satisfaction, which paves the way for step four: becoming a preferred customer. The special status is maintained by engaging in supplier-oriented actions and integrating supplier resources.

2.2.11 Sourcing Principles

Firms can also use specific principles that characterise the supply chain. An example is Just-In-Time (JIT), which was first adopted by Toyota. It means that the right parts needed for the production reach the assembly line at the right time and in the right quantity[73]. There are multiple variations of JIT implementations, but most contain single sourcing with long-term contracts and intensive relationship building with capable suppliers. Though JIT can be accompanied by great advantages, the costs can also increase. That is because dependence on one single supplier for one product can lead to higher transportation costs, supply disruptions and loss of price control.

2.3 The ABCDE of Global Sourcing

Strategic decision-making in purchasing has been explained in Chapter 2.2. However, the scope of this research, global sourcing, is elaborated on in the following chapter. A

[67] See Sillanpää (2015, p. 229)
[68] See Mena, Humphries, and Choi (2013, p. 72)
[69] See Schiele, Calvi, and Gibbert (2012, p. 1179)
[70] See Mitsuhashi and Greve (2008, p. 3)
[71] See Schiele (2012, p. 49)
[72] See Pulles, Ellegaard, Schiele, and Kragh (2019, pp. 2-5)
[73] See P. Wu, Pienaar, and Feng (2014, p. 582)

framework of global sourcing is composed, similar to a framework on supply chain visibility of Kalaiarasan, Olhager, Agrawal, and Wiktorsson (2022)[74]. The global sourcing framework discusses the antecedents, drivers, barriers and effects of global sourcing.

2.3.1 Defining Global Sourcing

Though many terms exist for the concept of sourcing from suppliers that are not domestic, there are differences between the different terms. International purchasing is the case when there are transactions between buyers and suppliers from different countries[75]. Global sourcing involves proactively integrating and coordinating common items and materials, processes, designs, technologies, and suppliers across worldwide purchasing, engineering and operating locations[76]. The difference between sourcing and purchasing is that sourcing relates to identifying and working with appropriate suppliers, whereas purchasing relates to the specific functions associated with the actual buying of goods and services from such suppliers[77].

Two components of global sourcing can be distinguished; continental and transcontinental sourcing[78]. The latter means sourcing from suppliers located on other continents and is the main focus of this research, whereas continental sourcing includes sourcing from other countries, but from the same continent. Worldwide trade increased drastically in the nineteenth century. The Gold Standard played an important role as a catalyser for international trade[79]. After the Second World War, international trade increased again. An important factor contributing to the increase in international trade was the liberisation of the Chinese economy from 1978 onwards (increase in transcontinental sourcing)[80]. The low labour costs in China initiated a shift of various production processes from developed countries to China, allowing China to become known as the 'world assembly line'. Between 1987 and 2007, global trade grew by an average of 7% per year[81]. In the years after 2002, global sourcing experienced further growth for several years, driven by the establishment of the single currency area (continental sourcing). In 2006, intra-European trade was assumed to be five to ten percent higher because of the euro currency[82]. In recent years, however, a

[74] See Kalaiarasan et al. (2022)
[75] See Trent and Monczka (2003a, p. 29)
[76] See Trent and Monczka (2003b, p. 613)
[77] See Ivanov et al. (2016, p. 127)
[78] See Koerber and Schiele (2022, p. 224)
[79] See Boonstra (2018, p. 95)
[80] See Ju and Yu (2018, p. 23)
[81] See Constantinescu, Mattoo, and Ruta (2016, p. 711)
[82] See Baldwin (2006, p. 5)

stagnation of global trade emerged. The growth of inequality, the slowdown of scientific and technological progress, the debt crisis and financialisation caused a reduction in the growth of the world's Gross Domestic Product[83]. The rise of nationalistic politics worldwide, such as Trump's America First politics, also played a role[84].

2.3.2 Antecedents of Global Sourcing

2.3.2.1 Existing Antecedents of Sourcing from Remote Suppliers

According to the Cambridge dictionary, an antecedent is 'someone or something existing or happening before, especially as the cause or origin of something existing or happening later'. In this research, antecedents are concepts that enable firms to source on a global scale.

Researchers who developed an intelligent decision support system for global outsourcing decisions in the apparel industry used the classic product characteristics as antecedents in the model. These characteristics included profitability, product quality, service performance, response time, reliability, social capability (social responsibility and work culture), capacity and on-time delivery[85]. In the ABCDE global sourcing model of this study, these characteristics form the first external antecedent and are gathered under the umbrella term 'supplier attractiveness'. Free trade agreements facilitate business on a global scale and form the second external antecedent[86]. Demand correlation, the extent to which the demand for the product of the firm correlates with the demand for competitor's products, is the third external antecedent for global sourcing activities[87]. When demand signals are highly correlated, firms are more likely to offshore their sourcing. This is because the risks associated with fluctuating demand are somewhat mitigated when competitors face similar demand patterns, making the cost advantages of offshoring more appealing. Also, when conducting business on a global scale, adequate logistics need to be present. Integrating global sourcing practices and logistics is an important area where performance advantages can be delivered[88].

Internal antecedents focus on the people and the firm. Research, for example, shows that the organisation of global sourcing is also largely dependent on intuition[89]. This intuitive decision can also stem from previous sourcing experiences. Hence, prior experiences with

[83] See Komolov (2020, p. 13)
[84] See Mukherjee, Kumar, Pandey, and Lahiri (2023, p. 3)
[85] See Aksoy and Öztürk (2016, p. 1324)
[86] See Shou, Wu, Wang, Kang, and Park (2023, p. 948)
[87] See Jung (2020, p. 754)
[88] See Negi (2024, pp. 120-122)
[89] See Stanczyk, Foerstl, Busse, and Blome (2015, p. 174)

sourcing practices affect current sourcing decisions[90]. Also, firm size and global awareness are found to be enablers of global sourcing[91]. Both larger firm size and global awareness correlate with higher levels of global sourcing. High commitment of top management is not found to improve global sourcing involvement. However, a positive effect was not observed, possibly because global sourcing was already conducted in the apparel industry, which was examined in the study. Therefore, resources in the particular industry had already been allocated, lowering the effect of management commitment. Also, technology plays a big role in global sourcing. For example, it was found that global sourcing firms implemented technology to a significantly greater extent than domestic sourcing firms[92]. An example is the digitalisation of communication technology, but also the ability to analyse and manage Big Data, which enables quantitative decision-making, is an important antecedent of global sourcing[93].

2.3.2.2 Developing Antecedents with Dynamic Capabilities

Firms do not always possess all the required capabilities to source on a global scale successfully. The firm's ability to integrate, build, and reconfigure its competencies to adapt to rapidly changing environments became the tenure of the Dynamic Capabilities Theory (DCT), introduced by Teece et al. in 1997[94]. The theory was derived from the Resource-Based View (RBV) and the Natural Resource-Based View (NRBV). Instead of merely focusing on the current resources of the firm, the DCT also focuses on the ability to modify and extend existing resources, make investment decisions, achieve the necessary business model and organizational transformations of new resources[95]. Dynamic capabilities focus on the broad organisational processes. Microfoundations, on the other hand, focus more on how the collective efforts of individuals shape the larger capabilities of the organization.

Three aggregates can be distinguished in the DCT: sensing, shaping or seizing and reconfiguring[96]. Sensing is about the exploitation of resources: is an organisation able to get access to information and does it understand the relationship between the user's needs and the required solutions? This not only urges companies to regularly scan the environment, but also to capitalise on research and development. After an opportunity is detected, multiple

[90] See Thakur-Wernz, Bruyaka, and Contractor (2020, p. 6)
[91] See Jin and Kang (2013, p. 62)
[92] See Jin (2005, p. 282)
[93] See Razaghi and Shokouhyar (2021, pp. 218-220)
[94] See D. J. Teece, Pisano, and Shuen (1997, p. 515)
[95] See Tate, Ellram, and Bals (2022, p. 378)
[96] See D. J. Teece (2007, pp. 1322-1340)

strategic choices are possible that form the seizing stage. Creating agility is an example of a company that develops seizing capabilities[97]. Finally, the reconfiguring capabilities require a change in a company's fundament. This is the case when the supply base is revised, or when new technologies are adopted.

The employees in organisations also develop capabilities that can be useful for attaining competitive advantages. Research underscored that purchasers possess threshold competencies in the beginning of their careers, but that these threshold competencies can evolve into core competencies over time[98]. This is the case for a variety of skills, such as negotiation skills, technical expertise, legal and intercultural knowledge and supply market orientation. These capabilities can belong to the sensing, seizing and reconfiguring phase. In a fast-changing environment, a reactive approach to market orientation, such as analysis and research of the market, is less effective than proactive approaches[99]. A proactive approach to supply market orientation includes innovation scouting and technology screening and allows firms to observe the peculiarities of the market. That means that firms must carefully consider their environment to decide which capabilities are prioritised.

For global sourcing in particular, it is pointed out that firms need to develop certain operational capabilities to deal with the longer distances between actors in the value chain[100]. A specific example is the case for the pooling of products for users that operate in different regions. Purchasers need to be able to optimise pooling across different business units across different regions. In a broader sense, mechanisms should be developed to better organise the loading on the firm's information processing capacity. This could be by minimising the loading (for example by sourcing in a decentral way), or by enhancing the capacity (for example by using International Purchasing Offices).

2.3.3 Drivers of Global Sourcing

There are various drivers to source globally instead of locally. The globalisation of sourcing processes of various business processes has been driven by a variety of technological, economical and organisational factors[101]. These will be discussed in the following section.

[97] See D. Teece, Peteraf, and Leih (2016, p. 22)
[98] See Oberoi and Naoui-Outini (2024, p. 448)
[99] See Foerstl, Kähkönen, Blome, and Goellner (2020, p. 79)
[100] See Lorentz, Kumar, and Srai (2018, p. 340)
[101] See Manning, Larsen, and Kannothra (2018, p. 411)

In an organisational context, organisations can choose to offshore production to acquire talent in developing countries[102]. In organisations, the organisational culture can also be focused on purchasing on a global scale, which drives global sourcing practices[103]. This is the case in large multinationals where the purchasing function is centralised, which forces the purchasers to be globally oriented. Sourcing decisions can represent the classic trade-off between cost and responsiveness, where a global supply base optimises cost advantages, whereas a local supply base optimises supply responsiveness[104]. Global sourcing can also be used to alter sub-optimal supply relationships. In the study on multi-tier supply chains, three multi-tier supply relationships were examined, ranging from open to closed[105]. Open relationships were characterised by linear relationships without direct contact between the buyer and the supplier's suppliers. Closed structures did have formal links between the buyer and supplier's supplier. A retailer could resolve suboptimal relationships by directly contacting the supplier of the supplier. In the paper, an instance is provided of a retailer that had traceability and environmental issues. To solve these issues, it was important to know what was going on upstream. With the supplier unable to improve, the supplier's supplier was contacted, leading to higher quality products.

The economic drivers consist of the pressure of customers to offer the lowest price and/or the best quality. Global sourcing allows the search for suppliers with lower prices, better quality or faster delivery times. Early research also pointed towards competition as a driver of global sourcing, since competition forces companies to lower costs and because a global supply base can create competitive advantage, if managed properly[106]. A monopolistic firm is found to be preferring the local responsive supply base and will avoid global sourcing if possible[107].

Cost advantages due to global sourcing are partly caused by lower labour costs in Asian countries. These labour costs also partly explained the rise of garment production in Bangladesh in the early 2000s, where labour costs are still low[108]. However, later research found that low labour costs were not the primary driver for firms offshoring production to

[102] See Mukherjee et al. (2023, pp. 17-18)
[103] See Francioni, Curina, Masili, and Viganò (2019, p. 2280)
[104] See Allon and Van Mieghem (2010, p. 123)
[105] See Mena et al. (2013, pp. 64-67)
[106] See Birou and Fawcett (1993, p. 35)
[107] See Jung (2020, p. 764)
[108] See Mottaleb and Sonobe (2011, p. 72)

China[109]. Firms that increased production or purchasing volumes in China argued that the firm would benefit from better access to the local market and improve product quality and supply chain practices by sourcing from global suppliers. Firms that decreased activity in China named rising labour costs as the primary reason. Also other costs, such as costs related to taxes, environmental responsibility, litigation, workplace safety and investor activism play a considerable role[110].

2.3.4 Challenges and Barriers of Global Sourcing

Though global sourcing projects and global supply chains create opportunities for firms in both developed and developing countries, there are also downsides to global sourcing. For example, major disruptions in the global supply chains emerged in recent years. Firms also encounter difficulties with creating transparency in their global chains and are confronted with trade wars and geopolitical conflicts. These factors cause difficulties for global sourcing firms.

2.3.4.1 Risk and Uncertainty

Supply chains do not always function seamlessly. A distinction can be made between micro risks and macro risks[111]. Micro risks are related to the company-specific environment and arise from operational issues, such as supplier and equipment failures, lead time changes and logistic issues. Macro risks, on the other hand, are related to macroeconomic factors and affect entire sectors. Examples of macro risks include pandemics, natural disasters and trade relations between countries. The COVID-19 pandemic, the tsunami in Japan in 2011 and (trade) wars are examples of macro risks. Supply chain risks can be viewed as accidents, such as pandemics and natural disasters, or as events, such as demand shocks or supplier conflicts. On the contrary, other research considers the behavioural factor of supply disruptions and states that problems and disruptions in the supply chain are merely the results of the behaviour of every stakeholder in an ecosystem[112].

Several researchers have attempted to predict supply disruptions by using algorithms, big data analytics and machine learning. Predicting supply disruptions allows senior management to anticipate these challenges and to start looking for alternatives in the early stages. However, some challenges have been identified related to predicting supply chain disruptions. For example, a firm that is trying to predict supply disruptions needs to have a

[109] See Cohen et al. (2018, p. 398)
[110] See Cofrin (2019, pp. 122-123)
[111] See Paul, Agarwal, Sarker, and Rahman (2023, p. 3)
[112] See Paul et al. (2023, p. 69)

comprehensive set of big data analytics capabilities[113]. These capabilities include the infrastructure, human resources and inflow of information. Another challenge that has been pointed out is that disruptions are often caused by external factors, which seem random in models that rely on internal data[114]. Recent research has shown that tree-based ensemble methods, such as Random Forest or Gradient Boosting Machines, outperformed other methods. However, even the most robust models fail to deal with inconsistent complexities[115]. Conventional logic-driven approaches relying on scenario planning, forecasting, and optimising supply chain processes, therefore, have limitations in offering comprehensive managerial insights.

Since change is the only thing that seems stable, businesses are focusing on becoming agile[116]. An agile enterprise has designed its organization, processes and products in such a way that it can respond to changes appropriately within a useful time frame[117]. An agile supply chain can better adapt to changing demand levels, but can also better respond to larger disruptions, such as a pandemic, natural disasters or rebels blocking a canal.

2.3.4.2 Recent Supply Chain Disruptions

Though there are benefits related to global sourcing and global supply chains, these global chains are not without risks. Recent years have seen several supply-disrupting events, such as the tsunami in Japan in 2011, Brexit, the COVID-19 pandemic and the Suez Canal blockades.

Brexit

Brexit was merely a regulatory disruption, which was a source of uncertainty for firms operating in the United Kingdom. Even the possibility of a Brexit made several supply chain managers move production locations before the public opinion showed a proclivity towards leaving the European Union (EU)[118]. Managers noted that access to the EU market, delays in product delivery due to new border controls, higher costs through new tariffs for imports/exports from or to the EU, access to international markets through EU trade deals, and favourable currency conditions were factors that were considered when choosing

[113] See M. Park and Singh (2023, p. 1478)
[114] See Brintrup et al. (2020, p. 3339)
[115] See Camur, Ravi, and Saleh (2024, p. 12)
[116] See Ambe (2010, p. 662)
[117] See Baramichai, Zimmers, and Marangos (2007, p. 335)
[118] See Moradlou, Reefke, Skipworth, and Roscoe (2021, p. 125)

manufacturing locations. There were also other long-term effects, such as higher transportation and material costs in relation to Brexit[119].

Tsunami in Japan

The tsunami in Japan in 2011 not only led to an estimated $235 billion in damages, but it also led to severe disruptions of supply chains that had global consequences[120]. The prices of several components of which Japan was a relevant supplier increased by 20%. Other products, such as specific chips for the automotive industry, could not be supplied after the disaster, causing problems for the automotive industry. Though the tsunami was a disaster for Japanese firms, German and Chinese counterparts experienced higher demand and increased production after the tsunami[121]. In the aftermath of significant disruptions, divergent research perspectives have emerged regarding strategic considerations for firms. One perspective advocates prioritising investment in the resilience and continuity of production facilities, even if such measures imply sacrificing operational efficiency[122]. Contrarily, an alternative stance of research points out that the interconnected nature of the global network compensates for disruptions. This viewpoint is based on the observation that production facilities managed to resume operations within a relatively short timeframe[123].

COVID-19 Pandemic

The emergence of COVID-19 was first reported in Wuhan, China, in December 2019, but quickly spread within the region and to other areas of China[124]. In 2020, China imposed widespread lockdowns to prevent the spread of the virus. Even before other countries also implemented lockdowns, the economic effects of Chinese measures were noticeable in other countries. The contraction of US imports from China led to a contraction of production of US firms[125]. In March 2020, many Western countries also imposed lockdown measures. Within six weeks, all EU countries had been affected by the pandemic.

The policy measures in response to the COVID outbreak in 2020 resulted in a contraction in economic activity that was greater than the contraction during the Great Recession in the 1930s[126]. The COVID crisis impacted firms in several ways. First, there were restrictions

[119]See Oyegoke, Fisher, Ajayi, Omotayo, and Ewuga (2023, p. 17)
[120]See Y. Park, Hong, and Roh (2013, pp. 75-76)
[121] See MacKenzie, Santos, and Barker (2012, p. 19)
[122]See Abe and Ye (2013, p. 567)
[123] See Carvalho, Nirei, Saito, and Tahbaz-Salehi (2020, p. 1265)
[124] See Y. C. Wu, Chen, and Chan (2020, p. 217)
[125] See Meier and Pinto (2024, p. 8)
[126] See Meier and Pinto (2020, p. 2)

imposed by governments. The closed borders prevented goods from being transported to and from several countries, which resulted in a shortage of food in European countries[127]. In the US, demand for automobiles was drastically lower, resulting in an 80% drop in China's automobile part export. The panic buying of consumers also created difficulties for firms that tried to predict customer demand[128]. After economies began to reopen in the summer of 2020, supply disruptions re-emerged due to a significant increase in demand that the supply could not keep up with. This caused congestion in ports[129].

Suez Canal blockade

The Suez Canal turned out to be a vulnerability as well, because a blockade of the Canal could cause severe disruptions, since alternative routes force transporters to go around the Cape of the Good Hope. These vulnerabilities were first triggered by a 400-meter-long container ship that blocked the Canal[130]. Not only did this event cause a 4% increase in crude oil prices, it also caused approximately 9.6 billion dollars in merchandise to be held up, because a large queue appeared. Recent events caused unrest in the Red Sea again, due to rebels attacking commercial ships[131]. These attacks led to soaring shipping rates[132]. Consequently, ships avoided the route and rerouted via the Cape of the Good Hope. 12% of global trade passes through the canal, so bottlenecks in the canal can affect businesses in multiple countries and sectors[133].

2.3.4.3 Unsuccessful Global Sourcing Projects

The scientific literature also points out that global sourcing projects do not always result in lower costs[134]. Therefore, firms that perform global sourcing are not always more successful. A study on the effectiveness of global sourcing demonstrated that firms that spend higher percentages of their turnover on global sourcing do not necessarily show greater competitiveness, especially for sourcing technology[135]. That can be because firms encounter difficulties in becoming preferred customers of remote suppliers. Gaining access to suppliers

[127] See Moosavi et al. (2022, p. 2)
[128] See Bhakat and Arif (2021, p. 21)
[129] See Mathivathanan and Sivakumar (2021, p. 92)
[130] See Khan and Rahman (2021, p. 39)
[131] See https://portwatch.imf.org/pages/573013af3b6545deaeb50ed1cbaf9444
[132] See https://www.bloomberg.com/news/articles/2024-01-24/red-sea-crisis-how-houthi-attacks-raise-inflation-supply-chain-worries
[133] See https://www.nytimes.com/2024/01/11/world/middleeast/houthi-yemen-red-sea-attacks.html
[134] See Vos et al. (2016, p. 345)
[135] See Steinle and Schiele (2008, p. 12)

can create a competitive advantage for firms, but the process of becoming a preferred customer can be a long-term process, especially for smaller and less attractive customers[136].

Other research points towards the downsides of global sourcing and shows that as much as 75% of international sourcing projects do not lead to the projected benefits[137]. Some projects even completely fail and come with an 'ugly twin'. In that scenario, the focal firm first replaces its supplier with a new supplier in a low-cost country. However, many of the projects with new low-cost suppliers failed, because of a lack of experience or expertise of the new supplier or cultural differences. After the project with the low-cost supplier fails, the focal firm is forced to return to its previous supplier in order to continue production. The weaker bargaining position results in higher costs, but there are also cases where the previous supplier had already reduced its capacity when the supplier returned. In the worst case, an 'ugly twin' may thus lead to both higher costs and supply disruptions.

In a study of Scandinavian software companies that tried to outsource software from firms in low-cost countries, such as India and Vietnam[138]. In this case, insufficient technological knowledge of the suppliers in these countries led to low-quality software. Cultural clashes and communication problems reduced the ability to solve problems that occurred. These failures caused the outsourcing companies to terminate the projects. The companies then focused on creating partnerships. In this scenario, development was still transferred to low-cost countries (Russia, China), but the Scandinavian firms sent over engineers and other staff to transfer knowledge to the new supplier. This strategy was deemed successful. Therefore, in certain cases, companies have the opportunity to deal with problems regarding global suppliers.

2.3.4.4 CSR and Transparency

Corporate Social Responsibility (CSR) is a topic of increasing importance. As a result of pressure from various groups, companies are engaging in practices to counter illicit behaviour in the supply chain. This could have consequences for sourcing practices. Companies could, for example, avoid global sourcing to counter illicit behaviour. As a consequence, CSR could impact sourcing strategies.

[136] See Kragh, Ellegaard, and Andersen (2022, p. 1)
[137] See Horn et al. (2013, pp. 31-33)
[138] See Moe, Šmite, Hanssen, and Barney (2014, pp. 15-21)

2.3.4.4.1 Definitions of Transparency and Illicit Behaviour in Supply Chains

One difficulty for firms that conduct global sourcing is the lack of transparency in global supply chains. However, there is an increasing push for companies to be more responsible with respect to their operations[139]. This has consequences for the entire production, but also for the outsourcing process. Corporate Social Responsibility tries to capture the obligation that organisations have that extends beyond compliance[140]. This includes the way the company handles its purchasing activities. Companies are now forced to trace the origin of purchased goods.

Recent literature defined three grades of illegal practices in the supply chain[141]. Chains can be fully illegal due to the nature of the traded commodity, such as hard drugs. All operations in these supply chains are illegal, from the growing to the consumer purchase. The second variation of illegal supply chains is defined as partly illegal. In this instance, the commodity itself is not illegal, but certain operations in the chain are not legally conducted. Fish, for instance, is a legal product, but fishing or processing can be done illegally. The third variation consists of the grey area and is the case for operations that are legal in one country, but illegal in other countries. This is the case for the use of certain pesticides and other environmental laws. An example of a partly illegal supply chain is depicted in Figure 2.

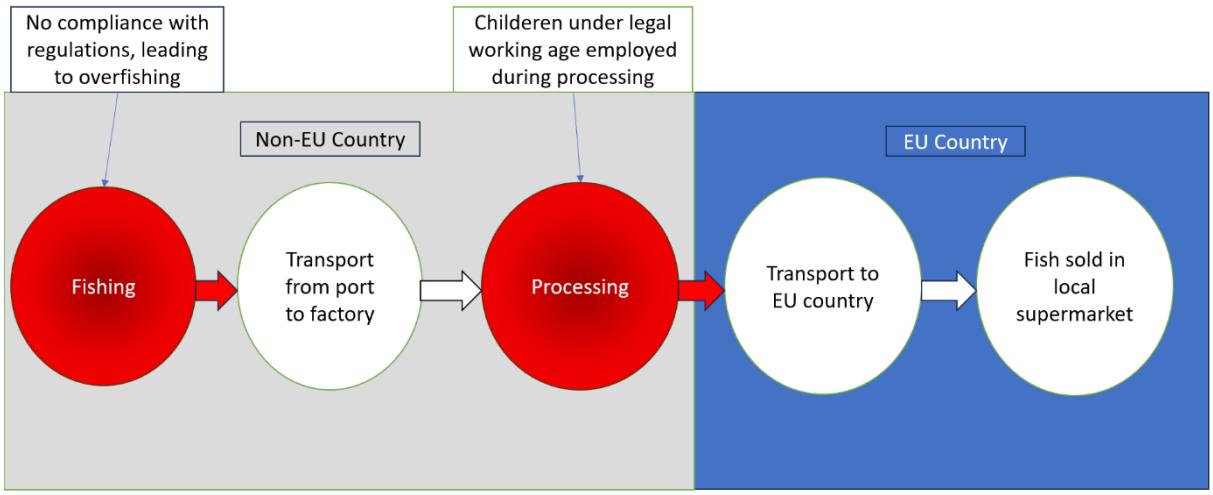

Figure 2- Illicit behaviour in supply chains. Based on Pullman et al. (2024, p. 301)

[139] See Letizia and Hendrikse (2016, p. 1919)
[140] See Monczka et al. (2021, p. 619)
[141] See Pullman, McCarthy, and Mena (2024, p. 300)

2.3.4.4.2 Examples of Illicit Behaviour in Supply Chains

There are various examples of production processes that are associated with illicit practices. An example can be found in the cacao industry[142]. The industry is known to be a significant factor in deforestation, with 60% of the deforestation being related to the untraced sourcing of cacao. Transparency can be a useful means to counter these illicit practices[143]. However, companies lack information about the origin of indirectly sourced cacao, making it difficult to assess its connection to ethical issues such as deforestation or child labour.

Also in the automotive industry, the relocation of production plants to low-cost countries caused supply chains to become complex and untransparent[144]. The transition towards electrical vehicles requires the mining of scarce natural resources, such as cobalt. However, the mining of cobalt is known to be related to dark practices. Known illicit activities include the use of children because they fit in the mining tunnels and drugging the children to suppress their appetite[145]. Transparency belongs to a priority for German automotive manufacturers to counter illicit behaviour.

2.3.4.4.3 Solving Illicit Behaviour

To avoid illicit practices in supply chains, either the producers or the consumers can be targeted to alter behaviour. At the beginning of 2024, the French parliament passed a bill that banned the advertisement of fast fashion, rapidly produced clothes to follow current trends in the fashion industry and sold at low prices. Lawmakers also plan to introduce increments with a maximum of ten euros to discourage the production and purchase of fast fashion, since it is associated with the exploitation of workers[146].

Measures can also be focused on the sellers. For example, companies can be pushed by Non-Governmental Organisations to counter illicit activities in their supply chains. In Brazil, the greatest exporter of soybeans, several companies signed Zero Deforestation Commitments (ZDCs). The ZDCs have led to a big reduction in deforestation related to soy fields from 30% to 1% of annual soy expansion in the Brazilian Amazon[147]. Extinction Rebellion is also known for its protests in order to raise climate change awareness. In the Netherlands, Extinction Rebellion focused on stores of H&M and C&A when activists glued themselves

[142] See Renier et al. (2023, p. 2)
[143] See Boegman, Carodenuto, Rebitt, Grant, and Cisneros (2023, p. 1)
[144] See Wissuwa and Durach (2023, p. 159)
[145] See Hilend, Bell, Griffis, and Macdonald (2023)
[146] https://www.bbc.com/worklife/article/20240320-france-bill-crackdown-ultra-fast-fashion-shein-temu
[147] See Gibbs et al. (2015, p. 377)

to the stores, while other activists protested in the store against the human rights abuses of the Uygurs, who produce 20% of the world's cotton[148].

Research found that CSR practices require that CSR is embedded in the entire value chain[149]. That becomes increasingly important with the Corporate Social Due Dilligence (CSDD) directive of the EU, which requires companies to check the origins of the products they source[150]. This means that supply chains will be required to be more transparent in order to trace the origins of a product. Supply chain visibility is defined as 'the extent to which actors within a supply chain have access to or share the information which they consider as key or useful to their operations and which they consider will be of mutual benefit'[151]. There are several ways for companies to create supply chain visibility.

Given that supply chains stretch out to distant locations and that supply chains that are concentrated in developing areas are less transparent[152], companies could diverge their supply base to create transparent supply chains. For some products, companies could also choose to source from local suppliers (or develop local suppliers) to enhance transparency and deal with the dark sides of the supply chains[153]. Having a second supplier in a nearby location not only creates a more certain supply and creates more transparency, it can also reduce emissions of carbon dioxide.

However, several barriers have been identified in the process of creating supply chain visibility[154]. Internal barriers, such as budget constraints and insufficient data availability, prevent the focal firm to create transparency. A lack of financial incentives discourages the supplier of the focal firm, but in addition, the supplier risks losing its competitive position as a result of increased transparency. The focal firm's customers pose a barrier as well, as customers are reluctant to share sensitive information and to engage in the process of creating transparency. Finally, there are macro-environmental factors that hinder transparency, such as silo thinking, independent decision-making, and diverging purposes.

[148] See Sark and Arnold (2024, p. 15)
[149] See Andersen and Skjoett-Larsen (2009, p. 82)
[150] https://commission.europa.eu/business-economy-euro/doing-business-eu/corporate-sustainability-due-diligence_en
[151] See Barratt and Oke (2007, p. 1218)
[152] See Gualandris, Longoni, Luzzini, and Pagell (2021, p. 820)
[153] See Gadde and Jonsson (2019, p. 6)
[154] See Kalaiarasan et al. (2022, p. 5)

2.3.4.5 Geopolitical Friction

Recent years have seen international tensions rising. Even before a weaponised conflict emerged in Ukraine, tensions increased between China and the US. The rise of new economic powers that might challenge established nations can lead to new regulations that hinder companies. A report found that US production was impeded because of the influx of solar panels and washing machines from abroad[155]. This led to a series of imposed tariffs, starting with specific products and eventually extending to steel and aluminium. These tariffs were extended to many other products in the following months. All tariffs combined affected 17,6% of its 2017 imports. These tariffs had a big impact on the production decisions of businesses. Apple selected a Taiwanese contractor to manufacture the Mac Pro desktop computer at a factory based in Shanghai, but revised that decision after the Trump administration granted a tariff exemption for certain Chinese product parts that Apple needed for production[156]. President Trump's trade wars can be viewed as a sign that there might be a limit to globalisation[157]. Research found that economic sanctions pose a challenge for companies that source on a global scale[158].

Businesses are also impacted indirectly because of higher commodity prices. The war between Russia and Ukraine in 2022 led to a shock in the energy market[159]. Russia is an important supplier of oil and gas and the conflict led to uncertainty about the availability of natural resources. The spike in energy prices and the aforementioned supply bottlenecks led to higher inflation figures, resulting in shrinking purchasing power and several central banks increasing interest rates. The war also had consequences for the global food chain. Ukraine and Russia are important exporters of wheat and especially developing countries that depended on the Black Sea trade and had low stocks were vulnerable to the consequences of the war[160]. Especially Mauritania, Sudan and Yemen were vulnerable and price increases posed a big risk for these countries. Egypt, where wheat ensures 39% of the calorie intake of the population, tried to mitigate the effects of the war by using monetary and fiscal tools.

The war also affects businesses in developed countries. Russia and Ukraine both play a big role in the supply of materials that are important for the microchip manufacturing and aerospace industry, such as nickel, copper and iron, neon, titanium, palladium and

[155] See Fajgelbaum and Khandelwal (2022, p. 3)
[156] See Monczka et al. (2021, p. 368)
[157] See Liu and Woo (2018, pp. 19-20)
[158] See Ha and Ngoc Thang (2023, p. 1044)
[159] See Inacio, Kristoufek, and David (2023, p. 2)
[160] See Abay et al. (2023, p. 4)

platinum[161]. Many companies are forced to conduct scenario planning to anticipate different scenarios and their impact on the business[162]. The Russian war also affects businesses in a moral way. The events in Ukraine have fuelled a debate about whether businesses should leave Russia[163]. Other economic consequences of the war include higher migration and defence costs. Total costs of the war are estimated to be 1% of global Gross Domestic Product[164].

The war events imply more uncertainty. This leads to the question of whether firms should anticipate increasing or remaining geopolitical frictions and reshore part of their production to domestic countries. However, recent literature states that the recent trend of reshoring in the US is not the result of increasing conflicts[165].

2.3.5 Effects of Global Sourcing

2.3.5.1 Advantages of sourcing on a global sourcing

Sourcing globally can bring about several advantages. Specific products can only be offered in certain regions after the required ingredients or components have been sourced from remote regions. Global sourcing, therefore, leads to a more diverse offering of products. This can be the case for natural resources that can only be produced in a selection of countries[166]. It also applies to sophisticated technologies that require knowledge that only few suppliers have obtained. Secondly, global sourcing firms can benefit from cost advantages[167]. Specifically, labour costs play a significant role, and in several Southeast-Asian countries, labour costs are notably lower. The minimum wage in China in 2024 ranges per region, with a minimum of 13 yuan (≈ 1,68 euros) in Heilongjiang and a maximum of 26,6 yuan (≈ 3,43 euros) in Beijing[168]. In France, the minimum wage in 2024 amounts to 11,65 euros[169]. Global sourcing, thus, can lead to significant cost advantages. Thirdly, having foreign alternatives available also enhances competition and pushes domestic suppliers to offer higher quality, become more efficient or offer lower prices[170]. Another benefit is that a firm can create access to foreign markets by creating a network of suppliers in other countries. Engaging in

[161] See Ho and Tien (2022, p. 638)
[162] See Srai, Graham, Van Hoek, Joglekar, and Lorentz (2023, p. 290)
[163] See Weyer (2023, p. 1)
[164] See Liadze, Macchiarelli, Mortimer-Lee, and Sanchez Juanino (2023, p. 875)
[165] See Kudrenko (2024, p. 10)
[166] See Oke, Maltz, and Erik Christiansen (2009, p. 154)
[167] See Steinle and Schiele (2008, p. 3)
[168] See Statista, (2024) https://www.statista.com/statistics/233886/minimum-wage-per-hour-in-china-by-city-and-province/
[169] See *Statista*, (2024) https://www.statista.com/statistics/460606/minimum-wage-france/
[170] See Monczka et al. (2021, p. 377)

global sourcing not only broadens a company's access to diverse markets but also facilitates the integration of expertise from foreign enterprises. Small and medium-sized firms that source from high-wage countries have a larger likelihood of remaining in the export market[171]. A purchasing department that is globally oriented, therefore, also broadens the scope of the sales department.

An example of a company that conducted successful global sourcing is IKEA. A case study casts light on the collaboration between IKEA and its supplier, a company that supplied the aluminium profiles that IKEA needed for several products[172]. A particular problem regarding the manufacturing of the PAX wardrobe system was the tempered glass. IKEA sourced the tempered glass from a single supplier and IKEA experienced difficulties with the supplier, because the Swedish supplier had capacity constraints and because it refused to lower its prices. IKEA then approached SAPA Profiler and suggested SAPA to source the tempered glass from China, where production costs were much lower. The Swedish supplier was eventually phased out and IKEA ensured back-up supply from a Slovakian company. Other products, such as packaging materials and rubber and steel components, were still sourced from Sweden, but the Chinese supplier of tempered glass ensured a significant cost reduction. Though there were some quality issues in the beginning phase of the collaboration, the global sourcing case of IKEA was a big success. Research has found that many global sourcing projects are initiated by critical incidents, such as a sudden bankruptcy of a supplier, natural disasters, supplier capacity issues or other supplier failures[173]. By sourcing globally, firms can abandon struggling local suppliers and make operations more efficient.

2.3.5.2 Negative Effects of Global Sourcing

There are also negative effects of global sourcing. Sourcing from global suppliers causes supply chains to be stretched out over longer distances and adds operational complexity[174]. Also, it has been found that larger offshore employment led to lower quality of innovations. However, the study examining the impact of global sourcing on innovation only found a weak effect[175]. Other research states that there is no universal guide to achieve both high cost savings and maximum innovation potential when sourcing globally[176]. Rather, a firm's

[171] See Bandick (2020, pp. 14-16)
[172] See Hultman, Johnsen, Johnsen, and Hertz (2012, pp. 15-17)
[173] See Gelderman, Semeijn, and Plugge (2016, p. 217)
[174] See Stanczyk, Cataldo, Blome, and Busse (2017, p. 47)
[175] See Yamashita and Yamauchi (2019, p. 8)
[176] See Lin (2020, p. 744)

strategy distinguishes successful purchasing innovation. This is why this downside is not included in the ABCDE framework of global sourcing.

2.3.5.3 Change of Geographical Distribution of Work

Offshore outsourcing also has consequences for the geographical distribution of work. Several reasons for cluster forming have been identified, such as historical evolutionary circumstances and lower transaction costs[177], but also benefits associated with agglomeration in combination with herd behaviour[178]. Global sourcing led to the rise of Knowledge Services Clusters, regions with highly concentrated lower-cost technical and analytical skills[179]. The benefits that agglomeration externalities offer, in combination with herding behaviour, gave rise to cluster forming. These clusters are for example located in Bangalore, Chennai, and Pune for software services, serving a wide range of global clients spread across industries.

In Norway, a maritime cluster can be traced back to the 19th century. The maritime cluster has developed organically over centuries, with different companies building close relationships and engaging in knowledge-sharing activities, driving innovation[180]. Historically, the cluster adapted to market changes by finding new technological solutions, such as transitioning from building fishing vessels to offshore supply vessels in the 70s and 80s. Where other ship manufacturers in high-cost locations had shut down production, this cluster proved successful. The shift to global sourcing marked a trend reversal from this evolutionary path. Regional inter-company links and tacit knowledge exchange have been replaced by coordination with foreign companies. The path-dependent nature of global sourcing, meaning that the choices available and the outcomes that are likely to occur are constrained and shaped by the sequence of decisions and events that have occurred in the past, meant that reversing the global sourcing decision was difficult. This was because the manufacturing capabilities were difficult to rebuild and highlights the importance of the Dynamic Capabilities Theory discussed in 2.3.2. The conclusion is that global sourcing can have severe consequences for regional economic structures and can mark a shift of knowledge, capabilities and production facilities.

[177] See Halse (2020, pp. 55-57)
[178] See van Roekel and Smit (2022, p. 153)
[179] See Manning et al. (2018, p. 11)
[180] See Halse (2020, pp. 62-73)

Now that all antecedents, drivers and barriers have been discussed, the global sourcing framework can be composed. This framework is illustrated in Figure 3. The framework forms the basis of the interviews with the purchasing experts.

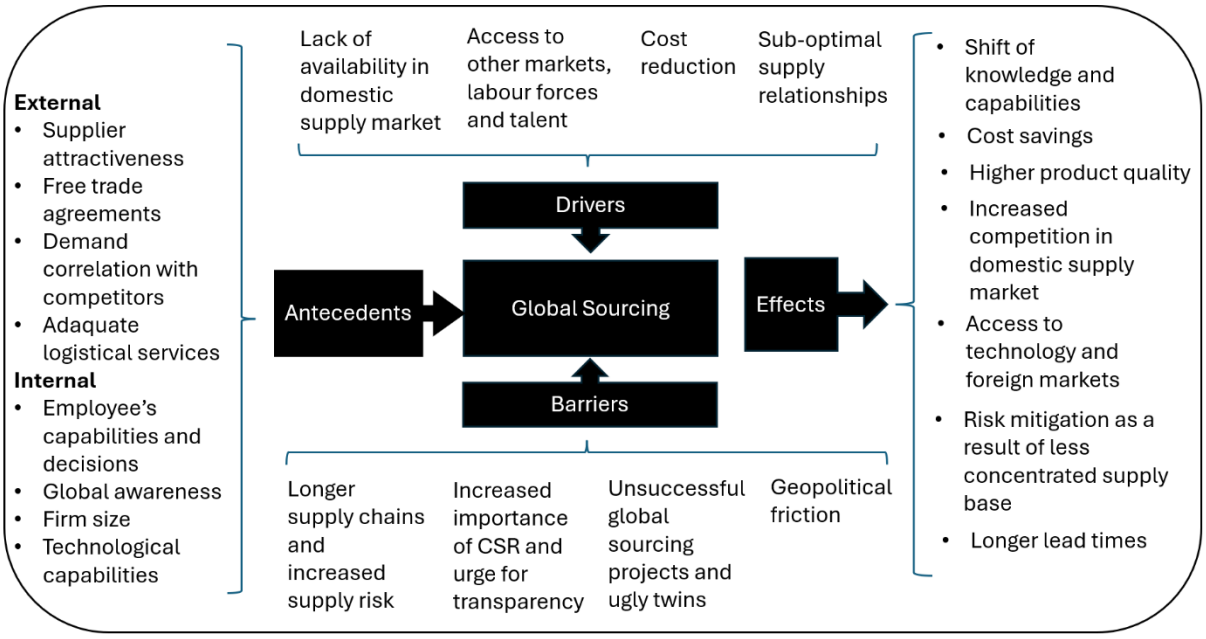

Figure 3- The ABCDE of global sourcing. Based on Kalaiarasan et al. (2022)

3. Methodology

3.1 Research Design

This study is a qualitative study to gain new insights about the future of global sourcing. The outcome of the interviews, together with the literature review, will shed new light on the future of global sourcing. The study will reflect on whether factors such as logistical issues, the increasing importance of a transparent supply chain due to CSR requirements and geopolitical tensions give rise to a more locally-oriented supply base for European firms. The research will explore the reasons behind global sourcing and the potential switch to local sources. It is important to understand why businesses conduct global sourcing in order to understand what the future holds.

Because of the complex nature of global sourcing, and because there is an interest in the reasons behind the decisions that firms make, a qualitative research design is chosen[181]. Qualitative research designs are more likely to facilitate serendipitous findings[182]. In other words; they can lead to genuine and new findings that are not expected before the study. Strategic decision-making is often not dichotomous. The global sourcing decision, and in

[181] See Saunders, Lewis, and Thornhill (2007, p. 315)
[182] See Miles (2014, p. 1)

particular the future of global sourcing, is not a binary classification. The decision represents a wide spectrum, with many different variants. Firms can choose to go entirely global or local, but can also go global for certain products, or certain suppliers. Or they can build in a flexible supply base, where there are no strictly defined suppliers, but where a firm has a different supply base each day. This makes the case for the future of global sourcing very complex and paves the way for thorough qualitative research.

In order to try to navigate through the complex spectrum of the global sourcing decision, semi-structured expert interviews are conducted, which are a typical variant of an exploratory study. Semi-structured interviews are a blend of open and closed questions and are often accompanied by follow-up *how* and *why* questions[183]. Semi-structured interviews differ from structured and open interviews. Semi-structured interviews allow the interviewer to omit certain questions and improvise, depending on the organisational context. Structured interviews often work with questionnaires, but may be too rigid for more complex matters and are often used for quantitative studies. Unstructured interviews are the most flexible, but are less suitable for specific research questions that need to be answered. Because each interviewee in this study may have their own organisational context and their own strategic considerations, a study using semi-structured interviews is chosen. This provides a multiple-case analysis, which is found to have strengths, such as like novelty, testability, and empirical validity, which arise from the intimate linkage with empirical evidence[184].

3.2 The Five Steps of Developing a Semi-Structured Interview Guide

The development of a semi-structured interview guide involves five phases, inspired by the framework of Kallio et al[185]. First, the prerequisites for using semi-structured interviews are identified. Semi-structured interviews are particularly useful for cases where people's perceptions and opinions on complex matters or emotionally sensitive issues. The fact that the dynamics of the purchasing decision-making process are very complex, with different perspectives on the subject and a possible variety between different sectors, makes expert interviews suitable for this research. Semi-structured interviews allow the interviewees to go into more detail and provide a unique perspective on the subject[186]. Semi-structured

[183] See Adams (2015, p. 493)
[184] See Eisenhardt (1989, pp. 546-547)
[185] See Kallio, Pietilä, Johnson, and Kangasniemi (2016, pp. 6-8)
[186] See McGrath, Palmgren, and Liljedahl (2019, p. 1002)

interviews are also suitable for cases where the participants do not have high levels of awareness of the subject, but that is not the case in this instance.

The second phase was retrieving and using previous knowledge to inform the interview guide. A thorough literature review was conducted to identify existing theories and findings related to global sourcing and purchasing trends. This literary review forms the basis of the interview guide. The interviews covered all aspects of the theoretical framework.

The third step involves presenting a preliminary interview guide where a list of questions can direct the interview. This interview guide is based on the theoretical framework. The interview starts with an introduction of the interviewer and interviewee. After the introduction, the general purchasing strategy was discussed, followed by global sourcing activities. The latter included benefits and drivers for conducting global sourcing. After that, barriers are discussed by reflecting on the three main barriers; logistics, transparency and geopolitics. After barriers are identified, the question is asked what can be done to facilitate global sourcing and how the negative effects of the barriers can be mitigated through the lens of Dynamic Capability Theory. Finally, the research question is also asked to the participants; 'What do you think the future of global sourcing looks like?'

The fourth phase was pilot testing the semi-structured interview guide to ensure its effectiveness. This study differs from the methodology of Kallio et al. The latter proposes a mix of internal testing, expert assessment and field testing to pilot-test the guide. In this research, the guide is checked by the supervisor of this study, who has experience with semi-structured interviews on several sourcing subjects. Also, field testing is conducted, albeit with the interviewees that participated in this study. It was noticed that certain questions did not contribute to the outcome of the study and were removed.

The last phase involved presenting the complete semi-structured interview guide in the study. The questions were ordered logically and were introduced with a scientific background. For each question, follow-up questions were available. The theoretical part started with an open question, but given the specific nature of the question, examples of possible lacking technologies were provided. The topic started with an open question without examples to prevent bias of the interviewee. Also, the final question about the future of global sourcing was initially asked as an open question, but was supplemented with possible options if the interviewee struggled with an answer. These possible options included increasing

globalisation, increasing localisation or the development of a more dynamic process. The main questions are summarised in Table 1.

Table 1- Interview guide used in the interviews

1. Would you be so kind to introduce yourself and your experiences as a purchaser?
2. Can you explain the purchasing strategy of the firm you work for?
3. Where are the suppliers of your firm located?
4. Can you give a percentage of the purchasing spend that goes to European and non-European suppliers?
5. What are the main drivers to source on a global scale?
6. What are the main barriers to global sourcing?
7. How did the logistical issues of previous years affect you as a purchaser and how did you manage these issues?
8. How do you deal with the increasing requirements for transparency and CSR?
9. Do geopolitical tensions affect the purchasing strategy of the firm?
10. Are there any capabilities that you would like to develop for your purchasing department to facilitate global sourcing? (Examples provided if needed)
11. Are there any technologies that would make purchasing on a global scale easier? (Examples provided if needed)
12. What is the greatest challenge for your firm when sourcing globally and what can be done to mitigate this challenge?
13. When you are sourcing on a global scale, do you experience increasing competition from local purchasers that can lead to increased competition for the resources of your supplier?
14. What do you do to maintain attractiveness for your supplier and what would you like to develop to remain the customer of choice?
15. What do you think that the future of global sourcing looks like?
16. Do you think that the challenges discussed in this interview lead to a more dynamic supply base?

2.3 The Sample of Experts for the Interviews

The study uses purposive sampling to gather a sample of 13 purchasers who conduct business with international suppliers. A purposive sample is one whose characteristics are defined for a purpose that is relevant to the study[187]. The interviewees were not prespecified before the study, but evolved once the fieldwork started[188]. The interviewees were selected based on specific criteria. The experts were required to be involved in the sourcing decision-making of a European firm that was sourcing from suppliers on other continents. The purchasers were also required to have multiple years of experience with global sourcing to compare the present situation with the period before the three influencing factors emerged. These requirements were established to enhance the quality of the data, which is essential

[187] See Andrade (2021, p. 87)
[188] See Miles (2014, p. 46)

for drawing conclusions in a semi-structured interview study[189]. If the experts are not selected adequately, the data is not valid. The purchasers were approached via LinkedIn after their work experience had been checked.

The experts work for a variety of firms in different sectors and branches. The experts represent a diverse range of industries, including electricity transport (1), various wholesalers (7) in promotional gifts, beans, seeds, artificial flowers, garden decoration, sustainable packaging, and greenhouse horticulture, a flooring producer (1), and large European retailers (2). Two of the experts are currently not occupied, but one worked as a freelance purchaser (1) for several organisations and the other is taking a career break for a study (1). The wide variety among the purchasers ensures that the study does not focus on a specific sector but provides a broad purchasing perspective on global sourcing. The profile of the participant is depicted in the Table 2.

The 1 hour interviews were conducted physically, unless the interviewee was located remotely or preferred a virtual interview. The interviewees know the data is collected anonymously and it is emphasised that there are no wrong answers. This avoids the Hawthorn effect[190]. The virtual interviews were recorded and transcribed by using Microsoft Teams. Physical interviews were recorded on the Dictaphone app, after which the conversations were transcribed by Microsoft Word. Before each interview, consent was given by filling in a consent form. After the interviews were transcribed and analysed, the audio was deleted.

[189] See Dorussen, Lenz, and Blavoukos (2005, p. 333)
[190] See Oswald (2014, pp. 60-63)

Table 2- Profile of the interview experts

Participant	Occupation	Sector	Duration of Interview (hours)
A	Procurement Category Manager	Floors	1:05:00
B	Manager Procurement and Logistics	Promotional Gifts	57:44
C	Procurement Manager	Seeds & Oils	55:09
D	Buyer	Non-Food Products	31:10
E	Founder	Greenhouse Horticulture	39:33
F	Strategic Buyer	Packaging	55:38
G	Career Break, but multiple years of experience in various sourcing positions	Fast-Moving Consumer Goods	1:08:55
H	Freelancer	Fast-Moving Consumer Goods	54:33
I	Technical Lead Buyer	Beans and Seeds	1:02:50
J	Head Supply Chain Management	Energy	58:59
K	Freelancer	Pharmaceutical Industry	57:33
L	Product Manager	Artificial Flowers	48:57
M	Teamlead Purchase Far East	Garden Equipment & Decoration	58:25

3.4 From data to theory

Data analysis was conducted by using Atlas.ti software, which is most appropriate to analyse large amounts of qualitative data, gathered by conducting interviews with 13 experts. Before the interviews, an interview guide based on the theoretical framework was composed. This is found to be crucial to maintain focus and to manage large volumes of data[191]. After the

[191] See (Eisenhardt, 1989)

interviews, the different subjects were examined across cases. Each of the different answers was divided into codes, representing the interviewees' possible context. For example, the countries where suppliers were located, but also different types of drivers and barriers, all had their own code. This made it easier to analyse the data, because it provides an overview of how often a certain factor was mentioned. By considering the prevalence of codes, it became clear what drives purchasers and what the most prominent problems were that they encountered. The structured codes also allowed for the use of analytical tools, such as co-occurrence analysis and the development of networks to better understand the relationship between different factors. This was for example the case for different drivers and the location of the suppliers. One difficulty when conducting the interviews was that the duration of the interviews differed, because not every expert had a full hour available for the interview. Therefore, not every subject was discussed in all interviews. A summary of the results, ordered by the different themes, is presented in Chapter 4. Chapter 5 provides an analysis of the dynamic capabilities that can facilitate global sourcing. Practical and theoretical implications, together with limitations and directions for future research, are part of the discussion, followed by a conclusion of the study.

4. Results: Observing Environmental Influences on Global Sourcing Practices

This chapter describes the outcomes of the interviews. The interviews focused on a variety of subjects and are described in the same structure as the ABCDE framework.

4.1 Antecedents and Dynamic Capabilities

The enablers mentioned by the experts were in line with the antecedents in Figure 3. This included attractive suppliers and adequate logistical services, for example. The experts focused primarily on internal capabilities. The most prominent enabler for global sourcing in particular was the ability to bridge cultural differences. Sometimes, companies focused on hiring local agents, or hired employees that spoke the language of the supplier, to facilitate global sourcing. Other internal capabilities that served as an enabler included the ability to build up profound relationships with suppliers, the ability to attain relevant information about markets, prices and suppliers, and the use of new communication technologies. Geopolitical stability served as the primary external antecedent and was required to attain reliable logistic services, conduct trade without government interference and reduce uncertainty.

There also was a focus on antecedents that were not yet optimally developed. Technology was the primary domain in which the purchasers wanted to innovate and develop the capabilities required for strategic sourcing. Data was most often noted as a key area to develop. This ranged from data about the prices and potential suppliers, to data about logistics and was most often mentioned in combination with new technologies, such as Artificial Intelligence. The development of more capable suppliers, or the detection of new potential suppliers, was mentioned in second place. This was required for producing products of higher quality or in higher volumes, but also for the documentation of CSR practices and transparency. However, one purchaser noted that they sourced from rural areas where advanced technologies had not gained a foothold yet. In order to change processes on the supplier's plant, digitisation and market data would be required:

'What do we need internally for this [changing the processes on the plants of suppliers]*? Primarily, quick and easy insights, supported by digitised market knowledge that allows us to get a clear picture of the local market at the push of a button. I believe we can leverage artificial intelligence and increasingly advanced tools that can perform better analyses than being physically present in another country.'* (Expert A)

Other dynamic capabilities were focused on improving the capabilities of the purchasers. That included the social capabilities of a purchaser, but also the ability to bridge cultural differences and to form strategic relationships with suppliers. That means that organisations focused on improving the capabilities that could serve as an enabler of global sourcing. Dynamic capabilities are analysed in more detail in Chapter 5.

4.2 Drivers of Global Sourcing and Selection of Suppliers

4.2.1 Harvested products

The experts in this study all sourced globally, but the location of the suppliers differed. The production of beans, seeds and raw materials was often tied to specific regions because of the required climate to grow these products. Therefore, soybeans were sourced from South American countries and India, but jute could only be sourced from India and Bangladesh. The purchaser of seeds could source the seeds from a variety of countries and exploited that opportunity to reduce its supply risk;

"*It is crucial to source from different regions. On the one hand, you have supply chain issues like we've seen in recent years, especially after the COVID period. Additionally, there are different harvest times. For example, in South America, the harvest is in March, April, and*

June, while in Africa, the harvest time is in October and November. You want a continuous supply of freshly harvested products, so you need to be globally represented to consistently purchase fresh products. If you were to source from only one region, for instance, you wouldn't be able to meet the demand." (Expert C).

4.2.2 Products Tied to Clusters

For other products, the production was concentrated around specialised production facilities and did not have many alternatives. For one purchaser, his suppliers of sophisticated electrical devices were located in Japan and could not be sourced from other countries. Another purchaser could only source from suppliers with the capacity to meet demand, as the purchaser explained;

"That [the selection of suppliers] all has to do with availability. If you look at the projects we carry out, such as a project in Germany where we need to lay 700 km of cable, with four lines next to each other, so you need 2800 km of cable. (…) The global production capacity can barely meet this demand, so we have to search for suppliers worldwide. It essentially means that we are often forced to source globally." (Expert J)

Also less sophisticated products were centered around specific clusters. An expert in the artificial flower sector explained that his firm designed the flowers, but the production could only be done by a Chinese supplier. Suppliers that appeared to be more cost-effective at first glance in other countries were ultimately found to be more expensive. Therefore, the production of artificial flowers remained in China, with no viable alternatives elsewhere.

Another purchaser was also forced to source from specific locations because suitable suppliers were not located elsewhere. Even though the product that was sourced was not particularly complex, production was performed by the most cost-efficient supplier, as the purchaser explained;

"We source the product where it can be produced best. Handmade or complex products, like metal products in large quantities, are usually made in Asia. But if you're buying something like tea lights, you go to Belgium. That's also convenient because it's so close by. It's about logistics, quality, and lead time. For example, Christmas lights are mainly made in China because there aren't any large Christmas light factories in Europe. So, you end up sourcing from China." (Expert D)

4.2.3 Products not Tied to Specific Suppliers

Other products were not tied to specific regions. Garments could be produced in a variety of Asian countries, but suppliers could also be found in Turkey. Garden decoration used to rely on production in China, but was increasingly being produced in Europe because of geopolitical uncertainty. A purchaser of glass stated that the production was very flexible and could therefore be sourced in the vicinity of where his projects were executed. The purchaser of packaging often had the option between European and Asian suppliers. The choice between European and Asian suppliers differed depending on the circumstances the purchaser explained;

"*Yes, we have set up dual sourcing, which allows us to switch more easily. Sometimes, Asia is extremely cheap, so we source from there. When the price difference narrows, we can switch to Europe. If customers demand sustainable products or if container availability is low, or if we fall just outside our schedule, we can also source from Europe. A dual sourcing strategy gives us many advantages. The same applies the other way around; if it's not feasible in Europe, we switch to Asia. It's always easier to switch to Europe because of the shorter lead times. You also need to account for two to three months if you want to source from Asia."* (Expert F)

4.2.4 Indirect Manufacturing Materials

Indirect manufacturing materials were predominantly sourced locally, because the components, such as a production machine or a conveyor belt were so critical for the production that the company could not afford a delay and required quick assistance from the supplier if a problem with a machine arose. Though it belongs to the definition of global sourcing, one indirect materials purchaser sourced from Marocco and other North African countries, which he found to be a sweet spot, benefitting from both lower prices and straightforward logistics. Another purchaser sourced most products in Europe, but relied on American suppliers for specific products that were only produced by a specific supplier. This purchaser was also exploring Chinese suppliers, although this was only feasible for products with accurately predicted demand. In conclusion, the two purchasers of indirect manufacturing materials both relied on European suppliers for most product parts, but the purchasers tried to maximise savings potential in their own distinct way.

4.3 Barriers of Global Sourcing

4.3.1 Logistic Issues

Regarding logistics, high container prices and longer lead times were the biggest problems the purchasers had been confronted with. That was particularly the case for products where transportation costs make up a large part of the total price. In those cases, a spike in container prices instantly led to smaller margins. This was for example the case for a purchaser that sourced glass and steel in China;

"For example, when we purchase glass and steel in China, we notice that transportation costs are a huge limiting factor (….) In certain cases, it's almost impossible to source products from Asia on a large scale due to those transportation costs. That's why companies in my sector often consider moving part of the production to Eastern Europe." (Expert E)

Nine purchasers stated that they had experienced difficulties during logistic disruptions. One reason was that various purchasers bought harvested products that were not available throughout the year. Hence, a disruption in one region could not be solved by buying in other regions. Local regions were also not available for most products, due to the required climate for the product.

Other products could only be produced in clusters where the supplier had built up the required capabilities or knowledge. Sometimes, purchasers were also bound by contracts, which disallowed buying under certain thresholds. The inability to change suppliers during logistic issues urged purchasers to undertake unconventional measures. One purchaser, for example, noted that they had made use of lorries that drove the distances that were normally covered by containerships. Other purchasers were considering changing product specifications, either to reduce the volume of the product, or in order to move production to local suppliers. However, due to capacity constraints, moving to local suppliers was often not possible.

Four purchasers stated that they were able to endure the period of supply disruption without significant problems. One great benefit for two purchasers was that even though they sourced globally and transported the products by ship, these ships were specifically designed for the product. That was the case for soybeans, but also undersea cables were transported on ships with specific cargo spaces. Two purchasers did ship their product in containers, but were able to cope with the higher prices because the products in the container were small, making the total contents of the container of high value. A shift in container prices could be spread

across the products, reducing the price increase. One of the two purchasers stopped sourcing bigger, low-value products globally and focused on high-value products. Low-value products were altered in order to produce these products locally. This way, the firm was still able to meet its demand without major logistic problems. Finally, a factor that contributed to being able to cope with the disruptions was long-term planning and maintaining higher inventory levels. The demand of promotional gifts, for example, is known well ahead of delivery. Hence, a few weeks of delay did not cause severe problems for these purchasers.

4.3.2 CSR & Transparency

CSR and Transparency were considered very important by all purchasers, not only because of intrinsic motivation, also because both customers and lawmakers demand it. All purchasers worked with certificates for their suppliers, though two purchasers were experiencing difficulties with the implementation of the certificates for some suppliers. Eight purchasers regularly visited the plants of suppliers to check their processes. However, several purchasers noted that trips to suppliers might lead to an overly optimistic view, given that a supplier knows that a customer is coming. The interviewees seemed to be a disagreement on the certificates, with three purchasers questioning the validity of the certificates. One purchaser said the following:

"*For example, certification looks very good on paper. During our visit there was a supplier who appeared to be excellently certified, with all documents in order. However, when we saw the actual situation, we were shocked. They had pigeons in the warehouse and large bags left open, which is absolutely not allowed. This indicated that their certification was not valid. On the other hand, there was another supplier whose certification was not at the same level, but their approach was much better. You only see that when you get there*." (Expert C)

This was an observation not held by all. Five purchasers stated not to experience problems with the certificates. One specifically said to disagree with purchasers that distrusted the certification and stressed that agencies can better check multiple tiers than the purchasers that buy the product. This disagreement makes it hard to draw conclusions about the validity of the certification.

However, not all purchasers were aware of the Corporate Social Due Diligence Directive. Firms did pay attention to the supplier's processes, but a thorough understanding of the entire chain, including sub-suppliers, was only conducted at a selection of the purchasing departments. For example, the purchasers that sourced harvested products whose origin had

to be checked were better aware of the entire chain than purchasers in other sectors. A big issue for the purchasers was that a product's supply chain consisted of several layers. Five purchasers said they had problems with facilitating a transparent multi-tier supply chain. In some cases, this was because the supplier was not focused on transparency or because the supplier was reluctant to share information. In other cases, the product of the focal firm was so complex that it consisted of many parts. One purchaser said the following:

"*Well, it often has to do with buying a composite product. It could have many layers. Take the production of transformers, with many components, such as steel, oil, copper, electronics, and cables. Such a product goes very deep into the supply chain. It's almost impossible to trace all of that. If you really want to check all subcontractors and their suppliers, it becomes very challenging. So, often you have to rely on certifications and trust that it has been done correctly.*" (Expert J)

4.3.3 Geopolitics

The impact of the war was especially noticeable to the purchasers who used to source products from Russia, Belarus or Ukraine. Mostly sunflowers, millets and wood were sourced from that region. Sunflower deliveries from Ukraine continued, albeit in smaller volumes, but the sanctions imposed on Russia forced purchasers to abandon suppliers in Russia. The purchasers were able to switch between suppliers and started buying the products from other regions. One purchaser was impacted by the war directly, but also indirectly;

"Yes, about 35 to 40% of our business consists of packaging for flowers. Russia is an important country for the flower industry, and that has hit us hard, though not really on the procurement side. We used to source a lot of wood from Russia, but that has been stopped. So, all the wood that came from Russia can no longer be purchased, which caused problems for me in the production of cutlery." (Expert F)

Interestingly, two purchasers that had sourced wood from Russia relocated the supply base in the opposite direction. Whereas one started importing wood from Asian countries, the other sourced in Eastern Europe because of faster delivery. Even though Asian suppliers could be cheaper, the second purchaser stuck to the European counterparts. Later on, there was room to negotiate a better price, as he explained;

“They help you out in times of need, so you agree to a slightly higher purchase price. Now that things have stabilized, you can discuss adjusting the price to ensure that their continuity is also maintained” (Expert M)

Geopolitical risk was of particular concern for the purchaser in the energy market, since the energy infrastructure is considered vital. Even though it is impossible to completely refrain from buying from China, his purchasing department was loth to buy specific products, such as cameras and critical cables, from Chinese suppliers:

"We are a state-owned company, so sometimes we receive signals from the government that certain actions might not be advisable. We currently have a security policy in place where we are very cautious with products coming from China. This is related to the vulnerability of our network. Imagine, in a James Bond-like scenario, that submarine cables are equipped with sensors or similar devices that can be remotely manipulated. That would cause enormous problems in the Netherlands. Look at what's happening in Ukraine, where the Russians are particularly focused on shutting down power plants. If you cut off power to an entire country, it leads to massive chaos. (…) We are now very consciously examining which products we use. Recently, for example, we had a discussion about cameras on construction sites. All construction sites are monitored with cameras, but if those cameras come from China, we aren't comfortable with that because it means they could know where everything is. Our security personnel are concerned that China might have access to those systems. So, that is definitely a point of concern. Even our laptops come from China, so this issue affects many aspects of our operation." (Expert J)

Four other purchasers were not directly affected by the war, but did circumvent specific regions. Another purchaser noted that although sourcing from Europe instead of China might seem beneficial, it is still possible that the new supplier imports components from China. Purchasers could be labouring under the delusion that the geopolitical risk is reduced, even when it is not:

"*Geopolitical instability has increased recently, which is a reason for many companies to shift to nearshoring. This means they are looking for producers within Europe. However, even if production takes place in Europe, the raw materials might still come from China, as they are only available there. Therefore, it's important to carefully assess whether nearshoring truly offers an advantage, because those raw materials still need to be transported over long distances*." (Expert G)

1 buyer sourced from unstable regions but indicated that it was difficult to respond to this, as there are many regions in Asia where a conflict might arise. However, the purchaser admitted that in the event of an escalation in Asia, the supply of certain products would be severely disrupted.

4.3.4 Increasing Competition for Supplier's Resources

Nine purchasers recognised the subject of preferred customer status and noticed that their suppliers experienced increased demand from upcoming markets. However, this did not form a reason to abandon remote suppliers. Sometimes, the increased competition for the supplier's resources was brought about by the emergence of local counterparts. However, raw materials could also be used for the production of other products, leading to competition for the supplier's resources from companies that operated in entirely different sectors. Five purchasers noted that they experienced problems with a supplier because they were not the preferred customer. Five purchasers noted that they had not experienced any problems with suppliers because of their position compared to competitors. One of these companies had a sister company operating in Asia, which streamlined the process with the supplier. Another company produced characteristic products, to the extent that it offered the supplier development opportunities. Hence, the buyer was more attractive than other buyers and became a preferred customer.

Tactics to become more attractive to suppliers were offering volumes or better prices, building up long-term relationships, honouring agreements, involving suppliers in developing programs, offering knowledge that could also be applied in different markets and developing local agents that streamlined the process with the supplier.

4.4 The Future of Global Sourcing

The interviewees all had their own views on the future of global sourcing of their product categories. These opinions can be grouped into roughly four groups; 1) purchasing will stay globally oriented, 2) purchasing will return to more local suppliers, 3) sourcing will be more local, but with a dynamic nature and 4) global sourcing will become a dynamic process, with the location of suppliers unknown

Six purchasers belonged to the first group and expected that the sourcing process of their product category would stay focused on global suppliers, without shifts towards local suppliers. That was for example the case for products of which particular capital needed to be present, such as for textiles and artificial flowers. For the textile industry, labour costs

remain a very important factor. Production processes can still be moved, but rather to other Asian countries, such as Bangladesh and Pakistan. The rising labour costs in China were mentioned as a primary driver for these shifts. A similar shift to other Asian countries from China was also attempted by the production of artificial flowers. Remarkably, the products turned out to become more expensive when produced in Vietnam. For two other purchasers, certain products could simply not be grown in Europe, such as Jute and Sesam. Though the importer of seeds and oils mentioned that products like pumpkin seeds could potentially be grown in Europe, instead of China, this *Made In Europe* market was likely to remain a niche market and was not feasible for large volumes. Finally, two other purchasers that sourced technically advanced products also expected their sources to remain on a global scale, as these production processes were hard to move. One of the two purchasers even expected an increase in global sourcing, rather than a decrease, because Asian countries were developing the expertise and were expected to reach European levels of production in the upcoming years.

The expectation that sourcing would remain on a (even more) global scale was not held by all. Three purchasers expected a decrease of global sourcing and thus form the second group. One interviewee was responsible for the sourcing of packages and expected sustainable packaging to gain preference. Because European suppliers were considered pioneers regarding sustainability, the percentage sourced in Europe was expected to increase. The other interviewee sourced vital infrastructure and expected that critical components were increasingly to be produced locally. That was mainly due to geopolitical unrest and the risks that are associated with sourcing from non-allied countries. Finally, the last purchaser expected a decrease in global sourcing because of increased logistic costs. For his products, the production of materials such as glass was easier to move. Given that his company performed projects in a variety of countries, most of the materials could be sourced locally-that is, where the project is performed. He said the following.

I believe the location where the projects take place is definitely crucial. Once that location is determined, there will be a strong focus on what can be sourced locally in that area. For example, if a greenhouse project is being done in Mexico, the focus will be on whether basic materials can also be sourced from Mexico. (Expert E)

Two more purchasers expected a decrease in global sourcing, albeit in a more dynamic nature. One purchaser of indirect materials expected that products critical for the

continuation of production were going to be sourced from nearby countries more often. However, for specific parts of which demand was known months in advance, an opportunity might arise to source these parts globally, given the increasing competence of global suppliers and because a delay in delivery will not cause problems. The option to source advanced components in Asia was facilitated by the fact that the company of this purchaser also operated in Asia. Hence, there were already purchasers that could streamline this new collaboration. The purchaser that sourced garden decorations also expected a slight decrease in global sourcing, but with larger decreases in periods of unrest. That means that if trade wars, geopolitical conflicts and logistic issues persist, the percentage sourced from China could fall back to 40%. The current percentage was 60%, but the expectation was that it would fall to 50%.

The final two purchasers belong to the group that projects a more dynamic global sourcing practice, but with exact locations or trends unknown.

I think you're increasingly moving towards machine-produced products for large retailers like us. This brings you to the level of a company like IKEA, where products are almost exclusively machine-made. The location of the factory depends on who can manufacture the products, and where the raw materials are sourced from becomes more important. You'll see significant shifts in the coming years. For smaller companies, handcrafting will still be possible, but for big players like [the company of the expert], the focus will shift more towards machine production. This will happen gradually. We used to buy glassware in Egypt or Portugal, but now that can easily be done in Poland. This process will unfold slowly. Where will we be sourcing in 20 years? I have no idea. (Expert D)

The other purchaser also stressed that the sourcing project is likely to become more dynamic. New technologies, such as artificial intelligence, help purchasers make the decision. Also beneficial to the process is that data and information is more widely available. That means that there is no rigid trend, but a dynamic process that keeps evolving. Consequently, a company can buy 80 percent of their volumes globally in one month, but change the percentage to 50 percent in another month. The dynamic nature of the process also means that new regions may develop that are suitable to become a supplier. Rather than solely focusing on price, the choice between suppliers will depend on a variety of factors, as the purchaser explained:

China was once the primary source, but now labor costs there are skyrocketing. This makes other countries more attractive for international sourcing, such as Myanmar, Vietnam, Indonesia, and increasingly, Africa. In some cases, Africa offers better manageable conditions and more certainty based on agreements made. This is just one example of how the sourcing landscape is shifting. These shifts require a more flexible approach based on up-to-date information. Companies need to be able to monitor and integrate developments that affect pricing, delivery reliability, and CSR. The goal is to serve the company's interests as effectively as possible, such as securing the best price, highest reliability, best sustainability, and strongest corporate responsibility. (Expert G)

5. Analysis: Developing Capabilities to Facilitate Global Sourcing

Logistic issues, CSR requirements and geopolitical friction all formed problems for the experts in this study. However, the dynamic capabilities that were elicited in this research show that the negative effects of these problems can be mitigated to a large extent, if a firm develops the required dynamic capabilities. In the next chapter, the cited dynamic capabilities of the experts are analysed through the lens of the Dynamic Capabilities Theory and applied to the three most prominent factors influencing global sourcing.

5.1 Sensing, Seizing, Reconfiguring

Dynamic capabilities have three dimensions; sensing, seizing and reconfiguring. The urge for up-to-date information would lead to the best opportunities to mitigate negative effects and thus was cited by the experts most often. The corresponding factor of dynamic capabilities is sensing, which is the capability of an organization to continuously scan, search, and explore its environment for potential opportunities and threats. Scanning for both opportunities and threats is important for an organization to plan its strategy for the next period. That means that an organisation must monitor new regulations, competitors, customers and suppliers and acquire the necessary information to conduct operations. It requires a thorough analysis of its environment, which includes the actors in the chain, social actors such as workers and lawmakers, technological possibilities, potential alternatives, industry trends, different cultures and the firm’s position in the environment.

After identifying opportunities and threats through sensing, an organisation captures possibilities in the seizing stage. This involves implementing actions to take advantage of new opportunities or mitigate the negative effects of threats. Examples of actions mentioned in the interviews that improve seizing capabilities include collaborations with suppliers,

facilitating transparency, improving collaboration between group subsidiaries, increasing employees' understanding of other cultures, and partial pooling of inventories.

Research has shown that pooling demand for specific products with other firms can offer significant price benefits[192]. Partial pooling can also be applied to realise other advantages. Companies often compete with other firms for a supplier's resources. In certain cases, competing customers can experience difficulties attaining beneficial conditions, such as attaining special products or lower lead times. However, two independent firms can significantly strengthen their position when they pool inventories and demand special treatment from the supplier. That way, a supplier unwilling to change production processes for a single firm might change its mind when a group of firms approach the supplier.

Research has found more factors that increase the acceptance of a supplier when firms try to drive supply chain digitalisation at the supplier's plants[193]. Firms can encounter reluctance from a supplier, due to a lack of trust, insufficient strategic alignment or lack of willingness to collaborate. A supplier's acceptance can be enhanced by a set of actions, such as providing new technologies free of charge or with financial support, offering technologies with benefits for the supplier (such as time efficiency, increased information exchange or reducing the number of digital platforms), providing support and training to the supplier, creating involvement of the supplier and planning a smooth transition to the new technology.

Finally, reconfiguring involves restructuring resources and capabilities to adapt to changing conditions. A company is reconfiguring when it is implementing new technologies, changing its product or processes, revising its supply base or is changing the length of contracts that are awarded. It should be noted that specific measures depend on the context of the problem. The list of the cited dynamic capabilities are summarised in Table 2. The next section elaborates on specific cases that were elicited during the interviews.

[192] See Silbermayr and Gerchak (2019, p. 381)
[193] See Kalesh, Kiratli-Schneider, and Schiele (2024, p. 90)

Table 3- Dynamic capabilities discussed in the interview

1. Sensing
• Monitor wage and price trends. Do wages in certain regions rise and does that make the supplier too expensive? Is the price increase a reason to consider alternative sourcing locations?
• Follow technological developments and stay up-to-date of new technologies that could impact the company's processes. Consider AI applications and other Industry 4.0 technologies, such as 3D printing of products or samples and Internet of Things connectivity.
• Scan new regions and potential suppliers. Use market scanning tools or external agencies, such as international purchasing offices.
• Recognize the importance of compliance. Firms will be increasingly required to create a transparent value chain. Ensuring transparency is not only essential for ethical reasons and legal compliance, but also critical for customer retention.
• Explore options in other regions. Are there alternative locations, or is the number of suppliers limited because of the nature of the product?
• Understand the firm's position as a customer to the supplier. Is the firm a preferred customer or not? Identify suppliers where preferred customer status is not accomplished.
• Gain early insight into issues within the supply chain. Stay informed about global events so supply chain managers can quickly respond to changes and expose vulnerabilities in specific regions.
• Focus on the identification of various types of risks. These could include financial risks (suppliers at risk of bankruptcy), ecological changes (whether future climate conditions will allow production in a specific location), and social changes (whether there will be enough affordable labour forces in the future).
• Create an understanding of different cultures. When dealing with suppliers from various countries, become aware of different modes of conduct. Understand that not everyone in the organisation is aware of different cultures. Identify stakeholders that lack cultural awareness.
2. Seizing
• If sensing indicates that the firm's position as a customer is weak, pool demand with other companies to strengthen the buying position. For example, a producer of wooden garden decorations might purchase wood jointly with furniture makers to negotiate better prices and terms.
• Collaborate with industry peers to jointly purchase from Asian suppliers, raising awareness of compliance. A buyer noted that CSR is not a priority for many Asian suppliers and that smaller companies struggle to drive change. Larger groups are better positioned to enforce such changes.
• Ensure transparency throughout the supply chain. It is important not only to understand the firm's production processes but also those of your suppliers and their suppliers. Use technologies to make the supply chain transparent.

• If the firm's position allows such actions, demand that suppliers adhere to CSR requirements. Collaborate with suppliers and sub-suppliers to make the product more sustainable.
• Optimise group potential. Share information within the group. Develop platforms for information sharing, and place local agents in complex situations with suppliers in distant countries.
• Focus on sustainability, but also consider the future developments. If a country invests heavily in sustainable energy, it may become a viable option in the long term. Plan accordingly.
• Ensure the procurement team has strong social skills. The relationship with suppliers is becoming increasingly important. Adequate social skills facilitate more profound relationships.
3. Reconfiguring
• Adjust the supply base by phasing out suppliers that do not put effort into sustainability or innovation, cannot meet product requirements, are unreliable, too expensive, or unwilling to change and improve.
• Implement new technologies to enhance transparency, market scouting, risk management, and product and process optimization. Collaborate with startups that introduce innovative ideas.
• Redesign the product if problems cannot be solved. If a product can only be sourced from specific regions, explore alternatives in product design. That may enable suppliers in other regions to offer their services.
• Adapt the product to make it easier and cheaper to ship, especially if shipping costs are high. Simplify the product to allow for local production in Europe if it frequently encounters bottlenecks.
• Restructure contracts. Enter long-term agreements with critical suppliers, while maintaining flexibility with others through shorter-term contracts. Build in ranges within contracts to facilitate easier scaling of orders with suppliers.

5.2 Dynamic Capabilities and the Linkage between DCT and Global Sourcing

5.2.1 Corporate Social Due Diligence Directive (CSDD)

Regarding regulations, the Corporate Social Due Diligence Directive will require much attention and will fundamentally change the purchasing landscape in the next decade. That is because it requires supply chain managers to pay attention to the entire chain, rather than solely on the focal firm's production processes. That means that downstream firms must detect and address the negative effects of production on humans and nature. Firms need to develop sensing capabilities and become aware of the urge to facilitate transparency.

All experts were aware of the importance of CSR, which was mostly translated into an effort to reduce emissions and care for production staff. However, purchasers did not always anticipate the CSDD directive. Several purchasers did not know where their suppliers

sourced their materials. Even though the CSDD now only applies to larger firms, also smaller companies can be confronted with the urge to provide transparency in their supply chain. This can already happen if such a firm has a large firm as a customer. One interviewee mentioned that his organization lost an important customer because they did not have all the required documentation about the production processes of their suppliers. Thus, if a firm has an untransparent supply chain, it cannot guarantee compliance in the entire chain and it cannot conduct business with large companies that are forced to comply with the directive.

A thorough scan of the environment is required to analyse with whom transparency can be accomplished, since many of the suppliers in developing countries do not pay attention to transparency yet. Sometimes, the interviewees experienced reluctance with their suppliers. A mismatch of priority can be the reason behind this reluctance. For example, social and environmental concerns could be less prioritised in developing regions, where there is no CSDD. Also, a supplier may conduct business with a large number of customers that do not demand full transparency, which decreases the supplier's urge to engage in sustainability.

When the sensing stage is completed, the seizing stage marks the beginning of a set of actions. When a supplier is reluctant because of competing priorities from other customers, a pooling collaboration with other firms can be started in order to attain a stronger position. When sourcing raw materials such as wood, pooling efforts can also be undertaken with companies in very different sectors. This was highlighted by the purchaser in the floor sector, who had to compete for a supplier's resources with very different firms because of the possible applications of the raw material. Such a firm can look for other companies that can use the product, but do not source from the respective supplier yet.

If a supplier would be willing to cooperate, but is still unaware of the importance of transparency, a firm can explain the context and offer support to the supplier. Research has shown that strategic partnerships foster more sustainable processes in the supply chain[194]. Technology support not only leads to a lower carbon footprint, supplier development also leads to higher supplier satisfaction, paving the way for preferential treatment[195]. Of the interviewees, those with international branches were likely to experience fewer difficulties when forming a closer relationship, because local agents formed a bridge to the supplier and mitigated cultural differences.

[194] See Abdelmeguid, Afy-Shararah, and Salonitis (2024, p. 147)
[195] See Glavee-Geo (2019, p. 10)

However, if the seizing stage proves insufficient, reconfiguring capabilities can still bring about the changes required for global sourcing. This can be done by starting alliances with new suppliers, who may be located in other regions. Firms can award longer contracts to give the new suppliers an incentive to invest in the production facilities. A firm can also seek recourse through new technology. In the food industry, blockchain is used to stimulate traceability, leading to safer and healthier food[196]. In the dairy industry, blockchain is still in the infancy phase, but was already found to be more efficient than traditional centralised techniques, such as bar codes and paper-based systems[197]. One of the experts mentioned that they were considering implementing 3D printing for samples of the supplier. 3D-printed samples would reach the buyer faster and would reduce emissions. These technologies can help companies comply with regulations and improve the image of a company.

5.2.2 Logistics and Supplier Failures

Supply bottlenecks are difficult to predict. Sometimes, bottlenecks are caused by logistic issues that are often brought about by sudden events. In other cases, a supplier in the chain has difficulties delivering the agreed quantities on time. However, firms can attempt to foresee bottlenecks and enable their purchasers to react swiftly to supply bottlenecks.

Sensing capabilities allow firms to analyse the chain and explore the different vulnerabilities in the entire value chain. These vulnerabilities can lie with the supplier, such as problems with production, resulting in longer lead times. Longer lead times can also be caused in the transportation phase, for example, because ships have to avoid specific routes. Therefore, a risk analysis of the transportation routes also needs to be conducted. In some interviews of this study, the financial risk of a supplier was also mentioned to be a limiting factor. Firms must identify possible future bottlenecks. Note that firms with transparent supply chains, also have more information on potential bottlenecks. Therefore, the transparency demanded by the CSDD can be an unforeseen side benefit regarding logistics.

If a bottleneck arises, a firm can use its seizing opportunity to mitigate the effects of the bottleneck. A firm can use alternative routes or alternative suppliers to circumvent problematic regions. A company with international branches can send local agents to support a struggling supplier. One expert in this study maintained higher inventory levels because of regular bottlenecks. Where possible, it is crucial to plan well in advance. In this study, the

[196] See Duan, Onyeaka, Pang, and Meng (2024, pp. 3-4)
[197] See Malik, Gahlawat, Mor, and Singh (2024, p. 11)

buyers who were able to anticipate product demand well ahead of time experienced fewer logistical issues.

One way to reconfigure logistics is by adopting new technologies to facilitate easier logistic processes. Research has found that disruptive technologies will reshape logistics and distribution management[198]. Artificial intelligence can predict when machines require maintenance and reduce downtime significantly, or it can better predict customer demand, which helps planning processes. Internet of Things connectivity can make it easier to trace products, allowing for more assertive management of logistics[199].

However, if rigid logistic issues persist, supply chain managers can also try a different approach, which includes a revision of the supply base. Suppliers in different regions can be selected to supply the product. Companies can also build up a local backup supplier. For certain products, the experts of this study noted that there were possibilities to produce products in the vicinity. That was even the case for pumpkin seeds, which are normally imported from China, but could be produced in Europe, albeit with higher costs. One expert that was confronted with high transportation costs, redesigned his product, so that European suppliers could meet demand. Instead of iron stoves from China, he offered his customers metal fire pits, which were cheaper due to the high logistic costs when importing from China.

5.2.3 Geopolitics

In the last years, several conflicts have emerged that have an impact on European firms[200]. Several firms saw their supply chains disrupted during these crises and the experts in this interview regularly expressed their difficulties with seeking alternatives. In order to commence a swift reaction, the sensing abilities of firms are important. That means that organisations can react to geopolitical risks more swiftly if a thorough analysis of their suppliers is conducted. That not only includes a risk analysis of the regions where suppliers are located, but also a risk analysis of transportation routes and harbours that products pass through. Certain products can also be vulnerable to trade wars. A purchaser feared that global suppliers of wood could become more expensive due to imposed tariffs. Such tariffs on raw materials could have severe consequences for many products.

[198] See Ramasamy, Natarajan, and Sathyamoorthy (2024, p. 6)
[199] See Shoomal, Jahanbakht, Componation, and Ozay (2024, p. 18)
[200] See Jawadi, Rozin, Gnegne, and Cheffou (2024, p. 24)

In some sectors, an analysis must be conducted to address the state-sensitive information that certain processes and products contain. Two experts in this study expressed concerns about possible espionage. These purchasers were loth to outsource critical components from China, such as wires and cameras, fearing the risk of losing sensible information to competitors. Trade restrictions could also have severe consequences and experts in this study mentioned ASML's export restrictions as a well-known example of how an escalating situation could look like. Tariffs on raw materials such as steel and wood can impact firms that participated in this expert panel. Therefore, firms should use their sensing abilities to identify geopolitical risks.

However, even if sensing abilities are optimal, it does not always mean that immediate action offers the best results. Immediately switching from suppliers when prices skyrocket may still result in higher costs. For specific cases, a wait-and-see approach is recommended[201]. This also proved successful for one expert in this study that sourced sunflower seeds from Ukraine. The purchaser waited until the initial spike in prices was over before sourcing sunflower seeds again. Other companies attempted to secure large-volume contracts directly, but ultimately incurred higher costs.

Therefore, there is no blueprint for acting upon geopolitical events. It depends on the situation which approach best suits the problem. Data and information help organisations to make informed decisions. It is also necessary to include multiple stakeholders when confronted with unforeseen events. Research has found that supply chain managers who continuously interact with their workers to develop group thinking where all stakeholders are involved are better able to maintain logistic innovation performance when confronted with geopolitical disruptions[202].

Finally, a supply chain can also be reconfigured to deal with geopolitical risk. In that case, regions where geopolitical risk is high are avoided. Most ostensibly, this already happens for certain products that were previously sourced from Russian and Ukraine, according to the experts. If products are not available elsewhere, firms can alter their assortment. For example, one of the experts replaced sunflower oil with oils from turnip rape or rapeseed. Geopolitical risk was mostly accompanied by shorter contracts. Shorter contracts allowed for flexibility and the chance to switch between suppliers.

[201] See Roscoe, Skipworth, Aktas, and Habib (2020, p. 1523)
[202] See (Ali, Gligor, Balta, Bozkurt, & Papadopoulos, 2024)

5.3 Developing a Decision-Making Tool for Global Sourcing

The interviews show that the decision-making process of global sourcing differs because of the sector-specific nature of the respective company. That means that firms are impacted by the risk factors differently. The process of global sourcing starts with the analysis of the product, the supply market, prices and quality. A product that entails local suppliers could be redesigned in order to enable global sourcing. However, the interviews showed that there were various reasons for companies to prefer local sources of supply. The local sourcing decision forms one of the four outcomes of the model, which is depicted in Figure 4. The four outcomes are characterised by the ovals. Squares indicate the decisions companies face.

Products that are most suitable to be sourced from global suppliers are confronted with the risk factors. The question is whether the risk factors pose a reason to search for alternative suppliers. Regarding logistics, this can be answered by considering the impact of higher container prices or longer lead times on the product price or quality. Regarding the CSDD, the entire chain should be analysed to elicit where the risks are located in the chain and where transparency may be harder to facilitate. The geopolitical risk can be analysed by considering the product characteristics and an analysis of which products are vulnerable to import tariffs. Also, the nature of the sector is an important consideration. For example, firms within the energy sector are more likely to avoid suppliers from specific countries compared to firms in the apparel industry.

If the factors are not a reason to change suppliers, the company sticks with its existing suppliers, which forms the second outcome in the model. However, if the risk factors do cause a shift, the next question is whether the product has multiple suppliers across different regions. In the interviews, some companies reported that they could not surpass certain suppliers, because alternatives were not available or present. In such cases, product redesign may be considered. If redesign is not feasible, changing suppliers is not an option, and the company remains dependent on its existing global supplier.

If the company does have alternatives in different regions, the question is whether the company also possesses the required dynamic capabilities. The dynamic capabilities are summarised in Table 3. These capabilities help facilitate and streamline the global sourcing process, but also allow for a more dynamic sourcing process where a firm can switch between suppliers more easily. If the company lacks these capabilities, it tends to focus more on local suppliers rather than on those located in distant regions. Therefore, the final two outcomes are either that a firm returns to more local suppliers, or that a firm remains sourcing

globally in a dynamic way, where companies can switch between both global and local suppliers.

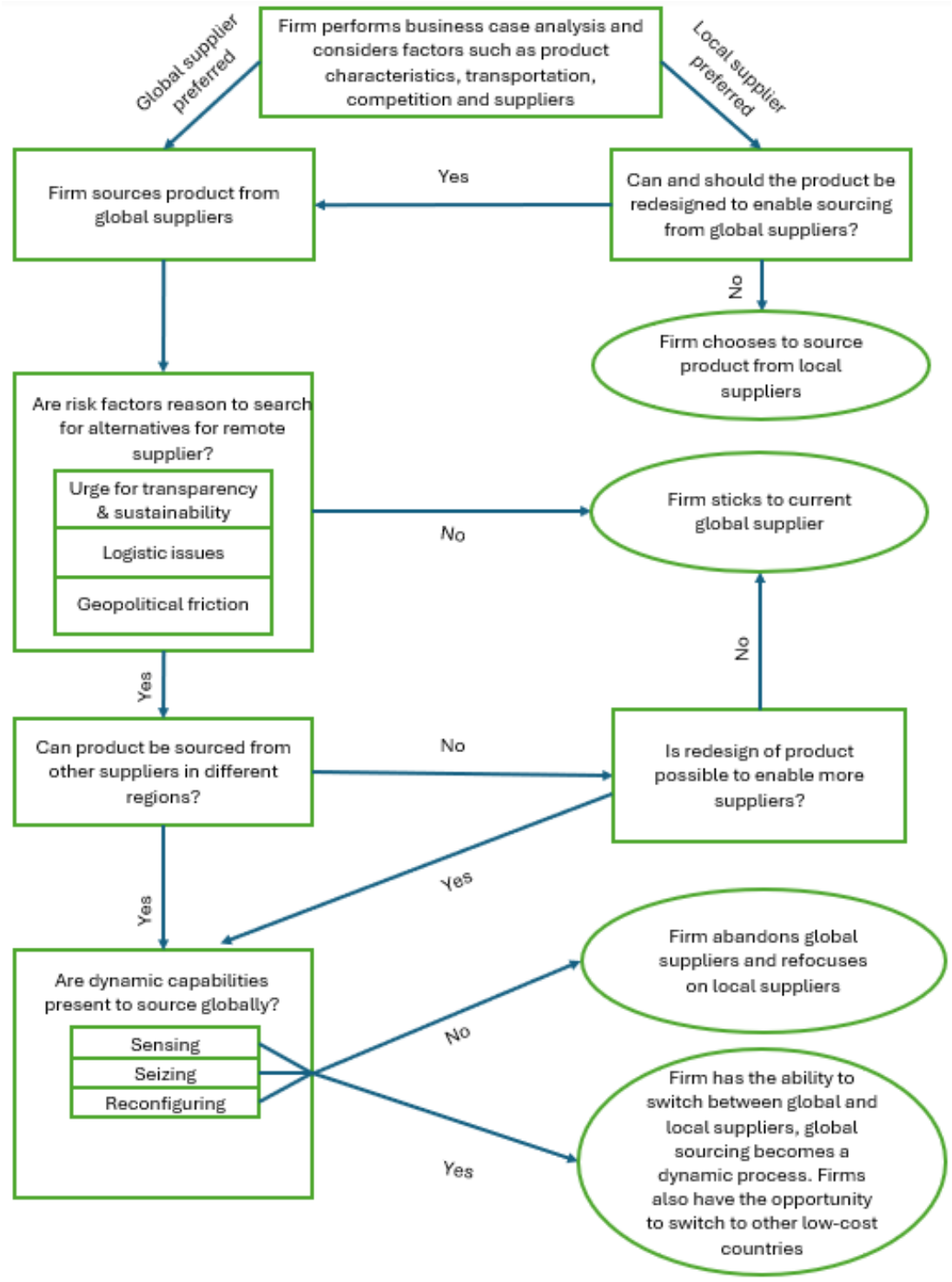

Figure 4- Decision-making tool for sourcing with a focus on the question of whether a firm can conduct global sourcing

6. Discussion: What is the Future of Global Sourcing?

6.1 Findings of this study

This study sheds new light on global sourcing practices. First, a comprehensive framework of global sourcing was developed. This framework is depicted in Figure 3. It provides an overview of the antecedents, drivers, barriers and effects of global sourcing. Furthermore, a global sourcing tool is developed, which can be used in the decision-making process regarding global sourcing. This tool is presented in Figure 4.

The findings of this study reveal that the future of global sourcing depends on the sector-specific nature of the products and that different sectors are impacted by the influencing factors in their own distinct way. For critical products, such as vital energy infrastructure, geopolitical risks triggered a return to local sources. For other products, the other risk factors also triggered a transition from global to local. Sustainable packaging could only be sourced from European suppliers, which encouraged purchasers to increase sourcing in Europe. For products where logistic costs covered larger shares of the total costs, logistical issues were motivations to seek suppliers in the vicinity.

For other products, the supply base is expected to remain globally oriented. One reason for this is that the capability to produce the product is centered around specific clusters and cannot be moved easily. This was not only the case for sophisticated products that required specialised knowledge or sufficient capacity, also less sophisticated products were sometimes bound to specific clusters. High labour costs also formed a barrier to returning production to Europe, because labour cost differences between developing and Western countries remained considerable. Even though a low-volume niche market for harvested products grown in Europe was developing, most harvested products and raw materials could not be grown in Europe. Another group of purchasers expected that global sourcing would become more dynamic. For this group, sourcing becomes a dynamic process where the location of the supplier can change, depending on the circumstances.

Findings also reveal that organisations can develop the necessary capabilities to facilitate global sourcing. With sensing, seizing and reconfiguring capabilities, summarised in Table 3, companies can mitigate the negative effects of logistical issues, CSR requirements and geopolitical tensions to a certain extent. If alternative suppliers are available, companies that possess these capabilities are able to make sourcing a dynamic process. In that case, sourcing strategies can be focused on global networks in times of certainty, but are focused on

alternative or local regions in periods of uncertainty. The focus of the sourcing strategy, however, depends on the specific situation of the company and its suppliers.

6.2 Theoretical contribution

The outcome of this study provides a number of new insights for research. Even though the advantages of global sourcing have been identified, research has also pointed towards possible downsides of global sourcing. Vos et al. (2016) examined whether global sourcing pays off and found no proof of higher cost savings due to global sourcing[203]. Rather, existing suppliers offered better prices because of increased competition. Those findings are in line with the research of Steinle and Schiele (2008), who found that firms that spent larger percentages of purchasing volumes on global suppliers were not necessarily more successful[204]. Furthermore, Horn et al. (2013) found that companies can also deteriorate their buying position if a global sourcing project fails, leading to higher costs if a firm returns to the old supplier[205]. The advantages and disadvantages, together with the antecedents and effects of global sourcing are depicted in a global sourcing framework that is similar to the model of supply chain visibility of Kalaiarasan et al. (2022)[206].

The effects of the three risk factors in this study have been examined in isolation, but the dynamics between the three risk factors together and global sourcing have not been examined. Koerber and Schiele (2022) studied the impact of COVID-19 on global sourcing, but found no evidence of a turning point in global sourcing[207]. Ha and Ngoc Thang (2023) found that economic sanctions hindered firms that sourced products on a global scale, possibly leading to a decrease in global sourcing[208]. Andersen and Skjoett-Larsen (2009) stressed that CSR practices require embeddedness in the entire chain, including suppliers[209]. Recently, the implementation of the EU CSDD directive, which urges firms to facilitate transparency in the entire chain, can have implications for the global sourcing decision-making process.

Therefore, this research extends global sourcing literature by examining the impact of multiple factors on global sourcing and finds that different sectors are impacted by each risk factor. The study shows that there is no single explanation of global sourcing decisions, but

[203] See Vos et al. (2016, p. 344)
[204] See Steinle and Schiele (2008, p. 12)
[205] See Horn et al. (2013, pp. 31-33)
[206] See Kalaiarasan et al. (2022, p. 8)
[207] See Koerber and Schiele (2022, p. 219)
[208] See Ha and Ngoc Thang (2023, p. 1044)
[209] See Andersen and Skjoett-Larsen (2009, p. 82)

that different companies react differently to different risk factors. Hence, different companies also entail a different sourcing strategy. Furthermore, the research also examines how companies can mitigate the negative effects of global sourcing by considering the Dynamic Capabilities Theory. It contributes to supply chain management literature by explaining that companies can continue global sourcing by developing the required dynamic capabilities, even when various risk factors, such as logistic issues, new due diligence requirements and geopolitical conflicts, make global buyer-supplier relationships more fragile.

Though the interview sample consisted of Dutch purchasers, these findings can be generalised to European firms. The risk factors in this research are also viable risks for firms in other European countries. That is because the CSDD directive impacts all firms in the European Union. Additionally, logistical challenges have similarly affected European firms that source from Asia, and European countries have expressed similar perceptions and responses to geopolitical issues. Therefore, this study is relevant for supply chain managers in the European Union.

6.3 Practical implications

The outcome of this study can be a useful tool for Dutch purchasers. By analysing Dutch global sourcing practitioners, a decision-making framework is constructed and presented in Figure 4. The framework shows the decision-making process of firms and focuses on the question of whether products are sourced from global or local suppliers. The model also shows how risk factors impact firms that are conducting global sourcing. Purchasers can use the framework in the decision-making about global sourcing. Furthermore, a more profound understanding is developed of how dynamic capabilities can mitigate the negative effects of risk factors.

This research also shows that managers do not have to revise their entire strategy when confronted with one of the influencing factors. It has been argued that there is a multitude of opportunities for businesses to develop the capabilities required to remain globally oriented, even though difficulties become more ostensible. The study provides a list of capabilities that purchasers can develop and provides specific examples when firms are confronted with problems in the context of the three influencing factors. Possible actions to facilitate global sourcing can also include more unconventional ideas, such as demand pooling efforts together with other independent firms to improve the buying position in the market. It shows that a reluctant supplier can be convinced if the buyer’s position improves and highlights the

importance of the status as a preferred customer. The dynamic capabilities that form the outcome of this study are discussed in Chapter 5.2 and are summarised in Table 3.

The study also shows that global sourcing is not bipolar, it can be a dynamic process that can be changed according to the circumstances. Purchasers should therefore not only focus on the trade-off between global and local sourcing, but can also consider the possible dynamic nature of the sourcing strategy. The study shows that the implementation of capabilities can facilitate dynamic processes. Purchasers are therefore advised to become pioneers in the adoption and implementation of innovations and capabilities to overcome supply chain problems.

6.4 Limitations and directions for future research

There are limitations to this study and the conducted interviews. Firstly, the sample contains 13 experts, which is a relatively small sample with experts that have different experiences with global sourcing. Secondly, the experts in this study occupied purchasing positions in very different sectors and there was a big difference between various purchasing departments. That makes it hard to draw general conclusions about the future of global sourcing. For certain sectors, the prognosis of sourcing is fundamentally different than for other sectors. Also, different purchasers react differently to the same problem. This shows that there is no one strategy that fits all. Thirdly, this study was oriented towards the European context of global sourcing. However, the future of global sourcing may be different for purchasers from other countries on other continents. Fourthly, the sample of this study does not include purchasers that once sourced on a global scale, but stopped and returned to local sourcing, nor does the sample include companies that are not yet conducting global sourcing, but are considering it. Fifthly, the concept of global sourcing was considered through the lens of Dynamic Capabilities Theory. Different study approaches may elicit different findings. Finally, three influencing factors were the main focus of this study. That still leaves room for additional factors that might influence global sourcing.

Therefore, future research can consider a sector-specific analysis of future global sourcing practices. That might elicit how different sectors react to the influencing factors and which sectors are especially vulnerable to any of the three influencing factors. A more detailed case study can also shed light on a specific approach to global sourcing issues, or might provide more specific guidance in companies that deal with similar problems as the case study. Future research can also perform analysis on firms that are not conducting global sourcing, but are considering sourcing from remote suppliers. Future scholars can also approach global

sourcing through different theoretical lenses, or include a new factor that might lead to different sourcing processes. Different approaches can enrich the academic literature and find new problems, solutions and capabilities.

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7. References

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8. Appendix

Appendix A: Informed Consent Form

Consent Form for Business Administration

YOU WILL BE GIVEN A COPY OF THIS INFORMED CONSENT FORM

Please tick the appropriate boxes	**Yes**	**No**
Taking part in the study		
I have read and understood the study information dated ****, or it has been read to me. I have been able to ask questions about the study and my questions have been answered to my satisfaction.	○	○
I consent voluntarily to be a participant in this study and understand that I can refuse to answer questions and I can withdraw from the study at any time, without having to give a reason.	○	○
I understand that taking part in the study involves an interview about the future of global sourcing, which is audio-recorded, transcribed and analysed. The audio-records are destroyed after the research	○	○
Use of the information in the study		
I understand that information I provide will be used for analysis and research. The results will be analysed and conclusions will be published in the UT database.	○	○
I understand that personal information collected about me that can identify me, such as [e.g. my name or where I live], will not be shared beyond the study team.	○	○
I agree that my information can be quoted in research output.	○	○
Consent to be Audio/video Recorded *I agree to be audio/video recorded. Yes/no*	○	○
Future use and reuse of the information by others		
I give permission for the interview data that I provide to be archived in the UT database so it can be used for future research and learning.	○	○

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Signatures

Name _____ date

Name participant	**Signature**	**Date**

I have accurately read out the information sheet to the potential participant and, to the best of my ability, ensured that the participant understands to what they are freely consenting.

Wouter Wilmer _____

Name of interviewer	Signature	Date

Study contact details for further information: Wouter Wilmer, w.wilmer@student.utwente.nl

Contact Information for Questions about Your Rights as a Research Participant

If you have questions about your rights as a research participant, or wish to obtain information, ask questions, or discuss any concerns about this study with someone other than the researcher(s), please contact the Secretary of the Ethics Committee/domain Humanities & Social Sciences of the Faculty of Behavioural, Management and Social Sciences at the University of Twente by ethicscommittee-hss@utwente.nl

Appendix B: Interview Guide

Introduction — Introduction of interview moderator

Briefing — **Is it possible to record the interview?**
Purpose of research
Purpose of interview
Explain the interview procedure
Question: **Do you have any questions before starting the interview?**

Question 1: **Can you first introduce yourself and the firm?**

- How long have you been active in the field of purchasing?
- How long have you been active in your current occupation?
- What are the main activities of the firm?

Outline question 2 from literature:
Firms have a variety of purchasing strategies available. These strategies can range from centralized versus decentralized structures, single versus multiple sourcing, local versus global sourcing and transactional versus strategic relationships with suppliers. To implement a strategy, a variety of sourcing levers is available to firms (Schiele et al., 2011).

Question 2: **What is the firm's purchasing strategy?**

Question 2a**:** **What are the most important suppliers of the firm and where are these suppliers located?**

Question 2b: **What are the main drivers for the firm to engage in global sourcing?**

Question 2c: **Does the firm experience specific difficulties when dealing with remote suppliers compared to local suppliers?**

Back-up:

- *Try to find out global sourcing strategy: for which products do they conduct global sourcing?*
- *Do competitors also conduct business with global suppliers?*

Outline question 3 from literature: Firms are faced with multiple strategic purchasing decision. One of these decisions is about the geographical dispersion of the supply base. Firms can try to maximize savings potential by searching for suppliers all over the world (Steinle & Schiele, 2008, p. 3). Also, sometimes, local suppliers are not able to supply the focal firm, forcing it to search abroad. However, several barriers regarding global sourcing have also been distinguished, such as more complex networks and the increased push for transparency.

Question 3: **Does the firm engage in global sourcing?**

Question 3a**:** **What are the most important suppliers of the firm and where are these suppliers located?**

Question 3b: **What are the main drivers for the firm to engage in global sourcing?**

Question 3c: **Is global sourcing conducted for a particular product type, or is it generally conducted?**

- *Try to find out global sourcing strategy: for which products do they conduct global sourcing?*
- *Do competitors also conduct business with global suppliers?*

Outline question 4 from literature:

Various benefits for global sourcing are known (Koerber & Schiele, 2022). These benefits range from costs and quality advantages, to regulatory and availability matters. However, each firm may have different incentives for global sourcing practices. Also, it might be interesting to see whether these differences have changed over time. For example, several global sourcing cases were found to be unsuccessful, which led the firm to return to its initial supplier at a higher cost (Horn et al., 2013).

Question 4: **How does the firm benefit from the global supply base?**

Question 4a: **Do global suppliers distinguish themselves in terms of quality, costs, service or sustainability?**

Question 4b**:** **Did the benefit of global sourcing change over time? Did the cost advantage or availability benefit decrease over time?**

Back-up:

For global sourcing, is competitive advantage achieved? Can firms attain preferred customer status?

Outline question 5

Given the unpredictable nature of global supply chains, recent supply disruptions such as those caused by the COVID-19 pandemic or incidents like the blockage of the Suez Canal have brought significant challenges to firms worldwide (Mathivathanan & Sivakumar, 2021). These disruptions have the potential to affect various aspects of a firm's operations, from sourcing raw materials and components to delivering finished products to customers. Also, research has pointed out that Western firms have become less attractive for Asian suppliers, because the suppliers experience increased demand from local customers (Koerber & Schiele, 2022).

Firms are increasingly being pushed to operate with full transparency in their chain (Letizia & Hendrikse, 2016). Given the geographical distance and potential cultural or regulatory differences between the firm and its remote suppliers, there may be inherent challenges in establishing transparency in procurement processes (Gualandris et al., 2021). These difficulties could manifest in various forms, such as limited visibility into supplier operations, communication barriers, and challenges in verifying compliance with ethical or quality standards. Understanding the extent to which the firm encounters difficulties in creating transparency when buying from remote suppliers is crucial for evaluating the effectiveness of its supplier management practices and identifying opportunities to enhance transparency and accountability throughout the procurement process.

Question 5: **The last years have seen several barriers regarding global sourcing. We now focus on the invironmental risks, such as logistical issues, the increased push for CSR and geopolitical friction. How do these barriers affect your firm?**

Question 5a: **To what extend and how long was the firm impacted by recent disruptions?**

Question 5b: **Do recent disruptions lead to an increase in the perceived likelihood of future supply bottlenecks? Does this affect the purchasing strategy of the firm?**

Question 5c: **Is transparency a hot topic in the business of the firm? Are there any actions taken to increase transparency? And how?**

Question 5d: **Does the increased importance of CSR lead to a more local tendency of supply?**

Question 5e: **Do customers put pressure on the firm when considering the origin of your suppliers?**

Question 5f: **Does the changing international political landscape alter sourcing practices? Do Russian/Chinese suppliers become less attractive?**

Back-up:

- If strategy is altered, how and why?
- If strategy is not altered, why not?

Outline question 6 from literature:

Literature focusing on Dynamic Capability Theory investigates the interaction of a firm's resource base and its capabilities to extend and modify existing resources or create new ones. This can be aggregated to three analytical activities: sensing opportunities and threats, shaping and seizing opportunities and maintaining competitiveness by reconfiguration and transformation. In the light of purchasing, it is interesting to see whether firms experience benefits because of certain capabilities or still lack capabilities that would streamline the sourcing process.

Question 6: **Do internal factors impact global sourcing practices? Does the firm notice any advantage stemming from internal capabilities (knowledge or processes) that benefit sourcing practices?**

Question 6a: **What are factors that enable global sourcing? Think of technology-, knowledge- or process-related factors**

Question 6b: **Does the firm experience any strategic disadvantage because of the longer distance from suppliers?**

Question 6b: **Is there a strategy implemented to develop any lacking capabilities**

Back-up: Think of sensing, seizing and reconfiguring, think of capabilities such as supply market orientation, contracting, cross-cultural behaviour

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Outline question 7 from literature:

Pros and cons have been distinguished by literature (Koerber & Schiele, 2022). It is now the question in which sectors a tendency towards local supply becomes visible.

Question 7: **What is your perspective on the future of purchasing? Do you think the supply base will get more local, or will considerable numbers of suppliers remain remote and originating from other continents?**