

The effectiveness of power in supply chain relationships during times of scarcities

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ABSTRACT,

Power is widely acknowledged within supply chains and buyer-supplier relationships. Previous research has addressed the effectiveness of power within supply chains and its relationships, and the different types of power that are applicable. However, very little is known about the effectiveness of power in such relationships during times of disruptions, like scarcities. This thesis provides several new insights concerning this gap. Suppliers and buyers were interviewed, and data was collected and analyzed for twelve different cases. These cases showed for different outcomes with one common theme; coercive power proved to be most common and usually effective. The findings narrowed the gap concerning the effectiveness of power during times of scarcities. Moreover, the findings might give managers awareness of power in different situations during disruptions.

Graduation Committee members:

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Keywords

Power effectiveness; Supply Chain; Buyer-supplier relationship; Disruptions; Scarcity; Case study

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1. INTRODUCTION

The COVID-19 disruptions followed by the war between Ukraine and Russia has quickly led to major scarcity issues. Supply chain (SC) disruptions were at the center of the attention within businesses during the global pandemic, but the Ukrainian crisis causes even more disruptions in global supply chains (Brink, 2022). Logically, this is a major cause of concern for firms with global suppliers. At some point, the profit margins on products could become so small, or maybe even disappear, that entire products will go extinct. These increasing scarcities will have a direct impact on suppliers and buying firms, and thus their relationships and the respective power and its effectiveness in these relationships. There are several factors causing disruptions to the global supply chains and the relationships between buying firms and suppliers. As it is such a recent development, there is very little known about how these disruptions can and may impact the effectiveness of power in SC relationships. As research has shown, power imbalance does not always lead to a poor supply chain relationship (Touboullic, Chicksand, & Walker, 2014). However, this may change in times of disruptions because power could shift from buyer to supplier due to scarcities. In this thesis, we will examine how effective power is during times of scarcities.

Plenty of research has been done to explore effects of disruptions, and some even give insight into the relational effects of SC disruptions (Porterfield, Macdonald, & Griffis, 2012). Other research has focused on how power imbalances impact an SC relationship (Touboullic, Chicksand, & Walker, 2014), or on satisfaction within a buyer-supplier relationship taking the influence of power into account (Benton & Maloni, 2004). Some research has been done that confirms the effectiveness of power in the supply chain if applied correctly (Benton & Maloni, 2000). However, no research has been done about the effectiveness of power in an SC relationship during times of scarcities. In general, what is missing is information about effectiveness of power and a direct connection between disruptions and effectiveness of power in SC relationships. Power can be of great importance in an SC and its relationships (Benton & Maloni, 2000), and scarcities can have a big impact on the structure of an SC relationship. This thesis will aim to give insight into SC relationships during times where scarcity issues are a major cause of concern. Based on the research objective, the following research question was formulated:

“How effective is power in supply chain relationships in times of scarcities?”

In order to complete this research and answer the research question, a suitable company was found to conduct interviews with employees in the purchasing/supply chain department. This company was considered to be suitable due to its ongoing complications with growing scarcity issues caused by the COVID-19 and Ukrainian war disruptions. With these interviews, more information was obtained about the effectiveness of power in SC relationships during times of scarcities.

The main purpose of this thesis is to close the gap described above through new research. Research was conducted to find out more about power and its effectiveness in SC relationships and how disruptions have impacted power in these relationships. Three interesting conclusions were drawn based on this research. Firstly, power was even more effective during times of scarcities than before. Secondly, due to scarcities, suppliers gained much more power, almost all power, as prices

became non-negotiable. Finally, it has become clear that there is a thin line between effective use of power and misuse of power. There are limits to the use of power and if these are exceeded, it can be detrimental to an SC relationship. With this research, we have learned that coercive power is the most effective and common type of power during times of scarcities, with legitimate power as ‘back-up’ if coercive power is proven to be ineffective.

The thesis is structured as follows; it starts with a summary, and a description of the used literature in this thesis (Chapter 1 and 2). These contain important information regarding the topic. In Chapter 3, the methodology will be provided and explained. Chapter 4 will show results from the completed research. Finally, Chapter 5 will provide a discussion, limitations, and implications, regarding the most important results and insights, finishing this thesis.

2. LITERATURE BACKGROUND

2.1 Scarcity of Goods

The core definition that will be used in this research for scarcity will be the one described by Cunha et al.: “Scarcity is the quality of something that is unavailable, insufficient, or not plentiful” (Cunha, Rego, Oliveira, Rosado, & Habib, 2014). Scarcities can be divided into three separate categories: demand-induced scarcity, supply-induced scarcity and structural scarcity (Bingham Jr., 2001).

The demand-induced scarcity involves the demand in a market. Increasing consumption levels decrease resources available, for example. This can lead to a scarcity in the market. Supply-induced scarcity is mainly about natural resources. A drought could for example lead to a limited availability of a certain resources, which can lead to scarcities. Structural scarcity is less about the market, and more about morals. Deep-rooted cultural problems can lead to structural scarcity issues.

A research written by John E. Bell et al. published in 2012 went deeper into how resource scarcities affected supply chain management (Bell, Autry, Mollenkopf, & Thornton, 2012). They drew attention to the natural resource scarcity (NRS) as a critical supply chain risk. The NRS is presented to highlight two attributes: scarcity and renewability. These two attributes directly relate to potential risks that firms can face in their supply chains. However, this research did not dive deeper into the impact on buyer and supplier relationships within a supply chain.

Firms who develop strong relationships with downstream customers and third-party processors will have a better chance at acquiring scarce natural resources than firms who failed to sustain such a relationship (Bell, Mollenkopf, & Stolze, 2013). Bell et al. found a link between a closed-loop supply chain, strong relationships, and a competitive advantage.

2.2 Supply Chain Relationships

This thesis will focus on the supply chain relationships within supply chain management. The actual term “supply chain management” can be split into four uses (Harland, 1996):

1. The internal supply chain
2. Management of relationships with suppliers
3. Management of a chain (suppliers, supplier’s suppliers, customer, customer’s customers)
4. Management of a network (interconnected businesses)

In his research, Harland mentioned how supply chain relationships are different for different business trends

(outsourcing, just-in-time, etc.). Relationship work generally concentrates on a two-party relationship, whilst these relationships should be seen as the building blocks of bigger chains and networks. Furthermore, Bendixen & Abratt's (2007) research showed that the ethical perceptions in the buying department of a firm by its suppliers have underlying dimensions consisting of ethical standards, but for this thesis more importantly: candid relationships. The perceptions are part of the corporate image, showing the clear link between a corporate image and candid relationships. In order to attain such a relationship, a firm should focus on speedy resolution of problems, respect for the partner, transparency in information sharing, fair and firm negotiations and clear communications.

2.3 Power in Supply Chain Relationships

Power will be referred to as one party's ability to enforce its will on another party (Emerson, 1962). Power can be split up into two forms of power; mediated and nonmediated power (Reimann & Ketchen Jr., 2017). Mediated power is used deliberately and with purpose, for example through promising rewards (reward power), or through threatening with punishment (coercive power). With mediated power, deliberate control of reinforcements, either negative or positive, is used to try and change behavior of the target (Brown, Lusch, & Nicholson, 1995). Nonmediated power is created through perceptions of the other party. This power can for example be a firm's desire to be identified with another firm (referent power), being appreciative of another firm's expertise (expert power), or through legal, hierarchical or contractual provisions (legitimate power). These sources of power do not rely on reinforcement behavior and response but focus on the indirect influence of one party on another (Brown, Lusch, & Nicholson, 1995). Types of power like referent power and expert power are usually less obvious, while legitimate power and mediated power like reward power and coercive power are more noticeable.

Research has shown that power plays a significant role in the supply chain. This was just one of four findings surrounding the importance of power within the supply chain by Benton and Maloni (2000). According to them, the source of power and the target of power must be able to recognize the existence and presence of power. Other findings directly involved a buyer-supplier relationship. A stronger relationship will enhance performance within the supply chain. Thus, this validates a pursuit of supply chain integration as a key driver of corporate strategy and promotes the need for a better understanding of the integration process. Thirdly, a power partner trying to exploit the supply chain could lead to dissension and under performance. A judicious form of power could benefit the power holder. Lastly, a more conscious, considerate use of power is of great importance. The influences of power on a buyer-supplier relationship and effects of this relationship upon the performance of the supply chain "expose the potential of power as a tool to promote integration of the chain and empower higher levels of performance" (Benton & Maloni, 2000).

Older studies have concluded that nonmediated power can help strengthen relationships between firms (Reimann & Ketchen Jr., 2017). Nevertheless, the use of mediated power can hurt the relationship, although it could turn out to be effective in enforcing short-term cooperation with demands. The resource dependency theory (Pfeffer & Salancik, 1978) is a theory frequently used to explain the existence of power in SC relationships. According to this theory, in order for firms to operate and compete successfully, they need access to

resources which can be acquired on the market. A tenet of the resource dependency theory is that the ability to use power is advantageous for the more powerful firm and at the expense of the less powerful firm. However, dependence should be considered according to the mutual dependence theory (Casciaro & Piskorski, 2005). If the firm with less power still possesses some power over the more powerful firm, it means that the more powerful firm still has something to lose if the relationship comes to an end. Consequently, there can be limits to power, if the powerful firm is dependent on the less powerful firm, and thus has something to lose in the relationship.

Highly volatile market prices for raw materials have caused shifts in power between buyers and suppliers (Reimann & Ketchen Jr., 2017). However, no previous research has been done about potential shifts in power in markets where scarcities are present.

Thus, a substantial amount of research has been done to explain effectiveness of power in an SC relationship, which types of power seem to be most effective and how power has its limits and may shift within a relationship. No research dives deeper into what happens with power if certain disruptions, like scarcities, occur, or how effective power can be during times of scarcities, but the already existing research has laid a foundation for this thesis.

3. METHODOLOGY

A qualitative single case study approach is chosen for this thesis. The aim is to provide insights into buyer and supplier relationship changes during disruptions, specifically looking at the effectiveness of power. A qualitative design is useful for understanding experiences and concepts, and to explore under-researched problems. A case study approach is suitable for understanding the complex relationship between buyers and suppliers (Yin, 2009).

3.1 Case Selection

For this thesis, the unit of analysis will be the buyer-supplier relationship. One firm has been selected for our case selection. This firm has been selected after multiple conversations and was found to be a perfect fit for this thesis. In order to attain the necessary information, a firm that has suffered or benefitted greatly from scarcity disruptions would be best. With one firm, the external validity is not met, but this thesis does not aim to draw general conclusions, but we solely want to find out if power in the SC relationship was affected due to disruptions, and if power remained effective in times of scarcities. Perhaps even increasing in effectiveness due to scarcities. Thus, focusing on the information from one firm in particular will be sufficient. In total, there were twelve cases (Table 1).

Table 1. Interviewees

Interview #	Interviewee + characteristics	Case #
1.	A	A1
2.	Job title: CCO Industry: Food Sales (2020): ~€300 million	A2
3.	B	B1
4.	Job title: Sales Manager Industry: Food Sales (2020): ~€300 million	B2
5.	Y	Y1
6.	Job title: COO	Y2
7.	Industry: Food	Y3
8.	Sales (2020): ~€300 million	Y4
9.	Z	Z1
10.	Job title: Purchasing Director	Z2
11.	Industry: Food	Z3
12.	Sales (2020): ~€300 million	Z4

A = Supplier's side
B = Supplier's side
Y = Buyer's side
Z = Buyer's side

Cases were selected from both the supplier and buyer's side. This is because the aim of this thesis is to find out how the disruptions have impacted the relationship between suppliers and buying firms, and if they have noticed a change in effectiveness of power. The interviewees, coming from the purchasing and supplier department, have been selected because of their direct involvement and contact with the suppliers and customers. A total of twelve cases were established after careful consideration with the interviewees. There were four interesting cases from interviews with employees on the supplying side of the company. There were more interesting relationships discussed during the interviews with employees from the purchasing department, leading to a total of eight on the buyer side of a relationship. The concepts mentioned in this thesis were shortly introduced and explained before the interview started, to ensure that our interviewees were familiar with the definitions of the concepts. For example, power was explained as a party's ability to enforce its will on another party.

3.2 Data Collection

The data in this thesis was collected through field research. Interviews were held over a one-month period. A total of twelve interviews were conducted with two to four per day. A limit of four interviews per day was set to not lose focus and thus miss out on important information. All of the interviews were recorded with audio (and permission) and later transcribed. To ensure accurate representation, the interviewees were provided with transcripts of their interviews and asked if they agreed with what has been written down (Ellram, 1996). For the interviews, there were a fixed few opening questions for every interview. This was done in order to acquire different views from employees with different job descriptions.

A total of twelve interviews were conducted with a duration of 10-15 minutes per interview. There was more time, however questions were answered clearly so there was little time spent on follow-up questions. A semi-structured interview structure was used to leave room for follow-up questions or extra questions after the fixed questions were answered (see Table 2). After the fixed questions were answered and certain types of

power had not been discussed, extra questions were asked (e.g. "Did you ever experience a form of reference power?"), to try and distinguish the effectiveness of different types of power. This resulted in a total of approximately two and a half hours of interviews. If anything remained unclear, we agreed to resolve this through conversations via e-mail. However, nothing remained unclear.

3.3 Data Analysis

Every interview got transcribed through a verbatim transcription method in order to get as much information as possible, whilst excluding irrelevant information, like "uhm's" and stutters. With interviewing different employees with different job descriptions, the intention of what is said is most important (Verhoeven, 2015).

Key categories were identified after the interview transcripts were completed and analyzed through the open coding approach. This approach prevents a forced interpretation, and it provides explanations for specific events and consequences (Flick, 2014). For this, the verbatim transcriptions were used. To ensure reliable coding as best as possible, these were checked by relatives who had experience in coding.

After the open coding was completed, axial coding was done through giving certain categories different colors. These were double checked to ensure these categories were not flawed in any way. This gave a clearer overview of patterns in the transcripts.

Answers were closely analyzed to try and find connections and/or overlaps between interviews. Finally, conclusions were drawn on the effectiveness of power in SC relationships to answer the research question.

Table 2. Interview protocol

Topic	Interview question	Goal
General information	What is your job title and job description?	Information interviewee
General information	For how long have you been doing this work?	Information interviewee
Suppliers/buying firms	With how many suppliers/buying firms do you work?	Information suppliers/buying firms
Relationship with supplier/buying firm	How would you describe the relationship with the supplier/buying firm?	Relationship interviewee and supplier/buying firm
Relationship with supplier/buying firm during scarcities	Have the scarcities since the start of the Ukrainian war had an impact on the relationship?	Changes in relationship due to scarcities
Relationship with supplier/buying firm during scarcities	Has the relationship improved or deteriorated since the start of the scarcities?	Changes in relationship due to scarcities
Relationship with supplier/buying firm during scarcities	Has this led to more or more intensive contact with the supplier/buying firm?	Changes in relationship due to scarcities
Power in relationship with supplier/buying firm during scarcities	What have you tried to do to have an influence on the supplier/buying firm?	Effectiveness of power in relationships during scarcities
Power in relationship with supplier/buying firm during scarcities	Have you tried using power to get things done your way? E.g., through rewards/punishment.	Effectiveness of power in relationships during scarcities
Power in relationship with supplier/buying firm during scarcities	Have you noticed power having an influence on the relationship during the scarcities?	Effectiveness of power in relationships during scarcities
Power in relationship with supplier/buying firm during scarcities	What kind of consequences did the influence of power have on the relationship?	Impact of power in relationships during scarcities
Relationship with supplier/buying firm during scarcities	How did the supplier/buying firm react to your approach in these times of scarcities?	Impact of changes in relationships during scarcities
Misuse/abuse of power in relationship with supplier/buying firm	Has there been any misuse/abuse of power within the relationship? If so, what happened?	Extent of effectiveness of power in relationships during scarcities

4. RESULTS

The interview results after transcribing and coding was completed are shown in Table 3. Key findings were the *effectiveness of different types of power* (4.1), where coercive was the most dominant one, the *shift in power* (4.2) and *how power was limited due to rules and regulations and the dependency* (4.3), as shown in Table 4.

Table 3. Interview results

Case	Relationship in general	Relationship during scarcities	Power in relationship	Power in relationship during scarcities	Misuse of power in relationship
A1	Constructive, challenging	Changes, better communication, improvements, uncertain future	Limited, asymmetric*	Coercive power, incidental shift, useful, effective	
A2	Constructive, challenging	Changes, declines, uncertain future	Limited, asymmetric*	Coercive power, incidental shift, useful, effective	
B1	High quality, flexible	Big impact, less compassion, hardened	Reference power	Coercive power, less reference power	
B2	Tough but fair negotiations	Big impact, less compassion, hardened	Balanced	Coercive power, shift	
Y1	Loyal	Challenging	Balanced	Coercive power, shift, limited	
Y2	Loyal	Challenging	Balanced	Coercive power, shift, limited	
Y3	Transactional	Declines, no future	Balanced, commodity	Legitimate power, shift	
Y4	Stable	Declines, unfairness	Balanced	Coercive power, shift	“Payback”
Z1	Stable	Changes	Balanced	Coercive power	
Z2	Good, high dependency	Big impact, no future, more communication	Asymmetric**	Coercive power, useful, effective	
Z3	Stable, high dependency	Future in mind	Semi-balanced	Coercive power	
Z4	Transactional	Heated	Balanced	Legitimate power, shift	

*Asymmetric, advantageous towards the buyer due to high dependency from supplier

**Asymmetric, advantageous towards the supplier since they are less dependent on one buyer

Table 4. Key findings

Key findings	Main result	Category	Findings
1.	Effectiveness of different types of power	Coercive power	Most common and effective most of the time during scarcities
		Legitimate power	Consequence of ineffectiveness of coercive power, detrimental to a relationship
		Reference power	Marketing tool, less effective during scarcities
2.	Shift in power	Incidental	Suppliers gained possession of power due to scarcities, however it seems likely that they will lose it again once scarcities are over
3.	Limits to the use of power	Dependency	Dependency prevents suppliers from maximizing power
		Rules and regulations	Thin line between use and abuse of power

4.1 Effectiveness of Different Types of Power

Different types of power appeared to be effective before and during the times of scarcities. Cases were all very similar; a new type of power usually came into play when the other type of power did not work in that specific situation.

4.1.1 Coercive Power

Coercive power seemed to be the most effective and common type of power in almost all situations. Coercive power was used in ten out of the twelve cases in this thesis, and it is effective on both the buyer and supplier side of the relationship.

Cases A1 and A2 concerned the supplier's side of the relationship. In both cases, power was very limited before the scarcities occurred. Due to the scarcities, they had to use coercive power, although they did not like doing that either. Prices went up and thus there was no more room for negotiations. Regarding A1, it led to more and better communication, while for A2 it led to more friction within the relationship. In both cases the buying firm ended up agreeing to the new prices and coercive power showed its effectiveness.

The supplier never had to threaten with punishments, but they made clear that with the uniqueness of the situation, it was a ‘take it or leave it’ deal.

The results for B1 and B2 are similar, also being on the supplier's side of the relationship. The relationships have hardened because of the scarcities and there was little room for negotiations regarding price. B stated that “hardened does not mean worsened. With more pressure, a supplier is forced to be more creative.” They told the buyers: “This is our new price, there is no room for negotiations. I need it sold at this price now or we will not be able to supply you with this product any longer.”, clearly showing that coercive power was applied.

Cases Y1-Y4 concerned the buyer's side of the relationship. Y1, Y2 and Y4 were once again very similar, they got ‘take it or leave it’ deals, and there was no room for negotiations. Where for cases A and B, the suppliers, they were the ones using coercive power, cases Y and Z were on the receiving end of the coercive power. There were limits to how much they could be supplied with, and prices were firm. They were forced to agree with these prices, otherwise they would not be able to

manufacture the necessary number of products. Regarding case Y2, he explained that even before the scarcities, the room for negotiations was small because there are not many alternatives, and their resources are necessities. Due to the scarcities the room for negotiations became even smaller. Y said: “Due to the scarcities, we have no choice but to accept it.”

In case Z2, coercive power was applied by both parties. The supplier stated that they could only deliver a fourth of what was originally planned and needed for the buyer. The supplier said: “this is what is available, so this is what you’re going to get”, Z said that they tried to put the supplier under pressure, through threatening with consequences, but this did not work. Consequently, they are now looking at alternatives for the future. Thus, coercive power was ‘effective’ for the supplier short-term, not for the buyer, and it went at the expense of the future relationship.

4.1.2 Legitimate power

Legitimate power was usually effective as a ‘last resort’. It had to be done when coercive power seemed to be ineffective, but when they did have a contract in which it stated that either the buyer or supplier had obligations to deliver or acquire a minimum amount at a minimum price. Legitimate power occurred in two cases: Y3 and Z4, both on the buyer side of the relationship.

In case Y3, it did not lead to a desired result. The supplier claimed they could not fulfill the contract and their supplier obligation due to the surging prices. The buyer, Y, did not agree to this as they need these resources, there was a legitimate contract in play. Because the supplier was a small part of a big entity, the parent company decided to let it go bankrupt, as it would get them out of the contract.

Case Z4 is similar to Y3, however it is still on-going. There is a contract, but the supplier has told them they can no longer fulfill the obligations in this contract. The contract has a set quantity that has not been delivered yet, and Z needs that quantity in order to be able to manufacture the products they are obliged to deliver to their customers. The supplier is also asking them to fulfill the payments, without supplying the products. Z has sent a lawyer to put the supplier under pressure, to try and get the resources through legitimate power. It is highly likely that the relationship will be ended after the disputes are settled.

4.1.3 Reference power

Reference power was only mentioned in one case: B1. It was also mentioned during the interview with Z, but he claimed it would be very opportunistic to think that reference power was in place. However, he did say that “they [suppliers] use it as marketing”, so there is definitely some reference power active there. B is a supplier of a big a-brand, thus, he stated, buyers are automatically interested in buying our products as it is something to be proud of if you can show your customers that you sell their products. This shows a form of reference power, but this was before the scarcities. Since the scarcities, the reference power has minimized as prices are still the highest priority. Reference power is helpful, but if the prices are too high, the buyer will back out of a deal. B said that the whole industry is currently in two minds; we want to keep our relationships as they were, but we do not want to pay ridiculous prices. Reference power remains applicable, as the buyers do not want to lose a supplier during scarcities, because it would be tough to restore a good relationship when the scarcities are over.

4.2 Shift in Power

A shift in power was mentioned during six out of twelve interviews. A shift in power was mainly noticeable towards the supplier’s side of the relationship. A1 and A2 confirmed the shift in power, but A claimed this was incidental, and would disappear after the scarcities, “we now have some ammo, but I don’t think it is a permanent shift in power”. This makes sense, as the scarcities are the reason the ammo is there on the supplier’s side, there are a lot less resources available, and thus the suppliers are first in line to set the price.

B2 talked about a shift in power before the scarcities, where they used to supply to approximately ten different firms, where it has now gone down to three or four. This caused a big shift in power because they are now very dependent on their few buyers. Since the scarcities, they attained more power as a supplier, as the prices have gone up for them as well. Thus, because they are now paying more for their resources, even though they only have a few customers, they now have to pay a higher price, whether they like it or not.

Y also noticed a shift in power, but limited. The suppliers did indeed get more power, because of the limited availability of resources, however they could not take great advantage of this because of the essence of their relationship. For Y1 for example, Y’s firm is very important to the supplier, and the supplier is partly dependent on Y as a buyer. He said that it is a loyal relationship as they need each other, this dependency leads to more power balance. If a party, in this case the supplier, were to misuse their power, it could ruin their relationship.

With Y3, the power was balanced due to their contractual obligations. Both parties had to fulfill this contract. Due to the scarcities, this contract was no longer fulfillable. The supplier’s parent company decided to let Y3’s supplier go bankrupt, which consequently led to Z4 having to look for alternatives, reflecting that all power was now in the hands of the supplier and its parent company. This narrative is also applicable to Z4, they have to now use legitimate power to try and get what is in the contract, showing that the supplier now has the power to simply say “we cannot fulfill this”.

This ‘scarcity shift’ is a direct consequence of the scarcities. In this case, buyer B for example, experienced reference power, which was now much less effective because of the scarcities. The scarcities caused a shift in power to the point where only dependency could still give the buyer a bargaining tool. Apart from that, all power is in possession of the supplier during times of scarcities.

4.3 Limits to the use of power

Multiple cases showed limits to the use of power. Partly because of the dependency between a supplier and its buyer and uncertainty over the period of time where scarcities are a cause of concern, but also because of strict rules and regulations that are in place within the food industry.

The limits mainly came up during the case of Y1 Y2 and Y4. Y1 and Y2 are very similar. There is a high dependency in both cases, at both parties. So, as mentioned in paragraph 3 of 4.1, both the supplier and buyer cannot make great use of power. During the scarcities, more power was in the hands of the supplier, but with the uncertainty of the duration of scarcities and the high dependency, you do not want to risk losing such a key customer. Y4 is the only case where misuse of power became apparent. The supplier of Y4 is in the packaging industry, where profit margins generally are low. Y said that the supplier saw this as their ‘payback’ moment. “Rational or not, now it’s our turn.” is what the supplier told Y. Although

this resource was a necessity for Y's firm, they looked at alternatives. The supplier had crossed the limit and it ended the relationship between the two parties.

What became clear during most interviews is that power is not a word they like to use, because the rules and regulations within the food industry are strict. They confirmed power was in play and it is very effective if applied correctly, but there is a very thin line between use and abuse of power.

5. DISCUSSION, IMPLICATIONS AND LIMITATIONS

In this thesis, the gap concerning the uncertainty of the effectiveness of power during times of scarcities was addressed. Older research failed to connect power and its effectiveness in SC relationships to scarcity disruptions. That is why the research question mainly focused on the power and its effectiveness during disruptions caused by scarcities. Results showed that coercive power was the most common and usually very effective type of power during times of scarcities, but there were other types of power that were applicable if coercive power did not work. Legitimate power, for example. Coercive power was applicable on both sides of the SC relationship, however legitimate power is mainly helpful for the buyer side, if the supplier is using coercive power. A noticeable finding was the shift in power towards the supplier's side, to the point where almost all power for the buyer had disappeared. Nevertheless, there were clearly limits to the use of power, not only due to rules and regulations, but also because of the uncertainty about the future. Thus, there were three main key findings worth highlighting.

5.1 Implications for Literature

Firstly, power has its effectiveness if parties in a SC relationship are aware of the presence of power and configure it into the SC correctly (Cox, 1999) (Benton & Maloni, 2000) (Reimann & Ketchen Jr., 2017), but even more so than before the scarcities occurred. Previous research has shown that power plays a significant role in the supply chain, but that the source and the target of the power must be able to recognize the existence and presence of power (Benton & Maloni, 2000). This can enhance the buyer-supplier relationship performance within the supply chain and shows effectiveness of power if applied correctly. Buyers and suppliers want what is best for their firms, but during times of scarcities, it is no longer possible to get the absolute best price. Due to the limited alternatives, a buyer has little room for negotiations with a supplier. Coercive power was effective in most cases and not directly hurting the relationship, showing the exact opposite of what older research has shown (Nyaga, Lynch, Marshall, & Ambrose, 2013) (Pulles, Veldman, Schiele, & Sierksma, 2014) (Zhao, Huo, Flynn, & Yeung, 2008). According to these studies, coercive power mostly has negative relational consequences. During times of scarcities, it turned out to be different. When coercive power did not seem to be effective, it led to legitimate power, when it concerned contracts that were in place. A third type of power was reference power. Here, a firm can get power because another firm wants to be affiliated with that specific firm. This type of power was applicable before the scarcities, but almost disappeared during the scarcities due to the shift of power towards the suppliers and the coercive power that becomes effective.

Secondly, scarcities caused a big shift in power. This is likely because it is a form of supply-induced scarcities (Bingham Jr., 2001). Research had already shown that power shifts could occur in high volatile markets (Reimann & Ketchen Jr., 2017). Where before the scarcities, buying firms could have had some

sort of power, like reference power, that disappeared during times of scarcities, because the limited availability of resources automatically led to higher prices and thus less room for negotiations with their suppliers. Leaving the suppliers with the power to set the price.

Lastly, even though a supplier that was not used to having any power could now possess power because of the scarcities, there are limits to the use of power (Reimann & Ketchen Jr., 2017). There are always alternatives and if you try to push the limits, it could lead to the other party ending the relationship if they expect to be able to find better alternatives. The uncertainty about the future (for how long the scarcities will be a concern) is the main reason why the use of power cannot be maximized. If a supplier now tries to use its power against a buyer that they are highly dependent on, it could hurt the relationship and they could lose their customer forever. So, dependency limits the maximization for the use of power, even during scarcities, as firms will have to keep in mind that there may be a time where the resource is no longer a scarcity. The rules and regulations within the food industry are another reason for the limits to the use of power. This became very clear during the interviews, no one wants to try and force its will onto another party through power if it does not seem necessary, because they said there is a thin line between fair use and abuse of power.

5.2 Managerial Implications

The findings can have several implications for managers on both the supplier side and the buyer side of the SC relationship. Firstly, for managers on the supplier side, it is clear that coercive power is always a first step. Rewards and/or punishments are not always necessary, being truthful and explaining the uniqueness of the situation during times of scarcities can already be enough to convince the buyer. Nevertheless, it is different for managers on the buyer's side. Here, you are the party on the receiving end of the coercive power. Almost the only way to be able to attain some sort of power is through contracts, thus legitimate power. Therefore, it is good for managers to make sure contracts are always in place, if there is a dependency on the resource or the buyer. This can prevent problems from occurring during times of disruptions.

Finally, during the interviews it became clear that sometimes managers do not realize power is already present in a relationship. For example, when the fixed interview protocol was finished, and they were asked about certain types of power, they did not know what the terms meant, but once the terms were explained they realized they have dealt with it either during times of scarcities or before. It seems helpful for managers to know the types of power to sometimes realize what kind of situation they are in. Referent power for example, is actually a very strong bargaining tool, but it is worthless if you do not realize the buyer/supplier wants to be affiliated with you for their own marketing strategy.

5.3 Limitations and Future Research

This thesis has several limitations. For instance, all interviews were held at one firm, meaning we got both sides of the relationship, buyer and supplier, but we did not get two sides of the same relationship. If you talk to two sides of one relationship, different outcomes are possible as they will likely look at the relationship, power and effectiveness of power in their relationship differently. Therefore, future research should consider finding a firm where it is easier to also get to the supplier/buyer side of the same relationship.

Secondly, the time period available for this thesis was not sufficient in order to get the best possible answers during the

interviews. The scarcities were still a very recent development, and some questions could not even be answered as they simply did not know yet. For future research it would be better to take more time and do the same interview once more, weeks or possibly months after, to see if things have changed and to get more interesting results (Weller, Pulles, & Zunk, 2021). However, I am not convinced very different results would occur.

Lastly, the industry in which the firm is active could have skewed the answers. Power seemed like a term with a negative undertone, and they did not like using the word power, mostly because of strict rules and regulations that are in place in this industry. Future research could try and focus on a different or

possibly multiple industries (Weller, Pulles, & Zunk, 2021). It is likely results would differentiate from this thesis.

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