# Factors that drive Coopetition and exploration of potential Supply-Based Drivers to Coopetition

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### ABSTRACT

Although coopetition has received more and more attention over the past couple of years, researchers have given little attention to coopetition for supply. In practice a lot of companies coopete for supply, but in literature this practice has been neglected almost completely. This study aims to provide an overview of the current knowledge about drivers for coopetitive relationships and expands this knowledge with the data of two case studies involved in coopetitive relationships for supply purposes. The overview of drivers for coopetitive relationships in the field of Supply Management provides managers with an idea of occurrences that can be tackled by involvement in coopetitive relationships.

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#### **Keywords**

Coopetition, Supply Management, Competition, Collaboration, Buyer-Buyer Relationship

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## 1. INTRODUCTION

Coopetition, also known as the joint presence of competition and collaboration in a relationship, is an often examined concept. It is described as 'a paradoxical relationship between two or more actors simultaneously involved in collaborative and competitive interactions, regardless of whether their relationship is horizontal or vertical' (Bengtsson & Kock, 2014, p. 182). However, in existing literature, coopetition is not extensively researched in the field of Supply Management and especially not in the case of multiple buying firms sharing one supplier (Pathak et al., 2014; Pulles, 2014). A firm's Supply Management practices can be decisive in a situation where firms acquire the same inputs from the same suppliers as their competitors (Pulles, 2014). Additionally, collaboration and networking between members in (international) supply chains is determined to be very important in the supply chain of the future (Hameri & Hintsa, 2009). Hunt and Davis (2008) state that organizations that compete for a market segment and find themselves in a disadvantaged position either try to neutralize or leapfrog advantaged organizations by acquisition or innovation of resources. As coopetitive relationships aim to combine complementary resources of rival firms to develop new products and technologies (Gnyawali & Park, 2009), coopetition is argued to be one of the ways to out-compete competitors and to overcome this disadvantaged position. Relative to competitors with whom no collaboration exists, the competitive position will improve because these companies will not benefit from the coopetitive relationship. However, in the case of competitors with whom collaboration is established, there is also a possibility to improve one's own competitive position. It is argued that competitors within alliances also learn from each other outside the boundaries of the alliance (Hamel et al., 1989). Subsequently an individual company can improve its other practices as a consequence resulting in an improved competitive position relative to alliance partners.

Moreover, current literature dedicated to drivers of coopetition mostly had a general focus or focused on a specific goal that the coopetition relationship should achieve other than those created for supply purposes. Padula and Dagnino (2007) have linked the rise of coopetition to a set of environment-related and firmrelated factors without a further specific focus. Gnyawali and Park (2009; 2011) have written two papers on coopetition, the first considering SMEs and the second considering giants, however this has been examined in the context of pursuing technological innovations. A focus on relationships constructed for supply purposes is neglected in literature, whereas multiple companies in practice are coopeting for supply to improve their Supply Management. An interesting example of a successful coopetitive purchasing relationship is a collaboration between Dutch hospitals. Four University Medical Centers decided to collaborate to reduce costs for telecommunication which has been achieved with use of IT. Therefore, IT was put forward as a means to overcome collaborative purchasing impediments. The collaboration achieved an annual saving of €1 million euros. (Kusters & Versendaal, 2013). With the documentation of more coopetitive relationships constructed for supply purposes other companies can be made aware of such practices. Moreover, they can be made aware of the advantages that coopetition brings and the problems they can expect when initiating such relationships. All taken together, it will help companies to see the benefits of coopetition for supply and the possible value it can add to their course of business.

What is missing in literature is a focus on coopetitive relationships between multiple buyers and a specific focus on the drivers of coopetition in the supply market. These gaps have to be covered and the central research question of this paper will therefore be: *What are the factors that could drive coopetition in the supply market?* Following the definition of coopetition from Bengtsson & Kock (2014), this paper focuses on horizontal coopetitive relationships which are also referred to as buyer-buyer relationships (Walker et al., 2013).

The aim of this research is to help companies assess when it is useful to get involved into a coopetitive relationship focused on improving Supply Management. Section two discusses the concept of coopetition, supply-based coopetition specifically and the origins. The third section is a literature review of already obtained knowledge in the area of drivers of coopetition. The literature review will be tested and extended with use of interviews with two companies involved in coopetitive supply relationships in the automotive and the construction industry. For this purpose, two companies have been studied being Auto Palace and PHB Deventer. Auto Palace is a car dealer that is having the dealership of multiple competing car brands and PHB Deventer is a construction company involved in an alliance with seven other companies in procurement. Both companies are involved in coopetitive practices with the aim of improving Supply Management. Reasons for the creation of these relationships will be examined. The fourth and fifth section reflect on the methodology and the information obtained from the cases. Afterwards, the available information will be compared in section six and extensions to the already known knowledge will be proposed.

## 2. LITERATURE BACKGROUND

## 2.1 Concept of Coopetition

Coopetition is introduced as a paradoxical relationship in which both competitive and collaborative dynamics are present. Another definition of coopetition takes another perspective and focuses on the description of the underlying fundamentals of coopetitive relationships. Coopetition is then described as 'a dyadic construct that represents the nature of the interdependencies between any pair of firms interacting on the basis of partially overlapped private interests' (Padula & Dagnino, 2007, p. 47). This definition specifically mentions a dyad, however, coopetition can also occur on the network level (Pathak et al., 2014). The two dimensions of coopetition, being competition and collaboration, have been viewed as opposite ends of a single continuum for a long time (Lado et al., 1997). Intense rivalry was considered to be beneficial to competition, whereas collaboration would harm competitive interactions (Bengtsson & Kock, 2000). However, from the late 1990s the dynamic interplay between competitive and collaborative phenomena was widely explored, reflecting degrees of interdependence between the two phenomena rather than the presence or absence of them. This was the beginning of a wide exploration on the concept of coopetition.

Bengtsson and Kock (2000) found that collaborative dynamics occur far from the customer and competitive dynamics occur close to the customer. This can be explained by the prohibition of many forms of collaborative activities in the downstream part of a supply chain, thereby promoting competition in downstream activities (Rusko, 2012). Upstream collaboration in the value chain is therefore not difficult to conceal from customers. As competition and collaboration within one activity is impossible, the two types of interaction are divided between activities either on functional aspects or between different business units or product areas (Bengtsson & Kock, 2000). Herewith making it possible to collaborate and compete simultaneously without compromising positive effects of both phenomena when executed properly. Coopetition results in advantages that are discussed by multiple scholars. First, coopetition is more than solely collaboration in a specific area as it also involves the willingness to learn. Coopetition creates the possibility to learn multi-directional and to share knowledge. However, the possibility to do so is determined by the structure of a network and the relationships within the network (Song & Lee, 2012). Secondly, multiple scholars have mentioned that coopetition is a way to reduce risk or absorb the risk of failure as multiple companies share the responsibility and the costs for their combined activities in areas such as R&D (Bengtsson & Kock, 2000; Walley, 2007; Lado et al., 1997). Companies can access each other's firm's unique resources and share the cost of developing new resources. Cost reduction is, therefore, another advantage in itself. Additionally, firms' resources and capabilities can be combined and used in competition with others which is also described as the possibility of capability transfer that enhances knowledge of all companies involved (Hamel et al., 1989; Walley, 2007). As a consequence, collaboration with competitors is a way to develop oneself in other areas (Mason, 1993). Other benefits mentioned pertain to added value, securing communication, fostering trust and reciprocity, improved productivity and quality and access to raw materials (Lado et al., 1997; Walley, 2007). However, coopetition also involves risks. It is considered a risky business because companies often display opportunistic behavior and it is difficult to establish trustful relationships (Ritala & Hurmelinna-Laukkanen, 2009). Disadvantages can also arise from partners that have obsolete resources and capabilities as a consequence of technological advances (Walley, 2007).

A theory introduced in relation to coopetition is game theory (Brandenburger and Nalebuff, 1995). The success of a company is found to be independent of the losses or successes of others as long as companies are playing the right game. In one-off games every party wants to maximize its self-interest. However, in repeated-games mutual cooperation results often in higher economic benefits than acting in one's own interest. Brandenburger and Nalebuff propose looking for positive-sum games as well as zero-sum games dependent on one's position within the company's value net (Brandenburger & Nalebuff, 1995; Lado et al., 1997). An interesting thought is that imitation will not always deter one's competitive situation as it might at the same time change the game and thus improve other business facets (Brandenburger & Nalebuff, 1995).

### 2.2 Supply-Based Coopetition

In literature multiple papers on coopetition have focused on relationships that are constructed for the purpose of jointly working on technological innovations. However, in practice there are also coopetitive relationships constructed for the purpose of bundling forces to achieve advantages related to Supply Management. The neglection of a specific focus on coopetition in the supply market creates an opportunity to document such relationships. In this study, the focus lies on coopetitive purchasing, which should not be confused with collaborative purchasing (also referred to as cooperative purchasing). The distinction between these two concepts is that the latter collaborations are built on low competitive pressure or the absence of competition, whereas the former are built because of the existence of competition (Schotanus & Telgen, 2007; Gnyawali & Park, 2009). Moreover, both relationships aim the optimal leverage of available resources, but coopetitive partners are also focused on capturing value from competitors (Oesterbeck, 2015).

Coopetition is explained from various views, however, as the focus of this paper lies on Supply Management the most

interesting view is the relational view (Dyer and Singh, 1998). Considering that coopetition is inseparable from the existence of relationships. Moreover, this view builds on the resourcebased view with resources being the core of Supply Management. The relational view assumes that the sources of competitive advantage can span firm boundaries. Firms that combine resources in unique ways can realize advantages over competing firms (Dyer and Singh, 1998). Additionally, Dyer and Nobeoka (2000) argue that interfirm networks rather than single firms might be more capable in achieving resource-based advantages. The relational view focuses on establishing longterm relationships that create value that would not have been achieved by acting alone. Coopetition serves the same purpose. This relational view builds on the resource-based view which holds that efficient firms with a competitive advantage can sustain superior resources only if these resources cannot be imitated or expanded by other firms (Peteraf, 1993). The resource-based view assumes that sharing critical resources will diminish their value (Padula & Dagnino, 2007). However, they in turn suggest that profits also result from non-finite, symbolic and idiosyncratic resources such as trust making. Moreover, resources are argued to increase in value when shared selectively (Padula & Dagnino, 2007). The resource-based view neglects that competition with companies involved in coopetition can still be sustained, as coopetition involves collaboration with activities far from the customer and competition in activities close to the customer (Bengtsson & Kock, 2000). Collaboration among firms could even lead to a more intensified form of competition as it leads to group vs group competition (Gnyawali & Park, 2009). Boundaries between companies involved blur when being in a coopetitive relationship, thereby creating a space to share knowledge which is a key source of competitive advantage. Only the competitors involved in the relationship will benefit from this knowledge sharing, thereby creating a competitive advantage relative to other competitors. This is also supported by the finding that information generated within a firm's boundaries often generates more useful information than external information. Due to the fact that external information is more publicly available to competitors and therefore easier to access (Barney, 2012).

A coopetitive relationship constructed for collaboration in R&D differs from a coopetitive relationship focused on growing a bigger market for a product. In the latter case companies together establish a new or enlarged market to subsequently compete for division of the newly created market value (Gnyawali & Park, 2009). Due to the existence of various coopetitive relationships it is important to not only have information on the general level, but also to have more in-depth knowledge of specific cases and in this case coopetition to improve Supply Management. Buyer-buyer relationships evolve when the procurement functions from different companies collaborate to not only achieve greater efficiency, but also to improve bargaining power with suppliers (Walker et al., 2013). Regarding Supply Management, companies are often bounded by contracts in their procurement. Additionally, operational links between companies cause companies to create relationships that differ from those of peers (Pathak et al., 2014). These contracts and formerly established terms and norms, form boundaries to the possibilities companies have to collaborate within the area of Supply Management. Coopetitive relationships created for supply purposes are, therefore, different than coopetitive relationships created for, for example R&D. A basic distinction between two types of supply alliances is the one between scale and link alliances. The former (scale) relates to competitors willing to increase efficiency in their existing activities by contributing similar resources and the latter (link) to competitors willing to expand into new markets or activities by the contribution of complementary resources (Mitchell et al., 2002).

# **3. DRIVERS OF (SUPPLY-BASED)** COOPETITION

Collaboration has proven to be a viable strategy to realize selfimprovement. The case for collaboration with competitors is said to be stronger than ever as few single companies have the resources to develop new products or penetrate other markets. Moreover, it is a means to improve efficiency and quality control (Hamel et al., 1989). If private interests can be aligned for common purposes collaborative relationships can evolve. However, when collaborating, what is better for one firm, might not be in the interest of another firm and exactly this problem lies at the heart of being involved in coopetition (Padula & Dagnino, 2007). As value capturing is an additional aspect of coopetition it is argued that drivers leading to coopetitive relationships will differ from those leading to collaboration only, because the aim is to achieve more extensive benefits. To categorize the drivers, it is useful to make a distinction between levels. Pathak et al. (2014) argue that understanding coopetition requires consideration of the wider environment and the behavior of individual firms. In literature two levels have been distinguished on which changes can occur that will impact interfirm relationships, being the environmental level and the firm level. Forces resulting from the former are classified as exogenous factors and forces resulting from within a firm are called endogenous factors (Padula & Dagnino, 2007). Table 1 and Figure 1 provide an overview of the differences.

Table 1 Difference between Exogenous and Endogenous forces

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Exogenous forces	Endogenous forces
'Can affect the extent to	Produced or synthesized
which the interest structures	within the organism or
of partners overlap' (Padula	system (Merriam-Webster
& Dagnino, 2007, p.38)	Online, 2015)
External cause or origin	Internal cause or origin
Independent	Dependent



#### Figure 1 Schematic overview of the origin of exo- and endogenous forces

In literature a couple of conditions are determined that cause competing companies to collaborate. In section 3.1 general coopetition drivers are discussed, whereas section 3.2 will be more specifically focused on drivers in the context of Supply Management. Table 2, 3, 4 and 5 will give an overview of the drivers mentioned in the following sections.

### 3.1 General Coopetition Drivers

#### 3.1.1 Exogenous factors

Within industries it is assumed that structural conditions force firms to act in rivalry relatively to each other while social structure and dependence that follow from structure explain collaboration (Bengtsson & Kock, 2010). Competition is therefore seen as rivalry that develops from dependency within industries. This dependence between competitors can explain why competitors collaborate and also why they compete (Håkansson, 1987 (as cited in Bengtsson & Kock, 2010)). One such structural dimension is competition. It is found that the degree of competition in an industry determines whether collaborative or coopetitive purchasing is preferred. Companies that face direct competition or competition in activities far from collaborative activities that is not difficult to influence are more likely to get involved in coopetitive relationships (Oesterbeck, 2015). Moreover, innovation and creation of a competitive advantage are more valuable in industries with intense competition compared to those where few competition is present. The degree of competition is therefore argued to influence the degree of innovative actions in an industry (Bengtsson & Kock, 2000). Additionally, companies that face a lot of local competition have especially been found to be pressured to innovate at higher levels than competitors. As nearby competitors are better able to observe each other's actions to subsequently imitate beneficial behaviors (Porter, 1980). Another condition is the level of uncertainty in an industry. High levels of uncertainty cause conflicting views to emerge and subsequently these result in different responses. This explains how competitive issues can develop in collaborative contexts (Padula & Dagnino, 2007).

Another reason to join forces is facing a similar threat. U.S. semiconductor manufacturers were having a difficult time in the 1980s competing with Japanese companies and it was predicted that the market share that was once 85 perfect, would shrink to 20 percent in 1993 if no changes would take place. As multiple U.S. companies were experiencing this externally evolving threat that was lying outside of their influenceable scope, it caused them to have overlapping interests and thus a reason to collaborate. Without a counteract all U.S. companies would suffer from Japanese companies taking their market share. Therefore, a consortium was formed also partly financed by the government that was focused on improving 1) the industry infrastructure, especially concerning the supply base of equipment and materials, 2) the manufacturing processes and 3) the management of factories (Browning et al., 1995). An advantage that has resulted from the collaboration pertains to a \$200-\$300 million saving from improved yields and production efficiencies (Irwin & Klenow, 1994). This has for example resulted from a reduction in the width of circuit lines, allowing more circuits to be placed on a chip. SEMATECH has also been working on equipment improvements from which the participating companies have benefited. New equipment is more aligned to their needs and they obtained a possibility to gain familiarity in the use of the new technologies (Grindley, 1994).

Table 2	General	Exogenous	factors
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Factor	Scholars & Examples
Changing structural	Bengtsson & Kock, 2000
conditions that increases	Degree of competition
dependency between	Direct/Indirect competition
companies	Local/ non-local
	competition
	Level of uncertainty
Facing a similar threat	Browning et al., 1995
	In the semiconductor
	industry, Japanese
	companies were a threat for
	the market share of U.S.
	manufacturers

#### 3.1.2 Endogenous factors

Numerous psychological factors have been enumerated in literature that stimulate companies to stay ahead of competition and to innovate pro-actively. In the event of being surrounded by competitors that are very innovative or in case of business in uncertain industries, feelings of vulnerability are likely to arise. Feelings of vulnerability have made companies decide to collaborate with competitors that have complementary resources (Gnyawali & Park, 2011). On the other end of the psychological factor spectrum are *prestige and pride* which were also argued to stimulate activities focused on enhancing competition and innovation (Bengtsson & Kock, 2000). These latter two psychological factors being prestige and pride relate to what Gnyawali & Park (2009) have termed prospecting strategies. Companies that are following prospecting strategies want to stay ahead of competition instead of being in a position where they have to follow others. Such firms constantly look for opportunities in coopetition to combine resources and capabilities to 1) learn from others, 2) improve bargaining power and 3) increase overall competitive capability (Gnyawali & Park, 2009). This particular combination of resources and capabilities from competitors is argued to be advantageous as these can be used in competition with others (Bengtsson & Kock, 2000). An example of a company that felt vulnerable in the changing industry in which they operated is Sony. Sony had long time been a leader in the TV market, but when the demand for flat-screen TVs rose, Sony was not prepared. As the necessity for change evolved internally because of a lack of knowledge, Sony is an example of a company that experienced endogenous drivers – drivers evolving from within the firm. At the time, Samsung had already invested a lot in LCD TVs and Sony and Samsung decided to collaborate (Gnyawali & Park, 2011). For Sony this was a great opportunity to learn from Samsung, Samsung on the other hand experienced other benefits which will be explored later.

Companies that have succeeded in establishing valuable coopetitive relationships have benefited from access to their partners' broad capabilities. Capabilities, which are viewed as synonymous with resources, 'are stocks of knowledge, skills, financial assets, physical assets, human capital and other tangible and intangible factors' (Mitchell et al., 2002, p. 206). Many of the skills that migrate between companies are not covered in the formal terms of collaboration (Hamel et al., 1989). Therefore, it is very important that as companies enter coopetitive relationships it is determined which knowledge and skills are to be shared and which are off-limits. All people within a company that interact with the other company, the socalled gate keepers who control which information flows occur, should be made aware of these limitations (Hamel et al., 1989). In the previously mentioned example of Sony & Samsung, both parties had unique capabilities that the other party needed (Gnyawali & Park, 2011).

The access to partners' broad capabilities can come in very handy when willing to win new product and technology battles (Hamel et al., 2002). Therefore, another reason why companies can determine to collaborate with competitors is argued to be the *willingness to set industry standards*. It is stated that coopetition is likely when standards are being developed as technological convergence creates the opportunity to set industry standards (Gnyawali & Park, 2009). The need for convergence is especially important for relatively small firms when willing to beat bigger competitors. With the formation of alliances, two small companies called MIPS Computer Systems and Sun Microsystems Inc. were able to compete with big competitors such as IBM and Hewlett-Packard (Gnyawali & Park, 2009). All these firms were competing for a share of the RISC design market and only a couple of designs could exist. Both of the small companies achieved an increasing user base at the expense of the user bases of well-established brands due to the encouragement of other firms to clone its innovations instead of patenting. This was possible because of the existence of network externalities which means that the value of a product increases according to an increase of the user base (Lado et al., 1997). When turning back to the previously mentioned example of Sony and Samsung, Samsung used the collaboration to benefit from Sony's TV making experience, to increase scale and to win the battle for the technological standard as the two companies shared costs related to the investments needed (Gnyawali & Park, 2011).

Finally, routines and resources are imperfectly tradable and this causes the need for collaboration (Mitchell et al., 2002). *Companies often possess underutilized resources from which value can be extracted.* This can be done either by making more efficient use of these resources or by the creation of new resources. Ways to achieve this are consolidating similar resources or combining routines to create new resources. However, it is important that the scale advantages and other advantages outweigh the governance costs that are caused by the formation of collaborations. In this way companies can protect and create resources (Mitchell et al., 2002).

**Table 3 General Endogenous factors** 

Factors	Scholars & Examples	
Feelings of vulnerability	Gnyawali & Park, 2011	
	Sony	
Feelings of prestige/pride	Bengtsson & Kock, 2000	
Access to partner's broad	Mitchell et al., 2002	
capabilities	Sony & Samsung	
Willingness to set industry	Hamel et al., 2002;	
standards/ win new product	Gnyawali & Park, 2009	
and technology battles	MIPS computer systems, Sun	
	Microsystems Inc., Samsung	
Using underutilized	Mitchel et al., 2002	
resources		

The factors described in Section 3.1 have led companies into coopetitive relationships. However, these factors are of a general nature. Drivers specifically related to occurrences in Supply Management or Procurement will be elaborated in Section 3.2. The added value that this particular distinction creates is that companies get an answer to the question: Why are companies coopeting for supply? And especially: When experiencing which drivers? This particular area has not been addressed yet in literature and thus calls for exploration.

### 3.2 Supply-based Coopetition Drivers

#### 3.2.1 Exogenous factors

Gnyawali and Park (2009; 2011) have identified key industrylevel factors that drive coopetition between SMEs operating in high-technology industries, pertaining to shorter product life cycles, convergence of multiple technologies, and increasing R&D and capital expenditures. These factors were found to increase the likelihood of the occurrence of coopetition. However, the two papers focus on technological innovations and caution has to be taken with generalizing their findings. It can be argued that these same factors may also drive the likelihood to coopete in the supply market, however, the supply market also poses other challenges that might be possible to overcome through involvement in coopetitive relationships.

In the context of the supply market, the *increased product complexity with shorter product cycles* has also been introduced as a challenge. These complexities are proposed to be managed

through the implementation of product postponement paradigms and related modular product designs (Hameri & Hintsa, 2009). A benefit of modularity is component economies of scale (Gershenson et al., 1999). Additionally, the introduction of new supply chain services has caused the integration of financial, physical and informational flows leading to further consolidation in the logistics markets (Hameri & Hintsa, 2009).

Another pressure within in the supply market is *the adoption of green operations and at the same time fuel costs are increasing* (Prajogo & Sohal, 2013). Already in 1993, eight competitive sweets producers joined forces in a collaboration named Zoetwaren Distributie Nederland (ZDN). The collaboration's primary aim was to cut transportation costs, however, when implemented, cost reductions were also achieved because of consolidated shipments thereby reducing the number of truckloads and thus also the unloading and handling costs (Cruijssen et al., 2006). Related to the challenge of increasing fuel costs coopetition can be argued to reduce the impact of these heightened costs because of the possibility to consolidate.

Ballou (2006) has identified closely related major challenges and opportunities for Supply Chain Management (SCM). However, SCM is a broader concept than being active in the supply market which is also referred to as purchasing. Purchasing is considered to be a functional area within a company, whereas Supply Chain Management is a concept, "whose primary objective is to integrate and manage the sourcing, flow, and control of materials using a total systems perspective across multiple functions and multiple tiers of suppliers." (Monczka et al., 1998 (as cited in Mentzer et al., 2002)). Some challenges and opportunities within the context of SCM might therefore also be challenges in the context of the functional area that is discussed here. Firstly, coordination and collaboration is argued to become even more important in achieving boundary-spanning advantages. However, to establish these kinds of relationships a certain degree of trust is necessary. Secondly, supply chain members will continue with sharing information (Ballou, 2006). It is argued that companies that will restrain from information sharing will be in a disadvantaged position as they will have access to less knowledge.

Table 4 Supply-Base	l Exogenous factors
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Factors	Scholars & Examples
Increased product	Hameri & Hintsa., 2009
complexity with shorter	
product cycles	
Adoption of green	Prajogo & Sohal, 2013
operations/ Increasing fuel	Zoetwaren Distributie
cost	Nederland
Coordination and	Ballou, 2006
collaboration is argued to	
become even more important	
in achieving boundary-	
spanning advantages	
Supply chain members will	Ballou, 2006
continue with sharing	
information	

#### 3.2.2 Endogenous factors

From a resource perspective firms can have resources and capabilities superior to other firms in the industry. As competition faces similar challenges, resources from competitors are directly relevant (Gnyawali & Park, 2011). An exploration of the already existing literature on drivers found

that, as competitors are conducting similar types of activities in similar positions in the industry value chain, there are plenty of possibilities to collaborate on resource efficiency related issues (Ritala et al., 2014). In the public procurement sector organizations pool purchasing volumes, information and/or resources to not only achieve greater efficiency, but also to achieve negotiation leverage with suppliers. Additionally, it was found that collaborative purchasing reduces waste in the purchasing system (Walker et al., 2013). An example of a relationship in the private sector is The WorldWide Retail Exchange which was founded in 2000 with an initial base of 17 international retailers to simplify and automate supply chain processes with use of an internet-based electronic marketplace (IEMP), nowadays the e-marketplace has over 60 members. The WWRE is mainly used for quick purchases of non-critical items and to supplement long-term agreements (Grieger, 2004). A system such as WWRE is difficult to replicate as it consists of multiple and interlinked connections between various companies thereby improving the competitive position relative to non-members (Grieger, 2004). Son et al. (2006) argue that participation in such e-marketplaces may be influenced by the perceived trustworthiness in the operating environment and potential partners.

Vulnerability has already been introduced as an endogenous driver, however, a specific area in which vulnerability can occur is relevant when considering Supply Management. Two types of vulnerability can be distinguished, being external and internal vulnerability (Gnyawali & Park, 2011). Despite of the fact that external vulnerabilities such as new competition or the introduction of pioneering technologies can pose great threats, especially internal vulnerabilities such as *poor performance and lack of resources* are important to consider in the context of the supply market (Eisenhardt & Schoonhoven, 1996). Purchasing is argued to realize big differences when it comes to performance improvement and the availability of resources.

Table 4 Supply-Based	Endogenous factors
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Factors	Scholars & Examples
Achieve greater efficiency	Gnyawali & Park, 2011
	WWRE
Achieve negotiation leverage	Walker et al, 2013
with suppliers	WWRE
Reduce waste in the	Walker et al., 2013
purchasing system	
Poor performance	Gnyawali & Park, 2009;
_	Eisenhardt & Schoonhoven,
	1996
Lack of resources	Gnyawali & Park, 2009;
	Eisenhardt & Schoonhoven,
	1996

### 4. METHODOLOGY

To verify, link and increase the knowledge on drivers found in literature in the first part of this thesis it has been chosen to conduct case studies. A schematic overview of the methodology is depicted in figure 2. Gnyawali & Park (2009) suggest in their paper on coopetition that case studies are an important means to thoroughly examine factors that are driving coopetition at both the industry and firm level for which the terms exogenous and endogenous have been introduced. Personal qualitative interviews were conducted in two different industries. The interviews were conducted using the same questions but as different answers required different responses some differences can be observed. Questions of the interviews were focused on obtaining information about the competitive setting of the industry, the organization of the supply, the relationships that have been built to improve Supply Management and the benefits and problems that resulted from this.



Figure 2 Schematic Overview of the Methodology

This study examines 'Auto Palace groep' and PHB Deventer. Auto Palace is a car dealer company of multiple car brands and represents these brands in the Northern, Middle and Eastern parts of the Netherlands. An interview was held with the owner and managing director at the office of the interviewee and was held in the Dutch language to ease the conduction of the interview. PHB Deventer is a company in the construction sector having an alliance with other construction companies for the procurement of routine products. The interview was held with a project leader and the contact person of PHB within the purchasing collective, also on location and in the Dutch language. As the context in which respondents are asked questions influences not only the willingness to respond, but might also alter responses, the interview was conducted in the normal setting of the interviewee (Berg & Kolk, 2014). The entire interviews have been recorded with an audio recorder to be able to write a transcript. The transcripts are available upon request. The results of the interview will be compared to the findings in section three, to not only verify statements, but also to add any information that is found in practice, but is not documented in literature yet.

# 5. HORIZONTAL COOPETITION IN PRACTICE

#### 5.1 Case in the Automotive Industry

Auto Palace is a car dealer and service station of various brands mostly established in the Eastern part of the Netherlands with its principal seat located in Zwolle. The company has 11 establishments and is currently having the dealership of Peugeot, Fiat, Fiat Professional, Hyundai, Alfa Romeo, Jeep and finally Mitsubishi which has been added to the portfolio as recently as the 2<sup>nd</sup> of May 2016. In December 2015, Auto Palace held the 21<sup>st</sup> place in the top 45 of dealer holdings in the Netherlands with 4000 new car sales and 3500 occasion sales (Kuijpers, 2015). When considering the amount of all new cars that are sold in the region in which Auto Palace operates, the amount of 4000 new-sold cars translates to a market share of around 12% to 15%.

#### 5.1.1 Competition in the Automotive Industry

Competition in the automotive industry has been described as extremely fierce by the owner of Auto Palace, who already operates in the automotive industry for 25 years. He was able to state that 25 years ago the competition of course would also have been described as fierce, but as companies have grown, and thus grown interests are at stake, the game is being played harder than before. The competition has, therefore, also shifted from competition between nearby colleagues - that were selling only one and the same brand - to competition with the bigger colleagues that are selling more than one brand and conduct similar practices. In 1991 the owner was having around 180 direct competitors, throughout the years this amount has shrunk to around 20 competitors that have all gone through the same changes. The automotive industry has consolidated because 'independent dealerships and small auto groups are being eaten up by larger groups' (Gordon, 2015). The competition for the Peugeot brand has decreased as Auto Palace currently consists of multiple establishments that sell Peugeot thereby moving the competition frontier outwards. However, in turn they encountered fiercer competition from other big car companies also having the dealership of multiple car brands. Nowadays, Auto Palace is more heavily competing with Renault dealers than it was competing with other Peugeot colleagues 25 years ago. Another factor that caused competition to increase is the increased transparency for the consumer. 25 years ago advertisements were placed in the newspapers to advertise a car and for occasions people came to the store and asked for advice without a lot of previously obtained knowledge. Nowadays customers are well informed, they look at the internet, compare prices, compare models and when they come to the store they already have a clear picture of what they want. Sometimes they even come to look at a specific car. However, this transparency and access to knowledge has also increased the amount of possible customers.

#### 5.1.2 The Evolution of Auto Palace

From the opening of its first establishment in 1950 up until now, Auto Palace went through big changes. After a take-over within the family in 1991, Auto Palace grew from having only one Peugeot establishment to having nine Peugeot establishments. This happened as a consequence of changing market dynamics that required companies to grow. However, after the owner observed that the increase in establishments would also not sustain viable considering the prevailing market circumstances, it was decided to expand to other brands. About six years ago the option of creating a multi-brand company was explored and pursued. This decision created the coopetitive relationship that Auto Palace is now involved in. Reasons for the expansion to other brands have been enumerated to be the following. Firstly, the company knew that it would be overhauled by competitors if they would stick to the current course of business and thus took action. Secondly, an expansion within the Peugeot brand was considered an irresponsible action, as it was preferred to spread odds instead of putting all eggs in one basket. Thirdly, there was a need to obtain volume, without volume the company could not obtain low cost prices which in turn leads to higher sale prices thereby deteriorating the competitive position. Additionally, the aims of increasing revenue and expanding the sales region were impossible to achieve with the branding of Peugeot only. Supply-specific drivers and advantages are discussed in the section below.

# 5.1.3 Coopetition: Collaboration, Competition and Findings

Auto Palace is an example of a company that has internal coopetition because competition and collaboration both exist within the boundaries of the company. The collaborative part of the coopetitive relationship concerns the procurement of universal parts across the various brands. Auto Palace sells multiple brands and was aware of the fact *that an increase in scale would result in lower costs as a consequence of bundling volumes.* The aftersales manager is responsible for procurement in the broadest sense. Spare parts are not only bought

specifically for a certain brand, but the volumes of generalizable goods are consolidated to be bought from one supplier to achieve economies of scale. Moreover, this manager also takes care of internal needs such as toilet paper, coffee cups and other necessities which can have a big impact on the costs of these routine products. The purchases of the cars are done per brand by the responsible purchasers of the specific brands. However, as Auto Palace is also selling lots of occasions, volume bundling does deliver procurement benefits in this area. The person responsible for the finances is also achieving benefits in contracting (e.g. telephone, energy). Due to the resulting economic advantages, Auto Palace is able to achieve higher margins, which is very important in the highly competitive automotive industry. Customers will always seek highest value for money and with higher margins Auto Palace is in a better position to offer more competitive prices.

Of course such relationships do not only involve advantages as competition between the various brands also causes some problems to arise. As Auto Palace has chosen to bring competing brands under one roof it has to deal with conflicting interests. Competition is present between the brands that are sold because every separate brand has its own targets to attain. Auto Palace is a volume factory and thus targets need to be achieved, every brand has it's yearly, quarterly or monthly targets and money can only be spent once. When asking about the distribution of the budget across the various brands, the owner mentioned that the most financially favorable option will be chosen. Another area in which competition is present is promotion of the cars. The choice to promote a certain model of a brand is completely independent of what promotions are run by the other brands that Auto Palace sells. If Peugeot's are advertised no direct consequences will be observed for the other brands. Therefore, it can be said that competition is sustained close to the customer because of the differences between the brands, but competition is not enhanced with that specific purpose. To diminish the amount of competition between the brands, thought was given to which brands were added to the portfolio. The brands that are part of the portfolio of course compete with each other, but Auto Palace has been adding only those brands that do not compete too heavily. Citroën has therefore been left aside as this brand is considered to be too similar to the Peugeot brand.

As a result of the coopetitive relationship, Auto Palace improved its relative power over other actors in the industry. For example, as Auto Palace grew, the various car brands got less power regarding imposing data subcontractors. They obtained more choice freedom regarding the DMS system and the data subcontractors to be used. Another area where their bargaining power has increased, is in the negotiations with importers. Their volumes have increased and simultaneously importers have decreased in size and are less powerful compared to times when car dealers did not have the possibility to acquire cars in bigger volumes. Another benefit resulting from the coopetitive relationship is access to an expanded source of knowledge and more employees. If one brand is experiencing an increase in sales or is having a lot of work in the service stations, it is possible to vary with the universal workforce between the establishments. Every establishment has certified mechanics for every brand as this is a necessity, but there are also mechanics that can be employed for the less specific tasks and these can be sent to other establishments when necessary. However, a problem may lie in that mechanics might not be willing to travel somewhat further. Secondly, the owner mentioned that the various brands within the company learn from each other as there is access to more knowledge.

Concluding it can be said, that the reasons why Auto Palace has evolved into a multi-brand company involving coopetitive relationships are: firstly, environmental changes being the necessity to grow as competitors are doing so and the necessity to create volume to survive the fierce competition for supply and dealerships. Firm-specific reasons are among others the willingness to increase revenue and expansion of the sales region. In section 6 an overview is given of the determined drivers.

#### **5.2** Case in the Construction Industry

PHB Deventer is a construction company in the eastern part of the Netherlands located in Deventer. It is specialized in the renovation and restoration of buildings which are explicitly mentioned as two separate domains. PHB Deventer is part of the holding 'Aan de Stegge Verenigde Bedrijven' (ASVB – Aan de Stegge united companies) which originated in 1973 and has evolved into a holding consisting of more than 20 companies from which a couple are located abroad.

#### 5.2.1 The Construction Industry

The construction sector is subject to high competition on price. The prices of projects are highly pressured and tenders are often chosen based on price. Especially in the case of PHB, because they operate a lot in the segment of projects that are distributed based on bidding. Competition is, therefore, extremely fierce. The companies that are part of the purchasing collective can compete for the same projects, however, all companies have their own specializations which diminishes the level of competition between the companies in general. PHB specifically is specialized in the renovation of buildings.

# 5.2.2 *Coopetition: Collaboration, Competition and Findings*

Out of the companies that are part of the ASVB, 8 Dutch companies have formed the ASVB purchase collective. Companies can decide themselves whether or not to be part of the collective which can thus be dependent on every individual management team taking the lead. If companies enter the alliance they can profit from the collaboration. If not, they do not have to dedicate any time, but they will also not benefit from the collaboration any longer. The reason for the alliance has initially been the possibility to achieve economies of scale in terms of bonuses concerning the consolidation of routine products that every company needs. However, more extensive benefits have resulted from the relationships and have been reasons for the extensive collaboration between the various companies. The products that are purchased collectively are routine products that are needed almost daily (construction products such as concrete and sand) and for most of the products, contracts are established on a yearly basis. These contracts are standardized to ensure familiarity within the companies. Strategic products are bought per project and per company as these are too specific to be bought collectively. Apart from the economic benefits that are achieved the alliance also creates an opportunity to discuss problems and exchange information. The interviewee mentioned that the meetings are also used to discuss industry developments and the performance of the companies. Recently there have been changes in the law regarding individual contractors and this has caused a discussion of the implications this has for the companies. The problems that PHB encounters are also relevant for other companies and thus information is shared between the companies to learn from and strengthen each other. Another source of information that is of value for the companies is the network that they can share. If one company becomes aware of a project that does not lie within their field of expertise, the alliance between the ASVB companies makes it possible to alert each other aware of opportunities in the market. Accordingly, PHB Deventer has executed projects in name of other ASVB companies and in collaboration with other ASVB companies. The interviewee gave one example of a bidding that went wrong. PHB Deventer and another ASVB company submitted a tender for a project, but it was found that the signature setter did not have the right mandate to sign the bid as the boss of the holding was required to sign it. No such a mistake was made again.

Competition between the companies within the holding results from the vision of ASVB. All companies that are part of the ASVB holding are themselves responsible for the results of their company and are highly autonomous. Additionally, they all have their own brand logo and identity and are often not widely known to be part of the holding. This ensures competition between the companies as every company needs to be self-sufficient. Further competition is present between the companies when the companies bid on the same projects. To ensure that no bias is present in the process, prices are kept secret for other parties, also within the holding. Additionally, when collaborating in the execution of a project, agreements have to be made beforehand. As these agreements are made between competitive companies, these agreements ensure a proper execution of the project which makes collaboration possible without conflicting interests. Such projects require the construction of a partnership (In Dutch: VOF) in which the parties' roles are written down. For example, who is the contact person? And who takes care of the personnel? The collaborative execution of projects also occurs when references are asked that cannot be fulfilled by one company. Other companies are then asked to combine references to be admissible for the bidding.

The purchasing collective operates as follows. All companies involved in the beginning have appointed an independent party to make sure that no dependency or agreements underlie decisions. Four times a year representatives of the various companies and the independent party join each other in a meeting. The individual companies can express the wish to purchase a certain product collectively after which the independent party has the duty to prepare the work. Requests for quotations are placed with various suppliers and an overview in for example Excel highlights the commonalities and differences between the offers. Subsequently, the best offer is proposed to the workgroup of that specific product and they decide on whether or not the offered product or contract meets their requirements. The independent party is never responsible for the final decision; the representatives of the companies are.

# 6. COMPARISON OF LITERATURE AND CASES

The comparison of the literature and the cases results in similarities and additional information related to the drivers of coopetitive relationships. An overview can be found in Table 6. As only two companies have been interviewed it becomes evident that not all information from literature is directly relevant in relation to the two cases. However, these drivers might have been drivers for other companies to collaborate with competitors for Supply Management and should therefore not be left out of the analysis and can be found in Table 7. First some similarities will be highlighted to confirm current knowledge.

The threat of going out of business if they were to go on with current practices caused Auto Palace to expand to other brands. All car dealers in the industry faced the similar problem of requiring size to stay in business. Therefore, this problem can be seen as the similar threat that all car dealers in the industry experienced and caused them to consolidate. The owner of Auto Palace mentioned that as car dealers have grown and expanded to multiple brands, competition has become fiercer. This is in congruence with the statement that group versus group competition resulting from coopetition is a more intensified form of competition than the competition between individual companies. Secondly, the increase in volume resulted in a better negotiation position for Auto Palace. They have not only benefitted from increased bargaining power with importers of cars, but also from improved bargaining power with car brands as with size, their interest increases. Thirdly, feelings of vulnerability have been mentioned that drove the creation of coopetitive dynamics. Auto Palace became aware of the fact that only selling Peugeot could place them into a vulnerable position if Peugeot car sales were to drop. This caused them to look further than one brand and thus underlies the expansion of Auto Palace into other brands.

Some similarities with literature were found in both cases. The first similarity is found in the achieved scale advantages because this is the case for both of the interviewed companies. The consolidation of volumes has provided Auto Palace with benefits, not only in the procurement of spare parts and routine products, but also in the procurement of occasions. However, Auto Palace was also able to achieve other scale advantages that have not been recognized in literature yet, these will be elaborated on in the next paragraph. Within the construction sector PHB Deventer has achieved efficiency benefits because of bigger volumes that have been linked to bonuses. Additionally, PHB Deventer has reduced waste in the purchasing system by standardizing contracts for all participating companies. Moreover, both firms view the coopetitive relationship also as a source to learn from each other and share information. Auto Palace is having access to the knowledge and practices of multiple car brands from which they can derive best practices. PHB Deventer is in turn able to discuss problems and developments in the market with its fellow colleagues, thereby strengthening their capacities in areas outside of the initial reason why the companies collaborate, the procurement collective.

Structural conditions were mentioned to explain not only competition but also collaboration, however, no specific structural conditions have been identified that caused car dealers to collaborate. Auto Palace was forced to grow because without the required size Auto Palace would be in a very weak position regarding suppliers and car brands. The shift in the automotive industry from individual car dealers to holdings of car dealers drove Auto Palace into expansion to other brands. This has simultaneously been stimulated by competitors who were starting to create holdings which caused Auto Palace to follow their actions. Endogenous reasons that have not been mentioned in literature were the willingness to expand the sales region and the willingness to increase revenue which could both be achieved by coopeting for supply.

More extensive benefits that Auto Palace was able to achieve because of its size have not been discussed in literature yet. Auto Palace is due to the coopetitive relationship able to optimally allocate the workforce that is non-specific to a brand, if it is necessary. However, this might be difficult to achieve by other companies involved in coopetition relationships as all establishments of Auto Palace are in essence part of one company. Nevertheless, the optimal allocation of the workforce might be another reason why companies can enter coopetitive relationships even when not belonging to a single company. Coordination and collaboration have been argued to become

Table 6 Overview of Drivers found in Literature and in the Ca	ses
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Literature	Practice
Similarities	
Facing a similar threat (exogenous)	Car companies in the automotive industry faced a need to create volume to stay in business. Therefore, consolidation in the automotive industry became a trend.
Achieve negotiation leverage with suppliers (endogenous)	With an increase in volumes, power increases and this was seen to be beneficial as power over importers and car brands creates the opportunity to achieve more (economic) benefits.
Feelings of vulnerability (endogenous)	Auto Palace only sold Peugeot, but as growth was required it didn't want to keep betting on one horse because bigger interests were at stake and thus it felt more vulnerable. By selling other brands these feelings of vulnerability diminished.
Achieve greater efficiency (endogenous)	Scale advantages have been a driver for both of the companies. Consolidation of purchase volumes results not only in volume bonuses, but also in less administration and thus higher efficiency resulting in lower related costs.
Reduce waste in the purchasing system (endogenous)	The standardization of contracts for the purchase of routine products makes all other forms redundant and thus time is saved (in the case of PHB resulting advantage instead of driver)
Access to partner's broad capabilities (endogenous)	The information obtained from the various car brands that are sold results in an enlarged source of knowledge. Selling various car brands results thus in learning from each other's practices.
Supply chain members will continue with sharing information (exogenous)	The purchasing collective of PHB creates an opportunity to discuss problems and exchange information outside the normal scope of the collective. Discussing changes and opportunities results in reciprocal learning.

Extensions to current knowledge	
Changing structural conditions that increases dependency between companies	'Independent dealerships and small auto groups are eaten up by larger groups' (Gordon, 2015). In the automotive industry it was necessary to grow to stay in business as small dealerships were not able to achieve low cost prices which placed them into a disadvantaged position.
	As mentioned above consolidation in the automotive industry became a trend and the case study saw that this consolidation was taking place and thus decided to take the same steps. Multiple car dealers were experiencing this phenomenon and thus dependency between competitors increased resulting in collaboration. The subsequent consolidations can thus be seen as a reactive response to competitors' actions.
	The case study in the automotive industry showed that there was an internal wish to increase revenue and enlarge the sales region which has driven them to expand geographically and in its number of car brands and thus create coopetitive relationships.
Coordination and collaboration is argued to become even more important in achieving boundary-spanning advantages	Having problems with the workforce or human resources. In case of shortage of employees or too few expertise on one location, coopetition can be a way to resolve these problems by optimally utilizing the employee pool → in response to the optimal allocation of the workforce within the case study in the automotive industry. Willingness to make use of each other's (supply) network. If companies are interesting because of their impressive customer- or supply-base, it might be interesting to collaborate with a competitor to gain access to these networks. It became evident from the case studies that the various competing companies were willing to share their network if one of the construction companies had more experience with the kind of project.

Table 7 Overview of Drivers that have not been mentioned in the cases

Literature	
Feelings of prestige/pride	Willingness to set industry standards/ win new product and
	technology battles
Poor performance	Using underutilized resources
Lack of resources	Increased product complexity with shorter product cycles
Adoption of green operations/ Increasing fuel cost	

even more important in achieving boundary-spanning advantages and this is a perfect example of such a practice. In the case of Auto Palace this benefit has resulted from coopetition, however, the corresponding driver that is added to the table is experiencing problems with the workforce or human resources (e.g. shortages or too few specialized people on certain location). Coopetitive relationships can be a part of the solution for these kinds of problems if executed in a similar way as Auto Palace. An extension of the current literature is also present in the case of PHB Deventer as the various companies share their network when projects do not fit their business. Thus, where no competition is present between the companies because parts of their businesses do not compete, the companies help each other to obtain projects. The possibility to share the network is experienced as a benefit, however, it is argued that sharing networks can be beneficial if companies can complement for example each other's supply portfolios. Therefore, this driver is described as the willingness to share (supply) networks. When comparing the two cases and the available information one can conclude that Auto Palace has entered coopetitive relationships to manage supply mostly due to exogenous reasons as without such relationships it would not have been able to sustain a competitive position in the automotive industry. Oppositely, PHB Deventer mostly had internally developed reasons why coopetitive relationships would be beneficial to its practices in the supply market. Whereas both alliances have resulted in the combination of similar resources and thereby indicating a scale alliance, PHB Deventer also combines complementary resources when it is willing to execute projects for which not all references are present inhouse, which is a feature of a link alliance (Mitchell et al., 2002). Moreover, PHB Deventer is collaborating in more areas than Supply Management alone and is argued to have more faceted collaboration than Auto Palace. However, this does not imply that collaboration is higher in the case of PHB Deventer, only that it is more widely spread throughout multiple areas of the company. Both cases show that an initial collaboration between competing companies for supply purposes can also result in coopetitive practices in other areas of the business.

### 7. DISCUSSION

Supply-based coopetition is a distinct type of coopetition as companies are bounded by contracts and resources often lie at the basis of the competitive advantage of a company. This paper provides an overview of the drivers of coopetition. In addition to specific supply-based drivers, this paper also contributes to the knowledge on coopetition drivers in general. The research question of this paper introduced at the beginning was: *What are the factors that could drive coopetition in the supply market*? This question has been raised as it was found that coopetitive relationships created for supply purposes had been neglected in literature whereas in practice it is of frequent occurrence. Coopetition in this area thus required special attention.

Drivers have been categorized as either exogenous or endogenous factors. The difference between exogenous and endogenous forces is that the former have an external cause or origin, whereas the latter have an internal origin. This difference evidences that companies can decide to coopete due to external changes or because of internal reasons (or responses to external changes). The added value of this distinction is that companies will know whether multiple companies are experiencing the same issue or if they have to initiate a solution by itself. Exogenous forces exist on the industry level which can drive companies towards each other as multiple companies have similar experiences. Endogenous forces on the other hand can be experienced by one firm and to resolve any problems evolving, this particular firm will have to initiate any following actions all by itself. Other companies might not experience the same factors although being in the same industry.

This paper aimed to identify the drivers that lead to coopetitive relationships. In addition to already existing literature this paper contributes an overview of drivers of coopetition with an additional specific focus on supply-based coopetition. The specific drivers that have resulted from the case studies that were not previously mentioned in literature pertain to the following. Structural exogenous conditions have been determined in the automotive industry specifically. Singular companies were increasingly dependent on each other as market changes required them to grow. Moreover, consolidating competition caused other car dealers to follow their lead. Other drivers are classified as endogenous. First, coopetition can be driven by an internal need or wish for growth either in revenue or region. Secondly, it was found that problems with the workforce – the human resources - can be resolved by collaboration with competitors. Finally, an extension to current literature is present in the willingness to make use of each other's network. Especially the latter two findings are important when considering a coopetitive relationship for supply purposes as these factors relate to the use of resources.

Managerially, this study provides managers with an overview of drivers that companies might experience which can be tackled by the use of coopetitive strategies. If a company experiences one or more of the drivers mentioned, coopetitive relationships are more likely to develop and have also proven to work in other cases. The cases studied could improve their coopetitive practices even further by considering if the advantages mentioned have or have not been attained yet. For example, it can be very interesting in the construction sector to share costs when investing in innovative materials.

# 8. LIMITATIONS AND FURTHER RESEARCH

The findings of this paper should be viewed in light of some limitations that call for caution in drawing conclusions and limit the generalizability. First, the findings are based on two case studies from only two different industries. Therefore, further research could expand the field of study to an increased number of industries to expand the scope of the findings. Moreover, information was only obtained from one representative within each of the companies. Validation of the data has thus not been possible within the cases. As Auto Palace is a company that has internal coopetitive relationships it is assumed that this information is more reflective of the practices than the information that is obtained from PHB Deventer. PHB Deventer is only one of the partners within the collaboration and there has not been an opportunity to validate the obtained information with any other party. Especially, it would have been valuable to obtain information from someone of the procurement collective. In addition, it would be interesting to obtain information from the suppliers of these consolidated buyers, as this study only focuses on the perspective of the buyer. It is assumed that the perspective of the supplier will provide an insight in the advantages that suppliers have obtained from getting bigger customers.

If there had been more time, more companies would have been asked to participate in the collection of data. Therefore, further research into coopetition should try to obtain more interviews to get a broader overview of more parties involved. Secondly, regarding the choice of the companies, it is important that further research will also involve case studies of companies that are not part of a holding. Within holdings, companies also have conflicting interests as confirmed by the case studies, however, it is assumed that companies not being part of a holding have more intense levels of competition. The evaluation of this fiercer kind of competition will probably have other results as the higher level of competition will prevent companies from collaborating too extensively.

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### **10. REFERENCES**

- Ballou, R. H. (2006). The evolution and future of logistics and supply chain management. Produção Prod., 16(3), 1-12. doi:10.1590/s0103-65132006000300002
- Barney, J. B. (2012). Purchasing, Supply Chain Management and Sustained Competitive Advantage: The Relevance of Resource-based Theory. Journal of Supply Chain Management, 48(2), 3-6.
- Bengtsson, M., & Kock, S. (2000). "Coopetition" in Business Networks—to Cooperate and Compete Simultaneously. Industrial Marketing Management, 29(5), 411-426.
- Bengtsson, M., & Kock, S. (2014). Coopetition—Quo vadis? Past accomplishments and future challenges. Industrial Marketing Management, 43(2), 180-188.
- Berg, S. V., & Kolk, H. V. (2014). *Data collection and scale development*. London: SAGE Publications.
- Brandenburger, A. M., & Nalebuff, B. J. (1995). The Right Game: Use Game Theory to Shape Strategy [Review of Co-Opetition]. Harvard Business Review, 1995(July-August), 57-71.
- Browning, L. D., Beyer, J. M., & Shetler, J. C. (1995). Building Cooperation in a Competitive Industry: Sematech and the Semiconductor Industry. Academy of Management Journal, 38(1), 113-151.
- Cruijssen, F., W. Dullaert and H. Fleuren (2006). *Horizontal* cooperation in transportation and logistics: A literature review. Tilburg University Working Paper.
- Dyer, J. H., & Singh, H. (1998). *The Relational View: Cooperative Strategy and Sources of Interorganizational Competitive Advantage.* The Academy of Management Review, 23(4), 660-679.
- Dyer, J. H., & Nobeoka, K. (2000). Creating and managing a high-performance knowledge-sharing network: The Toyota case. Strategic Management Journal, 21(3), 345-367.
- Eisenhardt, K. M., & Schoonhoven, C. B. (1996). Resourcebased View of Strategic Alliance Formation: Strategic and Social Effects in Entrepreneurial Firms. Organization Science, 7(2), 136-150.
- Gershenson, J. K., Prasad, G. J., & Allamneni, S. (1999). Modular product design: a life-cycle view, Journal of Integrated Design and Process Science, 3, 3–26
- Gnyawali, D. R., & Park, B. (2009). Co-opetition and Technological Innovation in Small and Medium-Sized Enterprises: A Multilevel Conceptual Model. Journal of Small Business Management, 47(3), 308-330.
- Gnyawali, D. R., & Park, B. (2011). Co-opetition between giants: Collaboration with competitors for technological innovation. Research Policy, 40(5), 650-663.
- Gordon, K. (2015). Industry consolidation, and why it's happening. Retrieved June 02, 2016, from http://www.autoremarketing.com/featuredcontributor/industry-consolidation-and-why-itshappening
- Grieger, M. (2004). An empirical study of business processes

across Internet-based electronic marketplaces. Business Process Management Journal, 10(1), 80-100.

- Grindley, P., Mowery, D. C., & Silverman, B. (1994). SEMATECH and Collaborative Research: Lessons in the Design of High-Technology Consortia. Journal of Policy Analysis and Management, 13(4), 723-758.
- Hamel, G., Y. Doz and C. K. Prahalad (1989). 'Collaborate with your competitors-and win', Harvard Business Review, January-February, 133-139.
- Hameri, A. P. and Hintsa, J. (2009). Assessing the drivers of change for cross-border supply chains. International Journal of Physical Distribution and Logistics Management, 39(9), 741-61.
- Hunt, S. D., & Davis, D. F. (2008). Grounding Supply Chain Management In Resource-Advantage Theory. The Journal of Supply Chain Management, 44(1), 10-21.
- Irwin, D., & Klenow, P. (1994). High Tech R&D Subsidies: Estimating the Effects Sematech. Working Paper, 4974th, 1-36. doi:10.3386/w4974
- Kuijpers, B. (2015, December 11). Dealerholding top 45: De grootsten willen nog groter worden. Automotive Management. 20(12), 1-64. Retrieved from https://issuu.com/mobilitymedia/docs/aum12-2015/47
- Kusters, R. J. G. and Versendaal, J. (2013). Horizontal Collaborative e-Purchasing for Hospitals: IT for Addressing Collaborative Purchasing Impediments. Journal of International Technology and Information Management: 22(1), Article 4.
- Lado, A. A., Boyd, N. G., & Hanlon, S. C. (1997). Competition, Cooperation, and the Search for Economic Rents: A Syncretic Model. The Academy of Management Review, 22(1), 110-141.
- Mason, J. C. (1993) Strategic Alliances: Partnering for Success. Management Review, 82, 16–22.
- Mentzer, J.T., DeWitt, W., Keebler, J.S., Min, S., Nix, N.W., Smith, C.D. and Zacharia, Z.G. (2002). *Defining* supply chain management. Journal of Business Logistics, 22(2), 1-25.
- Merriam-Webster Online. *Endogenous* [Def. 2]. (2015). In Merriam-Webster. Retrieved May 29, 2016, from http://www.merriam-webster.com/dictionary/citation.
- Mitchell, W., Dussauge, P., & Garrette, B. (2002). Alliances With Competitors: How to Combine and Protect Key Resources? Creativity and Innovation Management, 11(3), 203-223.
- Oesterbeck, S. (2015) Coopetition and cooperative purchasing in the context of service-oriented SME's. University of Twente.
- Padula, G., & Dagnino, G. (2007). Untangling the Rise of Coopetition: The Intrusion of Competition in a Cooperative Game Structure. International Studies of Management and Organization, 37(2), 32-52.
- Pathak, S., Wu, Z., & Johnston, D. (2014). Toward a structural view of co-opetition in supply networks. Journal of Operations Management, 32(5), 254-267.
- Peteraf, M. A. (1993). *The cornerstones of competitive advantage: A resource-based view*. Strategic Management Journal, 14(3), 179-191.

- Porter, M. E. (1980). Competitive strategy: Techniques for analyzing industries and competitors. New York: The Free Press.
- Prajogo, D., & Sohal, A. (2013). Supply chain professionals: A study of competencies, use of technologies, and future challenges. International Journal of Operations & Production Management, 33(11/12), 1532-1554.
- Pulles, N. J. (2014). *The competition for supplier resources*. University of Twente.
- Ritala, P., Golnam, A., & Wegmann, A. (2014). Coopetitionbased business models: The case of Amazon.com. Industrial Marketing Management, 43(2), 236-249.
- Ritala, P., & Hurmelinna-Laukkanen, P. (2009). What's in it for me? Creating and appropriating value in innovationrelated coopetition. Technovation, 29(12), 819-828.
- Rusko, R. (2012). Perspectives on value creation and coopetition. Problems and Perspectives in Management, 10(2), 60-72.

- Schotanus, F., & Telgen, J. (2007). Developing a typology of organisational forms of cooperative purchasing. Journal of Purchasing and Supply Management, 13(1), 53-68.
- Son, J., Tu, I., and Benbasat, I. (2006). A Descriptive Content Analysis of Trust-Building Measures in B2B Electronic Marketplaces. Communications of the Association for Information Systems. 18(6). Available at: http://aisel.aisnet.org/cais/vol18/iss1/6
- Song, D., & Lee, E. (2012). Coopetitive networks, knowledge acquisition and maritime logistics value. International Journal of Logistics Research and Applications, 15(1), 15-35.
- Walker, H., Schotanus, F., Bakker, E., & Harland, C. (2013). Collaborative Procurement: A Relational View of Buyer-Buyer Relationships. Public Administration Review Public Admin Rev, 73(4), 588-598.
- Walley, K. (2007). Coopetition: An Introduction to the Subject and an Agenda for Research. International Studies of Management and Organization, 37(2), 11-31.