

# Domestic sourcing, EU sourcing and transcontinental sourcing: the effect of social capital on different methods of sourcing

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## ABSTRACT

*In the last decades, global sourcing has been one of the significant sourcing methods to gain a competitive advantage. Although global sourcing is a well-researched topic, there is still a lack of research when comparing it with domestic sourcing and EU sourcing. All of these three different sourcing methods pose their challenges. Therefore, examining the effect of social capital on these sourcing methods is the purpose of this study. A qualitative analysis was performed in the form of 22 semi-structured expert interview. Purchasing experts put highest emphasis on the difference in culture and language. With increasing distance, it also gets more challenging to build a strong relationship between buyer and supplier. The most crucial result of this study is that the effects of social capital on sourcing can be divided into two steps. First, the significant difference between domestic sourcing and EU sourcing is the increasing importance of cultural and linguistic barriers, the further the supplier is located away from the buyer. The second step is the occurrence of even larger distances, which results in difficulties of meeting frequently and building any trust or commitment. The results of this research cannot be generalised due to the limited sample size. Nevertheless, they can be used as indications and insights into which social capital dimension affects sourcing the most. Moreover, they show which sourcing method is affected by social capital the most.*

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## Keywords

domestic sourcing; European sourcing; transcontinental sourcing; social capital; buyer-supplier relationship; purchasing and supply management;

## 1. SITUATION AND COMPLICATION: CHOOSING BETWEEN DIFFERENT SOURCING METHODS

In recent years, companies witnessed the increased importance of considering different sourcing methods (Berry and Kaul, 2015, p. 1025). The major trend in choosing between these methods is global sourcing (Horn et al., 2013, p. 27). In 2004, global sourcing accounted for \$268 billion of imports for American multinational companies in the manufacturing sector, which refers to an increase of 143% compared to 1989 (Berry and Kaul, 2015, p. 1025). The main reasons why companies start sourcing globally are an increased quality and availability as well as a reduction in costs (Cho and Kang, 2001, p. 546). However, Cho and Kang (Cho and Kang, 2001, pp. 546-547) argue that global sourcing could be connected to some risks. First, there might be logistical problems. Second, longer distances between buyer and supplier create a longer lead time for products. At last, there are many regulations like tariffs and quotas. On top of that, there might be cultural differences that exist due to a different language or different values and attitudes (Pyke, 1998, p. 8). That is why companies have to consider both advantages and disadvantages of sourcing globally.

Although global sourcing is an extensive-researched topic, it has not yet been distinguished between sourcing from a country located close to the buying firm's country and from a country located further away. In the research at hand, global sourcing is divided into sourcing by an EU member from another country in the EU (hereafter: EU sourcing) and sourcing by an EU member from another country located on another continent (hereafter: transcontinental sourcing).

The counterpart of global sourcing is domestic sourcing. It deals with the procurement of goods and services from companies that are closely located to the company (Körber and Schiele, 2020, p. 3). It is fair to expect that the disadvantages of global sourcing are the advantages of domestic. In particular that would mean that logistical problems are limited as the distance present in global sourcing is not given when considering domestic sourcing. Moreover, there are no regulations, tariffs or quotas if a company delivers products from one company to another one in the same country. Finally, differences in culture and language are less expected to be present - as typically - living in the same country, people share their culture, language and attitudes.

The question arises which theoretical approach can explain why companies choose domestic sourcing, EU sourcing, or transcontinental sourcing. According to Morris and Holman (Morris and Holman, 1986, p. 124), an effective buyer-supplier relationship is characterised by relational variables (Interaction), socio-structural variables (Situation), and normative variables. To be more precise, an effective exchange of resources between buyer and supplier can be facilitated by the development of social capital (Hughes and Perrons, 2011, pp. 168-169). However, it is not known how social capital's absence or presence influences the different sourcing methods and how the level of social capital is different within domestic sourcing, EU sourcing, and transcontinental sourcing. That leads to the following research question:

RQ1: How does the presence (or absence) of social capital affect domestic, EU and transcontinental sourcing?

In order to be able to explain the effect of social capital on domestic sourcing, EU sourcing and transcontinental sourcing, a further distinction of the locations is needed. Thus, the three sub-questions of this research are:

RQ1.1: To what extent does social capital affect domestic sourcing?

RQ1.2: To what extent does social capital affect EU sourcing?

RQ1.3: To what extent does social capital affect transcontinental sourcing?

It is helpful to separate sourcing into the supplier locations to discover which of them is affected by the dimensions and variables of social capital the most and the least. In that way, the research at hand concentrates on two main research gaps:

(1) Current literature barely divides global sourcing into EU sourcing and transcontinental sourcing. For example, there could be significant differences for a German company to source from the Netherlands or China that both are defined by global sourcing. The differences between domestic sourcing, EU sourcing, and transcontinental sourcing are examined by answering the research question.

(2) In contrast to current literature which only focusses on the effect of social capital on one sourcing method at once (Bohnenkamp et al., 2020, pp. 83-111; Villena et al., 2010, pp. 561-576; Kale et al., 2000, pp. 217-228; Horn et al., 2014, pp. 54-65), the research at hand is analysing the presence of social capital in all of the sourcing methods simultaneously. Bohnenkamp et al. (Bohnenkamp et al., 2020, pp. 83-111) have analysed the effect of social capital on deep localisation projects, whilst Horn et al. (Horn et al., 2014, pp. 54-65) have examined the effect of social capital on the internal and external integration in global sourcing relationships. Answering the research question and sub-questions, differences and similarities in the presence of social capital can be explained for domestic sourcing, EU sourcing and transcontinental sourcing.

This paper is divided into six parts. After introducing the current situation and complication and stating the research questions, a thorough literature review is going to be done. The literature review is divided into two chapters. First, the definitions of domestic sourcing, EU sourcing and transcontinental sourcing are explained. Then, the social capital theory is explained with its three sub-parts of *cognitive, structural and relational capital* and its sourcing application. In the fourth chapter, the research methodology is declared. It deals with the research design and data collection followed by a description and explanation of the research results, first for the locational factors and then for the theory sub-parts. Finally, a conclusion will be drawn.

## 2. SOURCING: PLANNING, SELECTING AND CONTRACTING

In general, sourcing can be seen as another word for procurement (Gottfredson et al., 2005, p. 132). It deals with interrelated processes focusing on the methodology of maximizing the value of externally procured goods (Smeltzer et al., 2003, p.16). To be more precise, Schiele (2019, p. 47) argues that sourcing is a part of the overall purchasing process and deals with the planning of supply, suppliers' selection, and contracting with those suppliers. In literature, sourcing is divided into domestic sourcing and

global sourcing that both are explained in the following (Bohnenkamp et al., 2020, p. 87).

## **2.1 Domestic sourcing: Focus on relationships and collaborations**

Domestic sourcing refers to sourcing goods and items in immediate geographical proximity (Körber and Schiele, 2020, p. 4). According to Sorenson and Baum (Sorenson and Baum, 2003, pp. 7-8), local suppliers should be used when a close collaboration between the partners is required. The benefits of local sourcing are short distances, same cultural backgrounds, currency and language, and a low risk for disruption of the supply chain (Ivanov et al., 2019, pp. 122-123). Moreover, companies choose domestic sourcing for costs, flexibility and delivery reliability (Wei et al., 2012, p. 367). Local supply chains are also more agile and responsive (Jin, 2004, p. 1292). With time going by, companies strive for more. They want to gain a competitive advantage and perform better than their competitors in combination with better quality and lower costs (Alguire et al., 1994, pp. 62-63). One option to gain the aforementioned competitive advantage is global sourcing. Conner and Prahalad (Conner and Prahalad, 1996, p. 488) add that firms tend to develop and progress and try to defend their current market position by moving to globally oriented supply chains.

## **2.2 Global sourcing: Procuring goods internationally**

*Global sourcing* is defined as sourcing goods and items on an international scale (Schiele et al., 2011a, pp. 317-318). Golini and Kalchschmitt (Golini and Kalchschmitt, 2011, p. 86) define global sourcing as the procurement from a different location than the buying firms'. However, that term gives space for interpretation. Literature does not distinguish between sourcing from countries that are close to the buying firm and sourcing from countries located farther away. As greater distances increase transportation costs and lead to longer lead times (Golini and Kalchschmitt, 2011, p. 87), it could be essential to distinguish between 'close' sourcing and sourcing from farther away. The research at hand will differentiate between intracontinental and intercontinental sourcing.

That distinction is also defined by Körber and Schiele (Körber and Schiele, 2021, p. 5). They argue that 'global sourcing consists of European sourcing as well as transcontinental sourcing [...]' (Körber and Schiele, 2021, p. 5).

In the paper at hand, European sourcing is operationalised as sourcing performed by an EU member state from another EU member state and is called 'EU sourcing' in the following. Transcontinental sourcing is operationalised as sourcing carried out by an EU member state from a country that is not an EU member and is referred to as 'transcontinental sourcing' in the following.

### *2.2.1 EU sourcing: Common market and values*

The European Union (EU) consists of 27 member states located on the European continent. As EU sourcing is considered as a kind of global sourcing, it can be defined as sourcing by EU member states from other EU member states. Hanf and Soetendorp (Hanf and Soetendorp, 2014, p. 2) argue that within the EU there are many similarities in legal and political systems which are not given between EU members and non-EU members. That is why it becomes attractive for EU members to cooperate

(Hanf and Soetendorp, 2014, p.2). Over the years, the formation of the EU led to an increase of 70% in trade among EU member states (Glick, 2017, p. 197). Camarero et al. (Camarero et al., 2013, p. 16) add that introducing the Euro led to an increase in exports between EMU (Economic and Monetary Union) member states by 13% to 16%. That is also supported by Kunroo et al. (Kunroo et al., 2016, p. 408), who argue that trade between European countries has increased by 14% after the introduction of the shared currency Euro.

### *2.2.2 Transcontinental sourcing: Decrease costs and gaining a competitive advantage*

The second kind of global sourcing is transcontinental sourcing which could be defined as sourcing from a country located on another continent (Schiele et al., 2021, p. 57). There are several purposes for companies to source from a transcontinental location. First, companies should use comparative advantages of locations that offer these advantages in a global setting (Alguire et al., 1994, pp. 62-63). That would lead to a decrease in costs and towards a competitive advantage. Moreover, transcontinental sourcing often goes hand in hand with superior quality and higher technology inputs (Alguire et al., 1994, p. 63). Ettlie and Sethuraman (Ettlie and Sethuraman, 2002, p. 351) add that transcontinental sourcing also covers access to new technologies and markets. However, companies have to face more difficulties when sourcing transcontinental than sourcing domestically (Kotabe et al., 2009, p. 289). Complexities arising are the availability of infrastructure, managing different cultures and languages, and managing relationships with foreign suppliers (Kotabe et al., 2009, p. 290; Trent and Monczka, 2003, p. 609; Alguire et al., 1994, pp. 63-64). Moreover, the lengths of supply chains are widened, making them more complex involving more partners (Christopher and Peck, 2004, p. 5-6). Companies have more difficulties handling transcontinental supply chains (MacCarthy and Atthirawong, 2003, pp. 811-812).

## **3. SOCIAL CAPITAL: COGNITIVE, STRUCTURAL AND RELATIONAL CAPITAL AS THE BASIS OF BUYER-SUPPLIER RELATIONS**

### **3.1 History, development and application**

The theoretical basis for the research is the social capital theory. There are a lot of different definitions of the term social capital. Coleman (Coleman, 1988, p.98) argues that just like human capital, social networks have values. Adler and Kwon (Adler and Kwon, 2002, p. 18) go back to the origin of the theory in social science and define social capital as goodwill based on social relations and is available to individuals as well as groups. Nahapiet and Ghosal (Nahapiet and Ghosal, 1998, p. 243) define social capital as "[...] a sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit.". These resources are not physical but are referring to social ties and relations among actors. Considering all of these definitions, they all share the same message. First, social capital is based on the connection between different actors that form social structure. Then, social capital can be seen as a resource that can be useful for individuals and companies (Tsai and Ghosal, 1998, p. 464). At last, Nahapiet and Ghosal (Nahapiet and Ghosal, 1998, 244) argue that social capital acts as a facilitator for individuals in the aforementioned social structures. The most used definition of social capital in past literature distinct the following three dimensions: cognitive, structural and relational (Nahapiet and Ghosal, 1998, pp. 244-245).

### 3.2 Cognitive capital: Shared language and codes

*Cognitive Capital* refers to shared interpretations of language and goals regarding norms and beliefs (Nahapiet and Ghosal, 1998, p. 244). Tsai and Ghosal (Tsai and Ghosal, 1998, p. 465) add that *Cognitive Capital* refers to shared values and visions. That means a high level of *Cognitive Capital* corresponds to a similar mindset (Bohnenkamp et al., 2020, p. 88). Regarding industries, *Cognitive Capital* is at a high level when the buyer and the supplier share the same norms and values and have a similar mindset (Bohnenkamp et al., 2020, p. 88). Athuaene-Gima and Murray (Athuaene-Gima and Murray, 2007, pp. 20-21) elaborate on the supplier-buyer relationship by arguing that the presence of *Cognitive Capital* enables a consensus on goals and processes and thus, 'provides key benefits' (Bohnenkamp et al. 2020, p. 88). Transferring the theory to sourcing, Horn et al. argue that *Cognitive Capital* positively affects the outcome of buyer-supplier relationships (Horn et al., 2014, pp. 60-62). Especially in collaboration-intensive buyer-supplier relationships, *Cognitive Capital* has the value of creating common interests and increasing the success of those relationships (Bohnenkamp et al., 2020, p. 89). Eventually, it can be concluded that the presence of *Cognitive Capital* can foster the success of buyer-supplier relationships in all different sourcing methods.

### 3.3 Structural capital: Shared networks

*Structural Capital* refers to "who you reach and how you reach them" (Burt, 2002, p. 207; Nahapiet and Ghosal, 1998, p. 244), or as Villena et al. (Villena et al., 2011, p.565) state, it refers to the connections between parties and how they are used and how frequently they occur. Moreover, it is about the presence or absence of networks and the ties and configuration of those. Thus, a high level of *Structural Capital* is present if there are multiple shared networks and interaction channels (Bohnenkamp et al., 2020, p. 89). In an industrial context, with that high level of *Structural Capital*, the information flow is enhanced (Koka and Prescott, 2002, p. 796), and the exchange of resources is facilitated (Zaheer and Bell, 2005, p. 814). That means a high level of *Structural Capital* facilitates relationships whilst the absence has a negative influence on them (Villena, 2011, p. 565). Transferring *Structural Capital* to sourcing, Horn et al. (Horn et al., 2014, pp. 60-62) state that there is a positive relationship between *Structural Capital* and the success of sourcing projects. In particular, *Structural Capital* '[...] can help buyer and suppliers to overcome communication barriers' (Bohnenkamp et al., 2020, p. 89) through a network structure that fosters information exchange and thus, creates transparency in sourcing projects (Villena et al. 2011, p. 565).

### 3.4 Relational capital: Trust and commitment

Kale et al. (Kale et al., 2000, p. 218) define *Relational Capital* as the level of trust, respect, and friendship that emerges in a relationship. It entails the strengths of a relationship that developed over time (Villena, 2011, p. 563) and the personal relationships that actors have created through a series of interactions (Nahapiet and Ghosal, 1998, p. 244). Combining all of these definitions, *Relational Capital* deals with the development of relationships over time and that the level of *Relational Capital* is high when there is a high level of trust and commitment in it. Concerning sourcing, a relationship with a high level of trust and collaborations corresponds with a high level of open communication and thus enables companies to gain access to suppliers' resources (Villena et al., 2011, p. 563).

### 3.5 Social capital operationalisation

Nahapiet and Ghosal (Nahapiet and Ghosal, 1998, pp. 244-245) initially operationalised social capital with the distinction between cognitive, structural and relational capital. Many papers (Villena et al., 2011, pp. 562-563; Kale, 2000, pp. 217-228; Carey et al., 2011, p. 278) followed that operationalisation. The aspect of sharing of norms and values then measures *Cognitive Capital*. When it comes to structural capital, the emphasis is put on the frequency of interaction and the given communication networks. Finally, relational capital is measured by trust and friendship. Bohnenkamp et al. (Bohnenkamp et al., 2020, p. 90) went a step further and adopted that operationalisation to the buyer-supplier relationship. As social capital is a very broad theory and construct and past research operationalised the dimensions of social capital as second-order factors, '[...] it would make sense further to split the assessment of the dimensions into single variables and conduct an individual measurement.' (Bohnenkamp et al., 2020, p. 90).

Following that idea, for *Cognitive Capital*, Bohnenkamp et al. (Bohnenkamp et al., 2020, p. 90) split the dimension into shared norms and general and overlapping objectives for the particular project. However, as these variables would not precisely measure the differences between sourcing locations as overlapping objectives for a particular project are not expected to differ between locations, the research at hand is focussing on possible differences between these locations. Therefore, *Cognitive Capital* is measured by the variables *Culture*, *Religion* and *Language*. These variables are expected to differ between locations and be of crucial importance to choose between these locations.

Regarding *Structural Capital*, Bohnenkamp et al. (Bohnenkamp et al., 2020, p. 90) uses the given infrastructure, the nature of communication and the quantity of interaction. The research at hand adjusts this operationalisation and uses the variables *Face-to-Face Meetings* as these are expected to differ a lot between locations, *Phone or Video Calls*, and *IT systems*.

Having a look at *Relational Capital*, Bohnenkamp et al. (Bohnenkamp et al., 2020, pp. 89-90) use *Trust* and *Commitment/Team-member Feeling* as the two variables that they want to measure. For the research at hand, these two variables are the same since that is the main gist of *Relational Capital*. Additionally, the variable 'Team Member Feeling' is added because that is a higher form of commitment and is expected to increase the relationship's performance and varies between locations.

## 4 Research Methodology

### 4.1 Research design: Semi-structured expert interviews to simplify comparison

When conducting research, there are two main data collection methods quantitative data collection and qualitative data collection. While quantitative data collection emphasises larger samples (e.g., through survey conduction), qualitative data collection focuses on more specific and context-related research (Polit and Beck, p. 1452). The most significant advantage of qualitative data collection is that the theory can be studied in its natural setting and can be advanced through observing actual practice (Meredith, J., 1998, p. 444). On top of that, it is possible to explore reasons behind arguments (Weiss, 1995, p. 3).

However, there are two main pitfalls in using interviews. First, the participants of interviews are likely to respond in a biased way to either show their own opinion or present their company positively (Boyce and Neale, 2006, p. 3). Second, when using interviews, a generalisation of results is difficult because of small sample sizes and not using random sampling (Boyce and Neale, 2006, p. 4). Despite these disadvantages, this research uses qualitative data collection in the form of expert interviews.

When it comes to expert interviews, individual interviews are the preferred choice over group interviews. That is because group interviews make it rather difficult for the researcher to ask follow-up questions to individuals (Watts and Ebbutt, 1987, p. 33). In addition, individuals in a group setting are likely to adopt their answers to other individuals because they are affected by peer pressure (Folch-Lyon and Trost, 1981, p. 445). Hence, the choice for this research is to perform individual expert interviews.

The most convenient type of expert interviews is semi-structured interviews as they allow the researcher to deviate from the questionnaire if some questions have already been answered or it is needed to ask some follow-up questions for clarification (Alsaawi, 2014, p. 151). It allows the researcher to somewhat deviate from the original structure of the interview and allows the interviewee to talk freely and examine his or her most crucial arguments. The interview structure started with an introduction that explains the trend of global sourcing. The following questions first asked for some general differences that the participants experience with different sourcing methods. Then, the suppliers and the reasons for choosing them have been described. After then asking for differences in the variables of social capital, the last summarising question asked if the location of the suppliers can reason these differences. The interview questions can be found in Appendix A. Apart from the questions regarding the social capital theory, the interview questions contain some questions about the principal-agent theory, which is not of interest for this research but for the research of collaborating fellow students.

## **4.2 Data collection: 22 virtual and physical interviews**

For data collection, 22 interviews were executed with experts responsible for a company's strategic sourcing activities. All companies are located in the Netherlands or Germany and are different in size and industry. Since the research focuses on the differences between domestic sourcing, EU sourcing and transcontinental sourcing, there has been one selection criteria. A company should have at least one supplier for two of the three sourcing methods. That means either a domestic supplier and an EU supplier, a domestic supplier and a transcontinental supplier, an EU supplier and a transcontinental supplier, or one supplier congruent with the definition of each sourcing method. Moreover, the suppliers of the participants are all delivering products from the same commodities which simplifies their comparison. The companies were first contacted via mail, and if they did not answer within two business days, they were called. Then, an appointment for the interview has been made.

Due to the limitations of the Covid-19 pandemic, many interviews have been conducted online via a virtual meeting platform like Microsoft Teams, Skype or Zoom. Face-to-face interviews were not possible in many cases, but if it was possible, the company was visited for the interview. In both cases, the interviews were recorded. The interviews were conducted in April and May 2021 in Dutch, English and German language. After conducting and recording, the interviews were transcribed using the software Amberscript which converts spoken language

into text in a reliable form. The transcripts were then rechecked and corrected, if necessary. Then, all interviews were translated into English, and it was possible to continue with the analysis of the data.

## **4.3 Data preparation: Interview coding with Atlas.ti**

The next step in this research was the analysis of the gathered data from the interviews. In order to be able to first structure and then analyse the data, it was coded based on the findings in the literature review. Based on 2.1, 2.2 and 2.3, the first codes refer to the different sourcing methods and are only used to count how many suppliers from each method have been discussed. When it comes to 3.2, 3.3 and 3.4 and social capital, the codes refer to the variables of the theory's sub-dimensions. Moreover, the codes include the effect of these sub-dimensions on each of the sourcing methods. The codes are attached in Appendix B.

The interviews were coded and analysed with the software Atlas.ti, enabling a structured analysis of qualitative data. As the coding method is subjective, and it could be that one misses some crucial arguments, the coding has been first done twice. Secondly, it has been compared to the coding of a fellow student, and then was coded individually for the third time. With the help of the software, the cases and codes could be analysed separately and compared with each other. In that way, the cases could be analysed in a structured way. The focus of the data analysis is two-fold. First, co-occurrence tables can analyse how often and with what frequency a code has been used in connection with another code. That allows the examination of which sub-dimension is affecting the different sourcing methods the most and the least. Moreover, with regard to these tables, one can search through all quotes that used these codes and examine which are the most crucial factors for the sub-dimensions of social capital.

## **5. THE EMPIRICAL FINDINGS OF THE STUDY**

### **5.1 Case description: Location of the companies and their suppliers**

As mentioned before, 22 interviews were conducted with sourcing experts from companies with different locations operating in different commodities. To ensure confidentiality, the company's names are not mentioned, but when referring to a particular company, the letters A to Z are used. The companies are summarised in Appendix C. One can find the company letter, the location of the company, the locations of their suppliers and the industry in which they are operating there. In the following, the locations of the companies, the locations of their domestic suppliers, EU suppliers and transcontinental suppliers will be summarised.

In total, 16 interviewed companies are located in the Netherlands, which refers to 72.73 % and six (27.27%) are located in Germany.

Furthermore, as the study focuses on the different methods of domestic sourcing, EU sourcing and transcontinental sourcing, it is interesting to see where the company's suppliers are located. According to the location of the companies and the operationalisation of domestic sourcing, the numbers for domestic sourcing should be the same as the frequencies of the companies' locations. However, as there are three interviews in which domestic sourcing has not been addressed, the numbers are slightly different. From the addressed 19 domestic suppliers, 13 are located in the Netherlands and six are located in Germany.

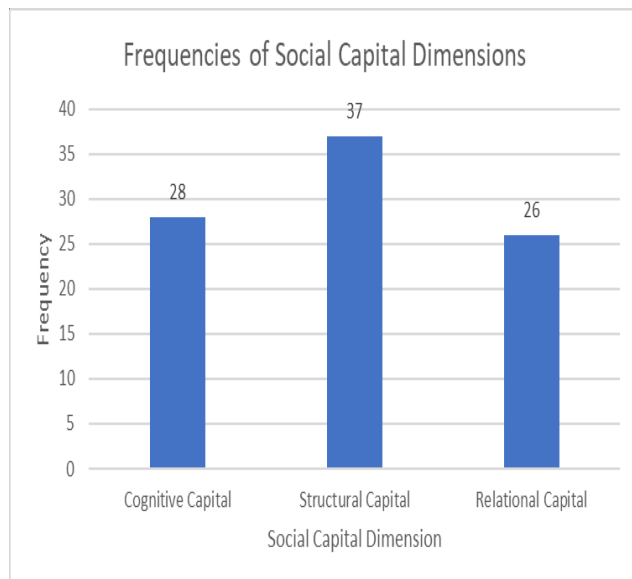
The EU suppliers are distributed as follows. Eight of the EU suppliers are located in Germany. The Netherlands as a location for EU sourcing is only relevant for German companies, which is one time. The other locations for EU sourcing refer to Italy, which was mentioned four times, Poland with two times and Finland, France, Spain, Lithuania, Austria, Portugal, and Belgium, all referred to one time. Moreover, in three interviews, the experts talked about EU sourcing in general, so these are undefined. On top of that, three missing values can be explained by interviews where EU sourcing has not been discussed.

Having a look at transcontinental sourcing, the suppliers' locations are distributed around the world. Seven of them are located in China, two are located both in Russia and Turkey, and one supplier is located in Ecuador, India, Suriname, USA and Vietnam. Additionally, seven interviews did not address transcontinental sourcing.

## 5.2 Findings: Comparing the cases with Atlas.ti

### 5.2.1 Social capital: Differences concerning dimensions and measurement variables

The next step is to examine the frequencies of the codes in Atlas.ti. First, it is interesting to see which dimension of social capital is emphasised in the interviews in order to get a first impression of which of them is influencing the methods of sourcing the most and the least. Then, the dimensions are split into measurement variables to analyse which variables are used most and least. At last, these variables are connected to potential positive and negative effects on the different sourcing methods. This procedure allows the researcher to examine the importance of social capital systematically.



**Figure 1: Frequencies of Social Capital Dimensions**

Figure 1 shows the frequencies of how often the dimensions of social capital have been mentioned in the interviews. In that case, one count refers to one answer containing information on them. It shows that *Cognitive Capital* has been addressed 28 times. To give an example, one of the engineering companies explain that for them there are no barriers within the dimension of *Cognitive Capital*:

“In general for all of Suppliers, we do not see so much cultural barriers because first of all, our procurement is a

very international team. We have over the 20 people, right, between 20 to 30 people. We have eight or nine nationalities. So we are already pretty internationally inclusive. So, so far we do not really see a lot of language, culture or even religion barriers.” (Company D)

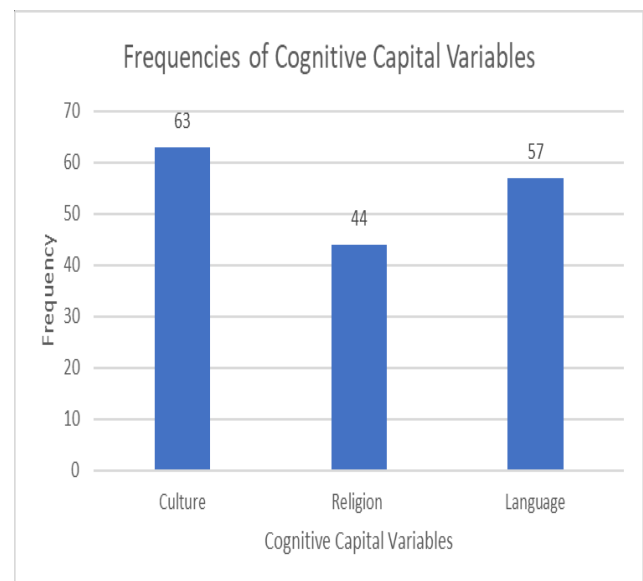
The dimension of *Structural Capital* has been mentioned 37 times in total. That means, in addition to the answers to the structured questions, it has been addressed the most. An example of *Structural Capital* being mentioned is given in the interview conducted with the furniture-producing company:

“As aforementioned, the B2B-platforms are all the same for the suppliers so they are also part of that. We interact with them every time we make a new project and buy their circuits. But again, the communication and collaboration is only focussed on business. We also meet them once a month. Then, we delegate the Purchasing to our production site in Spain.” (Company J)

When it comes to *Relational Capital*, Figure 1 shows that it has been mentioned 26 times. One of the electric wholesalers mentions *Relational Capital* in connection with the development of the buyer-supplier relationship:

“[We developed] A better bond with each other, because we are doing business for a long time.” (Company R)

In the next section, these dimensions are described individually by examining which variables of the dimensions are mentioned the most and which are mentioned the least and see the experts' preferences. Afterwards, these variables are connected with positive and negative effects on domestic sourcing, EU sourcing and transcontinental sourcing to see which of them influences them in what quantity.

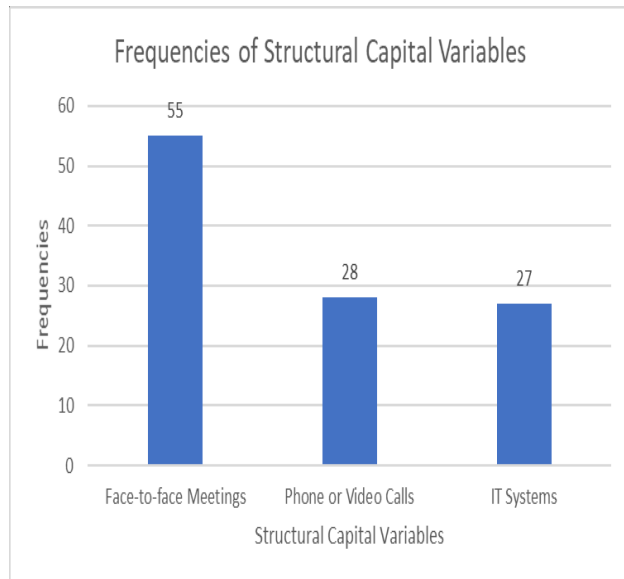


**Figure 2: Frequencies of Cognitive Capital Variables**

The next step is to examine the dimensions of social capital individually and see which variables are mentioned and addressed the most and the least. In Figure 2, the frequencies of variables from *Cognitive Capital* are presented. In this figure, one count does not refer to how often the variable has been mentioned but refers to how often the variable has been connected to an individual supplier. For instance, answering the question if there have ever been religious problems with any of their suppliers, the expert from company I says:

“No, there have not been any yet.” (Company I)

In that case, the code *Religion* has been coded three times, namely one time for each supplier. In total, *Religion* has been connected to a supplier 44 times, which is in accordance to two times on average per interview and the least mentioned variable. That means, that this variable is seemingly less emphasised than *Culture* and *Religion*. When it comes to culture, the experts connected the code *Culture* to a supplier 63 times. This refers to an average amount of 2.86. That means, *Culture* is the most mentioned variable among *Cognitive Capital*. Next to *Religion* and *Culture*, the third code of *Cognitive Capital* refers to language, which has been mentioned 57 times in the interviews.

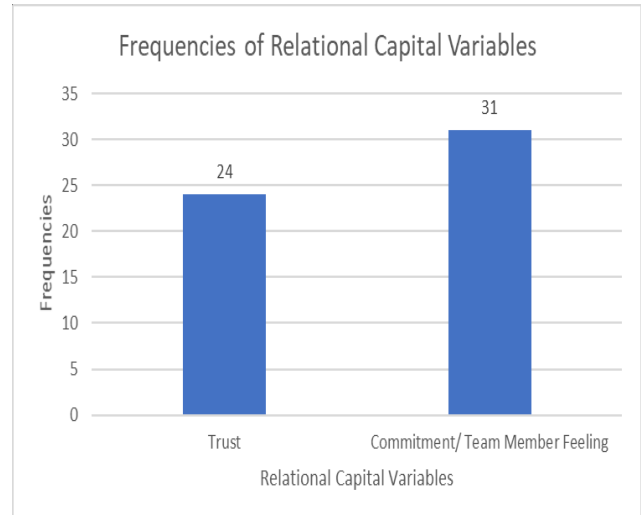


**Figure 3: Frequencies of Structural Capital Variables**

When looking at Figure 3, which shows the frequencies of the *Structural Capital* variables *Face-to-face Meetings*, *Phone or Video Calls* and *IT Systems*, the main difference gets visible at first glance. With a count of 55, *Face-to-Face Meetings* have been mentioned as much as the other two variables together, namely *Phone or Video Calls* with 28 times and *IT Systems* with 27 times. That means purchasers seem to highlight the importance of physical meetings for all sourcing methods whilst phone calls and shared *IT Systems* seem to have a limited impact.

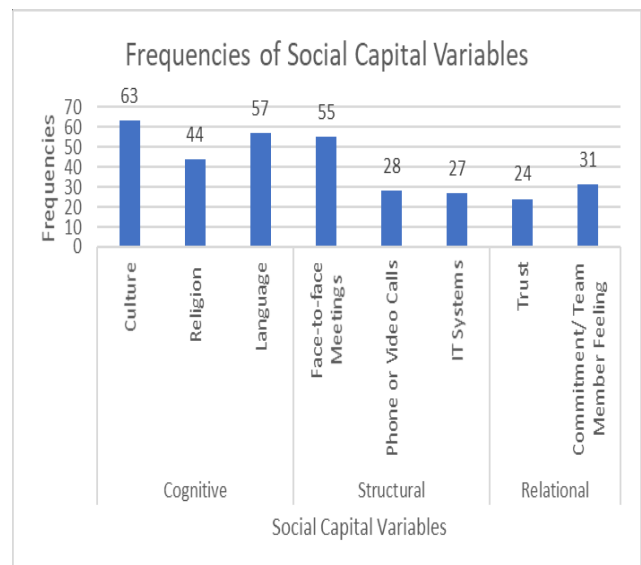
An example of both *Face-to-Face Meetings* as *Phone or Video Calls* being mentioned and related to a supplier can be found in the interview with company D:

„For the Asian supplier will be very often by email, by online meetings. But we also sometimes travel to there or they travel to here by making use of a business trip or like the commercial events. These are industry events, were we also always can meet.“ (Company D)



**Figure 4: Frequencies of Relational Capital Variables**

For the last dimension *Relational Capital* which is measured by the variables *Trust* and *Commitment/Team-member Feeling*, the frequencies can be found in Figure 4. The variable *Trust* was mentioned 24 times and the variable *Commitment/Team-member Feeling* was mentioned 31 times. It seems like *Commitment/Team-member Feeling* and *Trust* are put quite the same emphasis on but the small difference shows that *Commitment/Team-member Feeling* could be more crucial for the different sourcing methods.



**Figure 5: Frequencies of Social Capital Variables**

Combining the frequencies of all dimensions and variables, there is a transparent scheme of importance. As Figure 5 indicates, the most valued variable is *Culture*, followed by *Language*. The following crucial variable is *Face-to-Face Meetings*, followed by *Religion*. The least important and mentioned variables are *Phone or Video Calls*, *IT Systems*, *Trust* and *Commitment/Team-member Feeling*. In general, purchasers seem to emphasise the variables of *Cognitive Capital* since the two most mentioned variables are part of that dimension. Then, there is one variable of *Structural Capital* followed by the last variable of *Cognitive Capital* again. The minor emphasis is put on the variables of *Relational Capital*.

### 5.2.2 Location: The influence of social capital on domestic sourcing, EU sourcing and transcontinental sourcing

After the importance of the dimensions and variables of social capital has been examined, now the effects of these variables are going to be analysed for domestic sourcing first, then for EU sourcing and at last for transcontinental sourcing. This is going to be done by looking at co-occurring codes.

**Table 1: Co-Occurrence of Social Capital Variables and Effects on Domestic Sourcing**

		Positive Effect on Domestic Sourcing	Negative Effect on Domestic Sourcing
Cognitive	Culture	11	0
	Religion	17	0
	Language	16	0
Structural	Face-to-Face Meetings	19	0
	Phone or Video Calls	11	0
	IT Systems	6	3
Relational	Trust	8	2
	Commitment/Team-Member Feeling	8	2

By starting with domestic sourcing, the frequencies of how often the variables of *Cognitive Capital* have a positive or negative effect are shown in Table 1. The scheme shown in that table is clear as there is no negative effect of any variable on domestic sourcing. There is no difference in *Culture*, *Religion* or *Language* which is supported by many purchasing experts. The experts from the bed linen producing company H and the one from company P explain:

“For the German suppliers, there are no barriers in language, culture or religion.” (Company H)

“With the Dutch supplier, of course no [barriers].” (Company P)

That opinion is also supported by other purchasing experts who are answering the question if there are barriers in *Culture*, *Religion* or *Language* with “No.” or “No, there are not.” (Companies C,D,I,K,M,N,R,S,T,U). To sum up, regarding the variables of *Cognitive Capital*, there is no negative effect on domestic sourcing but only positive effects.

Then, there are the variables from *Structural Capital*. The frequencies of co-occurrence with the effects on domestic sourcing can be found in Table 1. Just as with *Cognitive Capital*, the picture is evident for the variables *Face-to-Face Meetings* and *Phone or Video Calls*. There seems to be no adverse effect that results from a lack of communication or meetings with domestic suppliers. The purchasing expert from company A supports that:

“We meet once every month, and besides that we have daily contact to discuss advertisements and sales. I have an assistant for that, and they also have an assistant for that. So the collaboration is very intensive.” (Company A)

The expert from company J also explains the importance of *Face-to-Face Meetings*:

“We visit the supplier each month to communicate our projects and the quantities and prices etc. But also to show them that they are an important supplier for us.” (Company J)

The same expert adds the importance of *IT Systems* for successful sourcing projects in a way to control that they fulfil norms and specific quality standards:

„When we select the supplier, they can apply through our B2B-platform where they have to hand in some specific paper that they fulfil specific norms etc.“ (Company J)

However, there are some companies that do not share *IT Systems* with domestic suppliers. The purchasing expert from company D explains that they do not share their *IT Systems* with suppliers yet but that it might be useful to ‘develop an integrated information system with the supplier.’ (Company D).

Table 1 also contains the frequencies of co-occurrence between the codes *Trust* and *Commitment/Team-member Feeling*, and the effects on domestic sourcing. It can be seen that both variables have more positive effects on domestic sourcing than negative effects. To give an example, the expert from company J explains that although the relationship is very professional and focussing on business, they often visit their site and have a coffee together and the relationship is full of *Trust* because of the long duration. (Company J).

However, some experts state that *Trust* and *Commitment/Team-member Feeling* should not be part of business relationships and that contracts are ‘on paper, [it] has nothing to do with trust.’ (Company U). The purchasing expert from company T adds:

“No, just business. It's just really business. You buy something and then you're done.” (Company T)

Summing up, regarding the variables of *Relational Capital*, there are more positive effects on domestic sourcing than negative ones. However, there are some exceptions when companies are not emphasising *Trust* or *Commitment/Team-member Feeling*.

All in all, it can be seen that domestic sourcing is affected by the variables of *Cognitive Capital*, almost only in a positive way. The only exceptions are given with *IT Systems*, *Trust* and *Commitment/Team-member Feeling*. The next step is to examine the effects of all variables on EU sourcing.

**Table 2: Co-Occurrence of Social Capital Variables and Effects on EU Sourcing**

		Positive Effect on EU Sourcing	Negative Effect on EU Sourcing
Cognitive	Culture	10	17
	Religion	18	0
	Language	19	8

<b>Structural</b>	<b>Face-to-Face Meetings</b>	21	3
	<b>Phone or Video Calls</b>	10	1
	<b>IT Systems</b>	6	5
<b>Relational</b>	<b>Trust</b>	7	2
	<b>Commitment/Team-Member Feeling</b>	11	3

Beginning with the effects of *Cognitive Capital* variables on EU sourcing, the frequencies of co-occurrence can be found in Table 2. The first row shows the variable *Culture*, which has been mentioned ten times with a positive effect on EU sourcing and 17 times with a negative effect on EU sourcing. The positive relation between *Culture* and EU sourcing is explained in the interviews of companies A, B, D, E, G, O, Q, S and U. The central answers from these purchasing experts are simply stating that there are no cultural barriers with EU suppliers, for example, the expert from company B:

“I read that you wanted to discuss that as well, but in all honesty we do not experience these issues. With the German we don’t experience them at all.” (Company B)

However, the amount of negative effects is higher than the one of positive effects. This negative effect is elaborated by companies C, F, I, J, K, L, M, O and Q. When talking about the relaxed work ethic of their Italian supplier, the purchasing expert from company O explains:

“That’s right! It is difficult to make the agreements with them closed, especially concerning delivery dates. A lot of promises, but they do not live up to them.” (Company O)

When it comes to *Religion*, it can be compared to with domestic sourcing. There only are positive effects on EU sourcing as well. However, with *Language*, there seem to be some more problems. While *Language* has been connected positively on EU sourcing 19 times, it has also been connected with a negative effect eight times. The positive effects refer to companies A, B, D, E, G, H, I, K, M, Q, R, S, T and U. The answers of these purchasing experts are similar to those concerning the positive effect of *Culture* on EU sourcing. The negative effects from *Language* on EU sourcing are explained by companies F, J, L and S. The purchasing expert from company S is mentioning a difference in language between their company and their Italian supplier (Company S), while the purchasing expert from company F is stating that there are difficulties in translating when you are not communicating in the same language (Company F).

Regarding the variables of *Relational Capital*, some differences are occurring. First, the variable *Face-to-Face Meetings* positively affect EU sourcing 21 times while it has a negative effect three times. Second, *Video or Phone Calls* have a positive effect ten times and a negative effect one time. At last, the variable *IT Systems* has a positive effect six times and a negative effect five times. The purchasing expert from company B explains the positive effect of both *Face-to-Face Meetings* and *Phone or Video calls*:

“We have a meeting twice a year. However, when we have projects together or if there are quality issues, we meet more often.” (Company B)

One of the few negative effects of both physical and non-physical meetings is explained by company A:

“But I prefer not having to meet with them, because they’re not very big and thus not worth the expensive time. Even though that might sound a bit arrogant. Also because their quality often is less, we do not want to meet with them very often. I want them to mail me first, and then I’ll decide whether a meeting is necessary. So we have fewer meetings.” (Company A)

Having a look at the effects of *IT Systems*, the effects seem to be more balanced. The purchasing expert from company A explains the advantage of having shared *IT Systems*, which is that order arrives correctly, and there is less workload for the buyer (Company A).

At last, there are the effects of *Trust* and *Commitment/Team-member Feeling* on EU sourcing. Concerning *Trust*, the positive effects, with a frequency of 7, are 3.5 times higher than negative effects. The positive effects are mentioned by companies A, B, F, G and R. They argue that a specific level of *Trust* develops a stronger bond between each other (Company R) which results in augmented information sharing regarding buyer-supplier relationships (Company A). When it comes to the negative effects of *Trust*, company K explains that it is hard to develop some *Trust* when not seeing each other regularly (Company K).

For the variable *Commitment/Team-member Feeling*, the ratio between positive and negative effects is very similar. The purchasing expert from company B gives an example of a positive effect of *Commitment/Team-member Feeling*:

“We are important to them, because we have a very intensive collaboration in the sense that we communicate often and work on improvement projects together.” (Company B)

The few amount of negative effect of *Commitment/Team-member Feeling* is explained by companies I, M and T who are reasoning that effect with the purpose of business relations to only focus on business.

Concluding the effects of the social capital variables on EU sourcing, one can say that most of the limitations and negative effects are based on *Cognitive Capital* variables *Culture* and *Religion*. With all other variables *Face-to-Face Meetings*, *Phone or Video Calls*, *IT Systems*, *Trust* and *Commitment/Team-member Feeling*, the trend goes to positive effects. However, there are some exceptions that state that the buyer-supplier relationship should only focus on business.

**Table 3: Co-Occurrence of Social Capital Variables and Effects on Transcontinental Sourcing**

		<b>Positive Effect on Transcontinental Sourcing</b>	<b>Negative Effect on transcontinental Sourcing</b>
<b>Cognitive</b>	<b>Culture</b>	3	20
	<b>Religion</b>	10	0
	<b>Language</b>	6	8

<b>Structural</b>	<b>Face-to-Face Meetings</b>	7	5
	<b>Phone or Video Calls</b>	4	1
	<b>IT Systems</b>	5	2
<b>Relational</b>	<b>Trust</b>	3	2
	<b>Commitment/ Team-Member Feeling</b>	5	2

The last method of sourcing is transcontinental sourcing (TS). Table 3 shows all social capital variables and how often they are connected positively and negatively with TS.

To begin with, the most crucial difference in *Cognitive Capital* variables can be seen in culture. While it has been connected to a positive effect on TS three times, it has been mentioned 20 times in a negative effect. On the one hand, companies A, D and H are stating that they have not experienced barriers at all. On the other hand, companies B, C, E, I, J, L, N, O, P and V refer to negative effects from *Culture* on TS. Their purchasing experts argue that '[Culture] is a problem when you see them for the first time' (Company B) and that 'Chinese are working day and night and they have a really high work ethic.' (Company O). The purchasing expert from company I is adding:

"The business culture in Turkey is very different than in Germany and the Netherlands. When negotiating, you feel like you are visiting a Bazar in Turkey. They start with a very high price and then you have to agree in the middle of their and your price. Moreover, their understanding of quality is sometimes not as high as expected from us." (Company I)

Concerning *Religion*, the companies are not experiencing any barriers or problems. However, having a look at *Language*, the scheme can be compared to *Culture*. With eight times, negative effects are more often mentioned than positive effects with an amount of six times. On the one hand, experts from companies A, B, D, G, N and O argue that they have not experienced barriers in language (Companies B, G, N, O), that they are overcoming these by introducing a middleman (Company A), or that they are an international team that can speak any language (Company D). On the other hand, companies C, H, I, J, L, P and V experienced some language barriers which have a negative impact on their TS supplier. In the following, some examples will explain why these barriers occur and how they affect TS. The purchasing manager from company C states that if a buyer is not familiar with the supplier's language, it is difficult to build up understanding and connections (Company C). That is supported by the purchasing expert from company H, who also adds that technical specifications are challenging to explain (Company H). Moreover, it often is the case that suppliers' contact persons are not fluent in the buyer's mother language or even not in English (Companies I, J). Company P adapted those barriers in language by hiring a Chinese colleague to translate when meeting with their Chinese supplier (Company P).

Now, the effects of the *Structural Capital* variables on TS are going to be examined. The most crucial difference can be perceived in *Phone or Video Calls*. That variable is connected to

a positive effect four times and to a negative effect one time. First, the positive effects are reasoned by companies C, D, H and N who argue that meetings are more focussed on video calls or social media nowadays (Company C) and that since it is not possible to visit the supplier, '[communication] will be very often by email, or by video calls.' (Company D). The only negative effect is explained by the purchasing expert from company V who says that as they order very big quantities, they are not communicating a lot (Company V). Regarding *Face-to-Face Meetings*, there are seven relations to a positive effect on TS and five to negative effects on TS. On the one hand, regular physical meetings are crucial to discuss the development of the relationship, update each other about the market, or how the business is going (Company C). On top of that, the expert from company L explains that regular physical meetings are used to discuss problems with quality or other problems (Company L). On the other hand, some companies only have physical meetings with their transcontinental supplier 'once every now and then' (Company A) or 'sometimes' (Company D), and that it is more challenging to communicate and visit a transcontinental supplier (Company P). Furthermore, company O limits the sharing of *IT Systems* with transcontinental suppliers as the Chinese tend to 'copy everything' (Company O).

At last, the *Relational Capital* variables *Trust* and *Commitment/Team-member Feeling* are going to be analysed. When it comes to *Trust*, company H argues that it develops due to a long relationship (Company H). Moreover, the purchasing expert from company O mentions that the company know that the supplier is always honest, and thus, they can trust them (Company O). On the other hand, company A explains that they tend to monitor their transcontinental supplier harder than before because there is a lack of *Trust* (Company A). Regarding *Commitment/Team-member feeling*, the ratio between positive and negative effects is five to two. Like with *Trust*, company H base commitment on the long-lasting relationship with their supplier (Company H). The purchasing expert from company J defines the supplier's commitment as 'the supplier is giving their best to fulfil our needs.' (Company J).

To conclude, it can be seen that *Cognitive Capital* variables negatively affect transcontinental sourcing most often. Additionally, it seems that the quantity and possibility of *Face-to-Face Meetings* are limited in the field of TS.

### 5.2.3 Face-to-Face Meetings and Culture as the main influence on sourcing

In order to support the main results of the most crucial variables *Face-to-Face Meetings* and *Culture*, the next step is to look at these variables separately. First, that is done for *Face-to-Face Meetings*.

**Table 4: Co-Occurrence and Power Quotes of Face-to-Face Meetings and the effects on sourcing**

	<b>Positive Effect of Face-to-Face Meetings</b>	<b>Negative Effect of Face-to-Face Meetings</b>
<b>Domestic Sourcing</b>	19 "If the supplier is located in the Netherlands, we can meet very easily." (Company D)	0
<b>EU Sourcing</b>	21	3

	“We visit all [EU] suppliers every 2-3 months once. During this visit, we evaluate and check lack in quality within the production process.” (Company L)	“The difference to the German supplier is that personal contact is simply not there. All negotiation is via phone or video call which sometimes is not that easy.” (Company I)
<b>Transcontinental Sourcing</b>	7 “Once a year, I visit the Russian supplier to strengthen the relationship which I think is very important.” (Company G)	5 “For the Asian supplier will be very often by email, by online meetings.” (Company D)

In table 4, the co-occurrence of *Face-to-Face Meetings* with positive and negative effects on sourcing are displayed. For domestic sourcing, there are no lacks in physical meetings while with EU sourcing and transcontinental sourcing, the farther you the supplier is located away from the buyer, the less likely it is to meet physically. However, regarding the power quotes, there are also differences occurring out of the companies' perception on the importance of physical meetings. Some companies emphasise physical contact to strengthen the relationship while other companies are concentrating on phone calls.

**Table 5: Co-Occurrence and Power Quotes of Culture and effects on sourcing**

	<b>Positive Effect of Culture</b>	<b>Negative Effect of Culture</b>
<b>Domestic Sourcing</b>	11 “For the German suppliers, there are no barriers in language, culture or religion.” (Company H)	0
<b>EU Sourcing</b>	10 “When you have a German supplier who is more for what we have talked about, [for example] delivery time. It's always correct.” (Company S)	17 “With culture, I think the main and most crucial difference is that Spanish people often tend to be a few minutes or sometimes an hour late when it comes to appointments. But that is what they are. They do not know the German punctuality. So when we expect them to deliver the

		circuits, they sometimes are some hours late or even one or two days.” (Company J)
<b>Transcontinental Sourcing</b>	3 “We do not see much cultural barriers because first of all, our procurement is a very international team.” (Company D)	20 “Out of the past has made us aware that the China copy everything, and use this information for other things as well. If we develop a product there, within half a year we can see the product used by others.” (Company O)

Regarding table 5 which represents the effects of *Culture* on sourcing, the main trends are that with domestic sourcing there are only positive effects of *Culture*, with EU sourcing the negative effects are almost twice as high as the amount of positive effects, and with transcontinental sourcing, there are only a few positive effects left. Except of some companies, for example company D with its international procurement team, all of the companies' purchasing experts connect the *Culture* of their transcontinental supplier with negative effects. However, the trend with EU sourcing is connected to different reasons. Therefore, it is wise to look at where the EU suppliers are located. Beginning with German suppliers for Dutch companies and vice versa, there are no cultural barriers since the purchasing experts did not connect *Culture* with negative effects on EU sourcing. The next countries where EU suppliers are located are France, Italy and Spain that are all located in southern Europe. In these cases, the differences in *Culture* seem to gain more importance. Regarding the French supplier from company F, the purchasing expert states that it is very different to deal with a French salesman than with a Dutch or German one: “A French guy, I can not [invite them to my place] because they would look at me like, what [...] is this? (Company F). The main problem with Italian and Spanish culture is stated by the purchasing experts from companies J, O and S: the behaviour of people when it comes to punctuality and delivery times. The quote from company J can be found in table 5. That opinion is supported by the purchasing expert from company O:

“It is difficult to make the agreements with them closed, especially concerning delivery dates. A lot of promises, but they do not live up to them.” (Company O)

To conclude, regarding EU sourcing and *Culture*, it is not only important that the supplier is a member of the European Union but it is more important where in the EU the supplier is located. With geographical nearness, for example given with Germany, the Netherlands and Belgium, there are no cultural problems. However, with south-European countries, where people have a different understanding of punctuality and quality, there are a lot more negative effects.

## 6. DISCUSSION AND CONCLUSION

### 6.1 Social capital dimensions and variables: Differences in importance

This paper aimed at determining to what extent social capital influences and affects domestic sourcing, EU sourcing and transcontinental sourcing. For that purpose, first, the importance of social capital dimensions and variables is discussed to be then able to discuss their effects on these three sourcing methods. Having a look at 5.2.1, at the first glance, it seems that *Structural Capital* is way higher valued than *Cognitive Capital* and *Relational Capital*, as it was mentioned more often. However, Figure 5 shows that the variables of *Cognitive Capital* were used the most in connection with a positive or negative effect on sourcing. Thus, these two figures are contradicting each other. The reason and effect of that are going to be analysed in section '8. Limitations and Implications for Future Research'.

### 6.2 Influence on location: Culture, Face-to-Face Meetings and Language as main influence

The next step is to discuss the effect of social capital on the different methods of sourcing and answering the research questions.

Beginning with RQ1.1, the most mentioned variable culture is also connected to positive and negative effects on sourcing in most cases. Concerning domestic sourcing, together with religion and language, the effects of *Cognitive Capital* variable are only mentioned positively, which is in accordance with the advantages of domestic sourcing. In domestic sourcing, the buyer and supplier share the same culture, language and currency (Ivanov et al., 2019, pp. 122-123). Moreover, the number of *Face-to-Face Meetings* and *Phone or Video Calls* affects domestic sourcing solely positively. That can be explained by another advantage of domestic sourcing, which is that the buyer and supplier are located close to each other (Ivanov et al., 2019, pp. 122-123). When it comes to the effects of *Trust* and *Commitment/Team-Member Feeling*, the number of positive effects can be explained by why companies choose domestic sourcing, namely if they want to build a strong relationship and collaboration (Sorenson and Baum, 2003, pp. 7-8). The small number of negative effects can be explained by companies that do not emphasise relationships but only focus on the business itself. To sum the effects of social capital on domestic sourcing up, one can say that it almost only has positive effects, which can be reasoned by shared language and culture and shorter distances.

In order to answer RQ1.2, it is worth looking at the advantages and disadvantages of EU sourcing. The literature review stated that countries within the EU share the same culture, religion, and language. However, these variables sometimes seem to harm EU sourcing. Companies state that although both supplier and buyer are located in the EU, cultural differences are enormous. These negative effects most often refer to south-European suppliers as the understanding of work ethics, the understanding of quality, and punctuality are very different than in the buying companies' country. However, with geographical nearness given, as with Germany, the Netherlands and Belgium the culture is quite the same and there are no cultural barriers between buyer and supplier.

Moreover, some companies reasoned that although they expected their supplier to be familiar with the English language, there are sometimes some problems with language that have to be tackled by a translator or a middleman. When it comes to structural and

relational effects, it is the same as with domestic sourcing. The distances, of course, are greater but not that large to meet less physically. On top of that, *Trust* and *Commitment/Team-member Feeling* are equally likely to develop with EU suppliers as with domestic ones.

At last, RQ1.3 can be answered. The advantages and disadvantages of transcontinental sourcing can be used to explain the effects of social capital. First of all, transcontinental sourcing is connected with the difficulty of connecting different cultures and languages (Trent and Monczka, 2003, p. 609). That is why there are a lot of negative effects by culture and language on transcontinental sourcing. Problems arising are the negotiation tactics, for example, with Turkish and Chinese suppliers and the different expectations when it comes to quality. On top of that, language barriers, for example, with Chinese suppliers, must be tackled by translators or mediators. Some companies even install a foreign bureau in the far Eastern countries to ensure that language and culture do not affect their transcontinental sourcing projects that much. A further difference between EU sourcing and transcontinental sourcing is that transcontinental sourcing is connected with even greater distances. It is more difficult to manage these long-distance supply chains (MacCarthy and Atthirawong, 2003, pp. 811-812), which results in problems regarding the number of *Face-to-Face Meetings*, which is the social capital variable negatively affecting transcontinental sourcing a lot. However, these distances are not the sole reason for less frequent physical meetings. While some companies focus a lot on these meetings to strengthen the relationship and show their supplier that they are important, other companies do not emphasise physical meetings at all, and try to focus on phone calls. Furthermore, as Alguire et al. argue (Alguire et al., 1994, pp. 63-64), it is not easy to manage the personal relationship with foreign suppliers. That is supported by this research as *Trust* and *Commitment/Team-member Feeling* have been connected negatively to transcontinental sourcing in many ways.

### 6.3 Conclusion: Two main steps in difficulties

Having answered sub-questions, RQ1.1, RQ1.2 and RQ1.3, RQ1 can be answered by summarising the effects and concluding on the primary influence of social capital on sourcing. To sum up the influence of social capital variables on locations, it can be seen that there are no significant problems with domestic sourcing. The small distances and shared cultures and languages allow the buyer and supplier to engage in the relationship, build some form of *Trust* and *Commitment/Team-member Feeling* and also meet each other virtually and physically as often as needed. All of these factors become more difficult the farther the supplier is located away from the buyer. With longer distances, it gets harder to meet physically and build some *Trust* and *Commitment/Team-member Feeling*. Moreover, culture and language get different and harder to understand the farther the supplier is located. These augmentations of effects can be divided into two main steps:

(1) From domestic to EU sourcing, the main problem is the management of cultures and languages which is caused by differences among the countries. With language, these differences are possible to occur between any countries but with culture, the problems are related to the supplier's country.

(2) From EU sourcing to transcontinental sourcing, the differences mentioned in step one tend to have a higher negative effect. Moreover, the negative effect of the lack of physical meetings comes into existence. However, in some cases, that lack of physical meetings can not be explained by the distance but only by the importance of the supplier and the engagement of both parties.

With these results given, it can be said that the study contributed to research and practice in the following ways. First of all, this study divides global sourcing into EU sourcing and transcontinental sourcing which was barely discussed in previous research. Moreover, previous research has only examined the effect of social capital on one sourcing method at once. This research thus contributes to theory by comparing the effects on all three sourcing methods which turns out to display the similarities and differences very clearly.

Regarding contribution to practice, purchasing managers can look at the two steps indicated in the results. With the differences between sourcing methods at hand, they can classify them by importance and then decide which sourcing methods to use. Of course, there are other factors for choosing, for example costs, delivery times or quality, but the theoretical variables of social capital can be used as a helping tool.

## **7. LIMITATIONS AND IMPLICATIONS FOR FUTURE RESEARCH**

One of the limitations concerning this research is that with 22 interviews the sample size is relatively small. That means the results cannot be generalised but have to be researched more profoundly with the help of more samples. However, this research gave insights into the differences in social capital between domestic sourcing, EU sourcing and transcontinental sourcing. These insights can be used for future research in a way that social capital is analysed in a broader scope. Moreover, it makes sense to analyse further the importance of social capital dimensions for purchasing managers and their companies to understand if and how it affects the decision to out of several sourcing methods.

Another limitation of this research is that coding with Atlas.ti is always subjective. Although the coding has been executed several times and has been compared with the coding of fellow students, it is always biased since the different effects of social capital on sourcing might be examined differently. To give an example, this research used the code 'positive effect on sourcing' when the purchasing experts said that there are no barriers with religion. It might be that other researchers would not code it in that way but see this as a neutral effect. For future research, the coding should be optimised and executed by more researchers and compared more often.

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## Appendix

### Appendix A – Interview Questions

#### Interview Questions ‘Sourcing Methods’:

1. Disregarding a special case, which differences do you see between suppliers located at home / in another EU country / on another continent? (relationship, delivery, ease of doing business with, treatment, legal aspects, contracting, liabilities, handling taxes...)

#### Interview Questions ‘Suppliers’:

2. Could you briefly describe the supplier and its product(s)?

3. Why did you choose this supplier?

4. How attractive are you for this supplier?

#### Interview Questions ‘Social Capital’: (RQ1)

5. How was your collaboration structured? (structural capital: shared IT systems, joint meetings, regular calls etc.) (RQ1.1)

6. Within this relationship, did you encounter problems (cognitive capital: language/culture/religion) (RQ1.2)

7. How did the relationship develop over time? (relational capital) (RQ1.3)

#### Interview Questions ‘Principal agent’:

8. Did you get all the information you needed when selecting this supplier? (hidden characteristics, before starting the relation)

9. During the interaction, did you have the feeling that the supplier was behaving different than promised? (hidden intentions)

10. Could you get all the information / transparency to be able to monitor the performance of the supplier? (hidden action)

#### Closing question:

11. Giving this experience, do you have an impression that it has to do with the supplier being local/European/transcontinental, and what lessons do you take out of this?

### Appendix B – Codes from Atlas.ti

Topic	Dimensions	Codes
Sourcing Methods	Domestic Sourcing	1.1 Domestic Sourcing
	EU Sourcing	1.2 EU Sourcing
	Transcontinental Sourcing	1.3 Transcontinental Sourcing
Social Capital	Cognitive Capital	2.1 Cognitive Capital
		2.1.1 Culture
		2.1.2 Religion
		2.1.3 Language
	Relational Capital	2.2 Relational Capital
		2.2.1 Trust
		2.2.2 Commitment/Team-Member Feeling
	Structural Capital	2.3 Structural Capital
		2.3.1 Face-to-Face Meetings
		2.3.2 Phone or Video Calls
Effects on Sourcing Methods	Effects on Domestic Sourcing	2.3.3 IT Systems
		3.1 Positive Cognitive Capital on Domestic Sourcing
		3.2 Negative Cognitive Capital on Domestic Sourcing
		3.3 Positive Relational Capital on Domestic Sourcing

		3.4 Negative Relational Capital on Domestic Sourcing
		3.5 Positive Structural Capital on Domestic Sourcing
		3.6 Negative Structural Capital on Domestic Sourcing
	Effects on EU Sourcing	4.1 Positive Cognitive Capital on EU Sourcing
		4.2 Negative Cognitive Capital on EU Sourcing
		4.3 Positive Relational Capital on EU Sourcing
		4.4 Negative Relational Capital on EU Sourcing
		4.5 Positive Structural Capital on EU Sourcing
		4.6 Negative Structural Capital on EU Sourcing
	Effects on Transcontinental Sourcing (TS)	5.1 Positive Cognitive Capital on TS
		5.2 Negative Cognitive Capital on TS
		5.3 Positive Relational Capital on TS
		5.4 Negative Relational Capital on TS
		5.5 Positive Structural Capital on TS
		5.6 Negative Structural Capital on TS

#### Appendix C – Companies' Characteristics

Company	Company's Location	Location domestic supplier	Location EU supplier	Location transcontinental supplier	Industry
A	The Netherlands	The Netherlands	Italy	Ecuador	Food Production
B	The Netherlands	-	Germany	India, Vietnam	Pipeline Production
C	The Netherlands	The Netherlands	undefined	China	Food Production
D	The Netherlands	The Netherlands	Germany	China	Engineering
E	The Netherlands	The Netherlands	Germany	China	Engineering
F	The Netherlands	The Netherlands	France, Germany	-	Food Production
G	Germany	Germany	Finland	Russia	Trailer Production
H	Germany	Germany	Poland	Turkey	Bed Linen Production
I	Germany	Germany	The Netherlands	Turkey	Shop Fitting
J	Germany	Germany	Spain	China	Furniture Production
K	Germany	Germany	Italy	-	Suction System Production
L	The Netherlands	-	Poland, Lithuania, Romania	Russia	Agricultural Machines
M	The Netherlands	The Netherlands	Germany (2), Austria	-	Manufacturing
N	The Netherlands	The Netherlands	-	USA	Aerospace Manufacturing
O	The Netherlands	-	Italy, Portugal	China	Interior Wholesaler
P	The Netherlands	The Netherlands		China	Hydraulic Machines
Q	The Netherlands	The Netherlands	Belgium, Germany	-	Road Construction
R	The Netherlands	The Netherlands	undefined	Suriname	Electrical Wholesaler
S	The Netherlands	The Netherlands	Germany, Italy	-	Concrete Construction

T	Germany	Germany	undefined	-	Electrical Wholesaler
U	The Netherlands	The Netherlands	undefined	-	Automotive industry
V	The Netherlands	The Netherlands	-	China	Accessories Wholesaler