

“Perspectives on value creation and coopetition”

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Perspectives on value creation and coopetition

Abstract

Coopetition, emphasizing joint value creation and cooperation between competing firms, is still a relatively new concept in the field of management studies. Value creation is strongly associated with win proposals. Thereby in seminal studies of coopetition, win proposals, such as win-win and also win-lose logics, have been already presented (see, e.g. Brandenburger & Nalebuff, 1996). This conceptual paper introduces and re-evaluates different types of collaborative and cooperative activities by exploiting and developing value creation typologies. The introduced approach participate coopetition discussions and, for its part, reorganizes coopetition dimensions of management by also using supply chain framework. Furthermore, this article provides interesting subjects for further research.

Keywords: coopetition, win proposals, collaboration, dyadic coopetition, multifaceted coopetition, supply chain framework.

JEL Classification: M10, M20.

Introduction

In the contemporary discussions of value creation, two perspectives are usual in the management literature and among managerial practitioners: win-win thinking (see, e.g. Sahay, 2003; Bititci et al., 2003) and collaboration between competing firms, that is discussion about win proposals and coopetition. The root of the word coopetition comes from words “*coop-eration*” and “*competition*” (see, e.g. Luo et al., 2006). In other words, coopetition (or co-opetition) means cooperation between competing firms (see, e.g. Bengtsson & Kock, 2000; Luo, 2004a; Rijamampianina & Carmichael, 2005; Kylänen & Rusko, 2011 and Rusko, 2011) and win proposals also consider competitive and cooperative activities of the firms (Hamel et al., 1989; Kotzab and Teller, 2003) often emphasizing the potential benefits of collaboration. In order to reorganize for one’s part competition, cooperation and especially coopetition discussions, this study introduces a framework which combines also value creation logics (especially win proposals) and supply chain perspectives with each other.

In this study coopetition and win proposal discussions are considered in the context of supply chain perspective. There are dozens of different definitions for supply chain management (SCM) in the management literature (Stock and Boyer, 2010). For example, following three concepts resembles each other: supply chain, product chain and value chain. The product chain in particular has many similarities with the supply chain. However, supply chain concept is possible to distinguish from the product chain concept (Rusko, 2010, p. 357). The main difference between these concepts is that whereas the product chain consists of products, the supply chain consists of activities. The similarity between these two concepts is that in both cases the value added rises according to the listed order: the sold product

is more valuable than the purchased product (supply chain); the final products are more valuable than e.g. raw materials or semi-products (products chain).

In the case of the value and supply chain there are similarities as well as differences. The value chain concept is often associated with Porter’s book “*Competitive Advantage: Creating and Sustaining Superior Performance*” (Porter, 1985). He divides the value chain framework into two categories: primary activities and support activities. Primary activities include inbound logistics, operations (production), outbound logistics, marketing and sales, and services. Primary activities are almost the same as in the supply chain. Porter’s value chain also takes into account support activities like administrative infrastructure management, human resource management, technology (R&D), and procurement. The supply chain framework also includes most of these activities. This study emphasises that cooperation and coopetition have different forms and nuances in different parts of the supply chain and these have also effects on the realization of coopetition phenomena.

This study is organized as follows. Section 1 describes research design in which competition and cooperation have been considered in the context of supply chain framework. After that different perspectives of coopetition have been introduced by using value creation logics and win proposals. Section 3 shows the constructed perspective, which is based on value creation logics (win proposals) and supply chain framework. Finally there are concluding remarks including managerial implications and subjects for further studies.

1. Research design

The basis of this study is on the conceptual analysis of coopetition. There are three phases of the analysis: literature review, which consists of competition, cooperation, supply chain framework, value creation (with win proposals) and finally different forms of coopetition. The second phase is based on introduced literature review which is culminating a

framework combining the competition-cooperation dimension, supply chain framework and value creation logics into one table (Table 1). In addition to theoretical conceptual analysis, the introduced frame-

work has been exploited in the context of managerial implications by three short cases based on the contents of collaboration announcements. Figure 1 depicts the research design of the study.

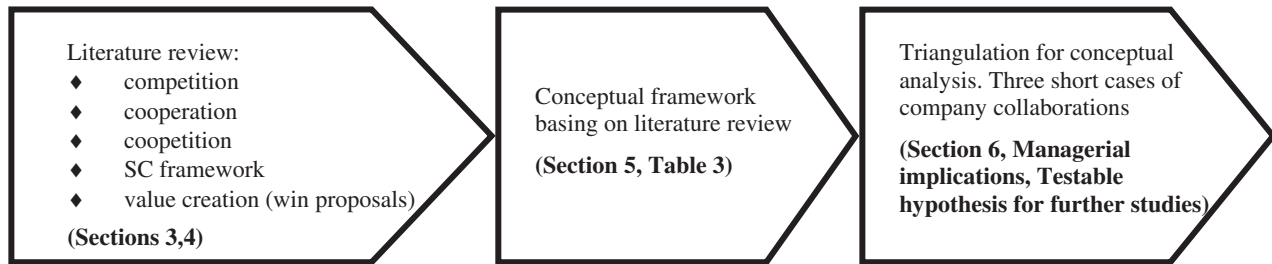


Fig. 1. Research design of the study

Because this study emphasizes conceptual analysis and main contribution is in reorganizing, for its part, different dimensions of coopetition, this research is mainly theoretical conceptual study. However, in the context of managerial implications there are also three short cases which main contribution is only show the usefulness of the constructed framework. Because of this slight feature of triangulation, this study is possible to consider also (multi)case study (cf. Yin 2002; Ericsson & Kovalainen, 2008).

2. Competition, cooperation and supply chain framework

2.1. Competition and supply chain framework.

Competition has generated a lot of research interest in past decades, especially in the field of management studies. The concept of competition is built on the assumption, reflecting the ideas of Adam Smith (1776), according to which individuals act to maximize their own benefit. To quote Padula and Dagnino (2007, p. 35) "the main implication of the competitive paradigm is that the inter-firm interdependencies define a 'zero-sum game structure'". This means that the profit of one actor increases the loss of another actor. According to Lydeka and Adomavicius (2007, p. 80) companies gain competitive advantage in two ways: (a) by achieving an advantageous position in an industry; or (b) by developing and using core competences to offer better

products and services. Hence, from the value creation point of view, the competition represents a *win-lose structure* (see e.g. Brandenburger and Nalebuff, 1996; Kotzab and Teller, 2003).

Because of competition legislation, competition is a useful and allowed strategy for all parts of the supply chain, for upstream, midstream and downstream activities (see also Table 1 in section 3). One of the main purposes of competition legislation is to promote the competitiveness of the market. There is no restriction for competition, for example, in raw material, production, R&D or in service activities. However, since many forms of cooperation activities are prohibited in the downstream part of the supply chain, it promotes downstream competition (Act on Competition Restrictions 27.5.1992/480).

The supply chain framework has also been directly linked with the form and level of competition or rivalry for example in the forest industry (Lamberg and Ojala, 2007; see also Figure 2). According to these studies, upstream rivalry happens when the similarity between the firms in the product market is low and high in the resource market. These conditions provide constant competitive interaction in the raw material market. In the downstream rivalry, it is the opposite; similarity in the product market is high and in the resource market low, providing constant competitive interaction in the product market.

High	A. Downstream rivalry: Constant competitive interaction in the product market	B. Intensive rivalry: Constant competitive interaction between the firms
Commonality in product market	C. High independency: Marginal competitive interaction between the firms	D. Upstream rivalry: Constant competitive interaction in the raw material market
Low		
	Low	High
	Similarity in the resource market	

Source: Chen (1996), Lamberg and Ojala (2007).

Fig. 2. Dimensions of competitive rivalry

Even when a firm follows a competitive strategy it must simultaneously have a close relationship with several stakeholders, e.g. customers, the public sector and legislators, complementors, owners, and several other actors. Hence, it is almost impossible to follow a competitive strategy perfectly. Competitive strategy also involves always cooperative features. This is well illustrated in Porter's studies (1980; 1985; 1998), where he introduces frameworks for the competitive advantage of firms or nations. According to Porter, competitive advantage is based not only on fierce competition, but also on multidimensional cooperation.

Whereas Porter's framework emphasises the external environment, supporters of the Resource Based View (RBV) focus on internal resources (e.g. Barney, 2001). According to them, sustainable competitive advantage is based on resources that have become valuable, rare, immobile and non-substitutable. What is noteworthy, however, is the connection between the RBV and the supply chain framework. When considered from the supply chain perspective, the RBV can be criticised because it completely ignores some features of the downstream parts of the supply chain such as the product market. Since Porter's (1985) framework takes into account all parts of the supply chain – factor markets, R&D, product markets and marketing – it can be considered wider than the RBV.

2.2. Cooperation and supply chain framework.

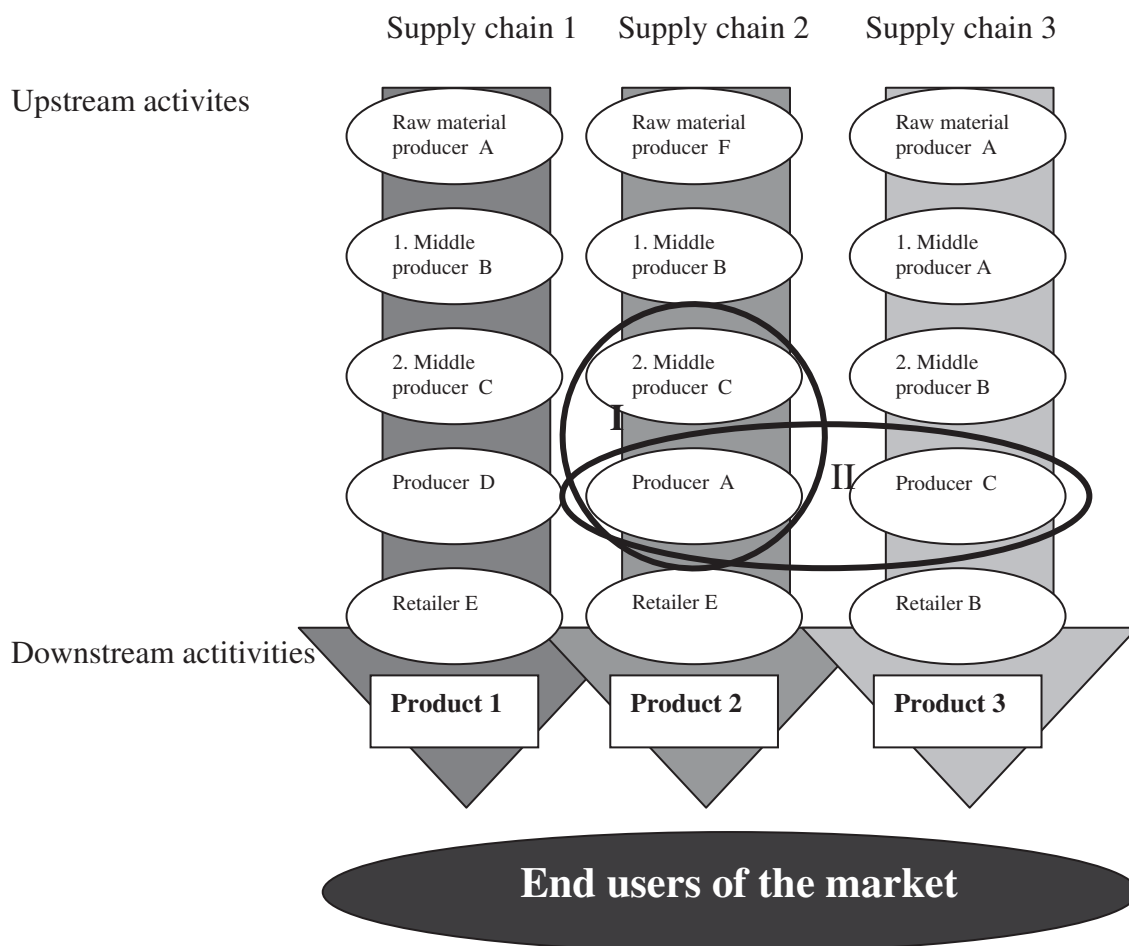
Compared with competition, cooperation is a more recent research subject in the field of management studies. Since competition legislation forbids many forms of downstream cooperation, such as price agreements or agreements over markets or market shares, competition – according to legislation – is a more suitable strategy for firms. Hence, competition is associated with downstream parts of the supply chain and cooperation with upstream or midstream parts of the supply chain (e.g. Bengtsson and Kock, 2000; Walley, 2007). Also, mergers and acquisitions which establish or confirm a national or international monopoly are forbidden. This has not, however, prevented the formation of long-term cartels or collusions in international or national markets.

In addition to the illegal cartels studied mainly in economics, other cooperation strategies such as networks, clusters, strategic alliances, supply chain management (SCM), value co-creation, co-evolu-

tion and coopetition with value nets have gradually aroused interest on the part of management researchers. Current discussion about cooperation follows a *win-win* framework (e.g. Barnes et al., 2007; Hagberg-Andersson, 2006; see also Table 1). According to Jorde and Teece (1990, p. 85), a strategic alliance is an inter-firm agreement “which can be defined as a bilateral or multilateral relationship characterized by commitment of two or more partner firms to a common goal”. This definition already includes the idea of common value creation between firms. Also, Doz and Hamel (1998) emphasize the value creation characteristics of strategic alliances in their book *Alliance Advantage*. They call for a broader understanding of value creation and, therefore, use the concept of value capturing in the context of strategic alliances. However, they admit that value capture and value creation are difficult to distinguish in practice.

Value creation is also connected with cooperation in many other perspectives adopted in the field of management studies such as on co-evolution, co-creation or the role of the prosumer. In the case of co-evolution (e.g. Lamberg and Laurila, 2005; Zettinig and Benson-Rea, 2008), the focus is on long-term beneficial cooperation and evolution between firms and sometimes between firms and the public sector. On the other hand, studies discussing service co-creation or value co-creation (e.g. Ordanini and Pasini, 2008; Vargo et al., 2008) emphasize the value creation between supplier and purchaser (customer). Overall, in co-creation customers participate in one way or another in the production process. In other words, customers play the role of “prosumer”, that is they simultaneously act as both producers and consumers (e.g. Toffler, 1980).

In the case of vertically oriented cooperation, or vertical integration, cooperation between the supplier and the purchaser (customer) is realized along the same supply chain, whereas in the case of horizontally-oriented cooperation, or horizontal integration, competing firms producing the same product cooperate with each other in different supply chains. The third alternative is diagonally-oriented cooperation, or diagonal integration, in which firms that produce different products in different supply chains cooperate with each other (Figure 3).



Source: Rusko (2008).

Fig. 3. Vertical integration (1) and horizontal integration (2) and diagonal integration (3)

All in all, this section showed that supply chain framework provides useful tool to consider business activities also in the context of dimension between competition and cooperation. In addition to that, also the perspectives of value creation and win proposals will complete this analysis which is based on supply chain framework and dimension of competition-cooperation.

3. Win proposals and different forms of competition

3.1. About contemporary win proposal literature.

Actually win proposals are extremely popular concept in the everyday business and in the field of management studies. For example win-win – strategy or win-win thinking is very known phrase among managerial, educational and scientific discussions (see, e.g. Chan et al., 2003; Chan et al., 2004). Recently, also win-win-win strategy has found favor with sustainable development (Elkington, 1994; Laird, 2008) and also with competition discussions (Kotzab & Teller, 2003; Walley, 2007). However, the actual win proposal discussions and frameworks have met with little interest. Only some studies have focused or at least

mentioned on this concept (see, e.g. Hamel et al., 1989; Kotzab and Teller, 2003; Rusko, 2011). Because of the practical usefulness of win proposals in the branches of management and marketing, there might be a need to develop and take them in use in the scientific business literature more generally.

Although win proposals are nearly neglected in the discussions of management studies, in the literature of social sciences this theme is more popular. The perspectives of win proposals are associated, for instance, with following themes: sustainable development (Brodhag, 1999), public sector projects (Dworksy & Allee, 1998), labor market (Bronfenbrenner, 2005) and history (Ashton, 2001; Petersen et al., 2004).

There are also some papers in the field of management studies which consider win proposals. According to Kotzab and Teller (2003, p. 271) already Hamel and his colleagues (1989) considered in their "...article as a vivid form of competition and a 'win proposal'...". It is noteworthy that in their article the focal point is in collaboration with competitors, that is, in cooperation (Hamel et al., 1989; see, also

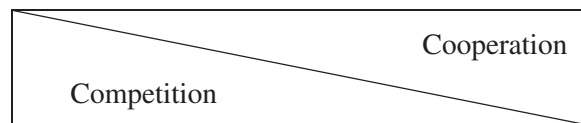
Kotzab & Teller, 2003). In the same context Kotzab and Teller (2003, 271) noticed that “[T]he traditional win-lose or friend-foe paradigms have been becoming obsolete in collaborations, which to some extent seems to be the result of the rising complexity and dynamics, especially in fast moving consumer goods markets”.

An alternative concept for “win proposal” might be “win-win proposal” which is used also in some studies of management especially in the context of public sector. This is called also super-optimum solutions (see, e.g. Nagel, 1997; Nagel & Eckart, 2001). However, this study uses “win proposal” – concept because it is a shorter expression and “win-win proposal” might restrict somehow too much the perspective especially towards the popular everyday win-win thinking, which is only one possible type of win proposals among several other alternatives.

3.2. Different forms of coopetition. Coopetition is a relatively new concept that emphasizes simultaneous competition and cooperation between firms. Both cooperation and competition are paradigms. In the sense of Kuhn’s (1962) interpretation about paradigm, coopetition is not such a paradigm like cooperation or competition, but it is possibly complementary paradigm (Bengtsson et al., 2010). Coopetition strategy has not achieved the status of paradigm. According to Smith and Vogel (2010, p. 278), the first documented use of the coopetition concept was in 1913 when the Sealshipt Oyster System coined “co-opetition” to describe the idea of cooperative competition, or cooperating with competitors. In 1937 the historian Rockwell D. Hunt used the concept of “co-opetition” in the Los Angeles Times. In the 1980s Raymond Noorda reintroduced this concept to characterize Novell’s business strategy. By 1996, the concept had become familiar to a wider readership through a study presented by Brandenburger and Nalebuff (1996). Since the mid-1990s, many articles have appeared dealing with coopetition and its several nuances such as *dyadic coopetition* (Bengtsson and Kock, 2000; 2003) and *multifaceted coopetition* (e.g. Dowling et al., 1996; Luo, 2004b).

In the contemporary turbulent business environment it is impossible to follow a purely competitive or cooperative strategy. Hence, one may argue that competition, cooperation or coopetition are not separate. In the case of cooperation, the firm must also take competition viewpoints into account (Padula and Dagnino, 2007). On the other hand, in the case of competition, firms act in several networks (consisting of e.g. customers, providers, public sector and other stakeholders). Hence, competition also

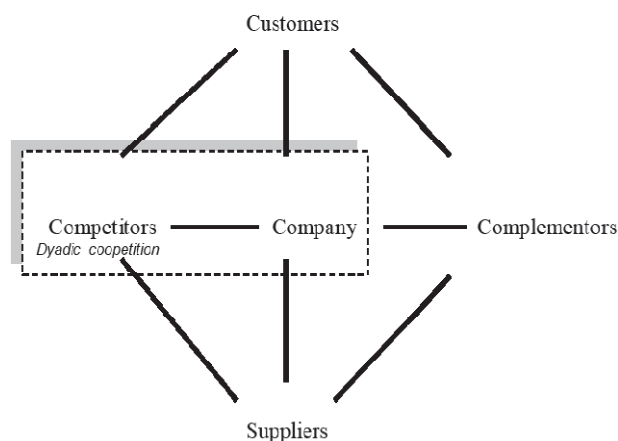
includes an element of cooperation. Overall, *nearly all firms, in one way or another, engage simultaneously in competition and cooperation, i.e. in coopetition* (see Figure 4).



Source: See e.g. Eikebrokk and Olsen (2005).

Fig. 4. The competition-cooperation dimension

This article focuses especially on the coopetition concept and its connections with the supply chain framework. As already noted above, cooperative activities are typically placed in the upstream parts of the supply chain and competitive activities in the downstream parts of the supply chain. Implicitly, this would mean that coopetition focused on midstream activities such as production of semi-finished or finished products, storage, and R&D activities (see Figure 3). However, this is not the case, since coopetition focuses on the entire supply chain.



Source: See e.g. Brandenburger and Nalebuff (1996).

Fig. 5. Multifaceted coopetition (value net) and dyadic coopetition

In the literature of coopetition a division can be made¹ between dyadic and multifaceted coopetition. Coopetition is dyadic if there are only two firms involved in the relationship (e.g. Bengtsson and Kock, 2000) and multifaceted if there are other participants such as customers, public organizations, suppliers or other stakeholders involved in the coopetition network or value net (see e.g. Brandenburger and Nalebuff, 1996; Kylänen and Rusko, 2011; Luo, 2004a, 2004b; Walley, 2007). In addition to these two, some studies have also focused on studying intra-firm coopetition (Luo et al., 2006). Since this article emphasizes coopetition between firms

¹ Or the division of coopetition between competing and non-competing organizations (Ritala, 2010).

and also other appropriate value net entities, only dyadic and multifaceted coopetition research is discussed below (Figure 5).

According to Bengtsson et al. (2010), there are two main approaches to coopetition: coopetition as a context and coopetition as a process. The approach “coopetition as a context” emphasizes the importance of groups and organizations in coopetition in the same way as Brandenburger and Nalebuff (1996) (see, also Figure 5), whereas in the coopetition as a process approach, coopetition is described as developing through the mutual interaction between two or more entities (ibid, 199; Figure 4). Also this study divides coopetition approaches into two categories: dyadic (resembling mainly coopetition as a process views) and multifaceted (resembling coopetition as a context perspective).

3.2.1. Dyadic coopetition. Bengtsson and Kock (2000; 2003) define coopetition narrowly as a dyadic relationship, implicitly assuming that competition occurs in downstream (or output) activities and cooperation in upstream (or input) activities. They emphasise *tension* in the dyadic coopetition, i.e. cooperation between two (or more) competing firms (Bengtsson and Kock, 2003; cf. Jensen & Nylén, 2006). Even though dyadic coopetition might create value for the two competing firms, it will not necessarily create value for other stakeholders such as consumers or the public sector (society). Thus, dyadic coopetition mainly follows a *win-win-lose* structure (see Table 2). Among the most recent studies of coopetition, Ritala (2010) focuses not only on value creation between competing firms but also on value appropriation. Following the logics of win proposals, his viewpoint has a win-win-lose or even a win-win/lose-lose structure where the benefits of collaborating competitors are also threatened. It could therefore be argued that his approach is closer to competition than cooperation.

What is noteworthy in Ritala's study (ibid.) is that it draws on the resource-based view (RBV), which is generally associated with the competition paradigm and especially with sustainable competitive advantage (Barney, 2001). In contrast to competition, Ritala (2010) emphasizes the cooperative elements of RBV, which connects it directly to research on coopetition. He does this by using the concept of “coopetitive advantage”. It is also possible to regard cartels as one form of coopetition (Walley, 2007). Since in dyadic coopetition win proposals follow a *win-win-lose* structure (Table 2), this means in the case of cartels that, for example, customers lose benefits.

3.2.2. Multifaceted coopetition. There is a vast literature describing multifaceted characteristics of coopetition in the field of management studies (e.g. Dowling et al., 1996; Luo, 2004a; 2004b; 2005; 2007; Mariani, 2007; Walley 2007; Wilhelm, 2011). Multifaceted coopetition is based on networks or value net introduced initially by Brandenburger and Nalebuff (1996; see also Figure 2). For example, Dowling and his colleagues (1996) considered “interorganizational multifaceted relationship under coopetition”, where a buyer, supplier, and/or partner is also a competitor. In other words, multifaceted coopetition consists of vertical and horizontal relationships between firms “where cooperation and competition merge together, and the actors' roles, processes and objectives become more complex” (Eikebrokk and Olsen, 2005, p. 2). Rijamampianina and Carmichael (2005) introduce in the context of alliances coopetition framework, which is based on cultures and strategic imperatives. According to them, in order to achieve robust cooperation of coopetition relationship, strategic imperative have to be similar, or at least complementary (ibid.). Their perspectives about coopetition are multidimensional, and therefore, mainly resembling multifaceted coopetition. Multifaceted coopetition has the same features as contextual coopetition, that is, environmental interaction based on the “sets of competitive and cooperative relationships and interdependences in the environment influence the behavior of individuals, groups or organizations, which suggest that these entities are engaged in coopetition” (Bengtsson et al., 2010). In this study multifaceted coopetition is defined as *a contextual coopetition network comprising of two (or more) cooperative firms in which also at least one or more actor, such as own or foreign government, customers or other stakeholders of the firms are involved in*. It is contextual: because of the context, two or more competing firms are cooperating with each in a way which is valuable also for the other participants (stakeholders) of the value net. In another context these firms are competing with each other without any remarkable cooperative elements.

Luo (2004a; 2004b; 2005; 2007) has examined the coopetition of large multinational companies (MNC) in which the local public sector is also involved, i.e. multidimensional coopetition. Also, Mariani (2007) has studied emerging coopetition strategies between firms (in his case opera houses) and the public sector in the context of project development work. Gnyawali and colleagues (2006) and Peng and Bourne (2009) consider an interesting special case, namely *coopetition networks*. In the latter study there are two (or more) competing networks that cooperate with each other. Furthermore, networks

in the context of coopetition have been also considered implicitly by Bengtsson and Kock (2000), although their main focus was in dyadic coopetition. Another form of multifaceted coopetition is the situation in which consumers also gain from coopetition. Walley (2007) calls this environment a win-win-win game because at least three entities (two or more firms and customers) gain from this arrangement. Furthermore, Dowling and colleagues (1996) have introduced a multidimensional (or multifaceted) coopetition framework which connects the competition-cooperation dimension with a vertical-horizontal dimension. They found examples of multifaceted coopetition especially in the field of information (communication) technology and in firms such as IBM, Intel and Apple. Their coopetition framework is associated with a supply chain perspective in which the IBM-Intel connection describes a multifaceted vertical relationship along the supply chain and the Apple-IBM relationship a typical horizontal relationship between competing supply chains. Also Wilhelm (2011) considers different directions of coopetition associated with supply chain: vertical, horizontal and networked in her case study of automobiles. Her focus is on the supply-side coopetition and e.g. supplier associations.

The research of Lado and his colleagues (1997) is one of the foundational pieces of work in discussions about coopetition. They consider simultaneous competition and cooperation in a “syncretic model of rent-seeking strategic behavior” with two levels: low or high. A high competitive orientation is combined with a simultaneous high cooperative orientation in their understanding of coopetition. Instead of perceiving the syncretic model behavior of rent-seeking in terms of a zero-sum inter-firm relation, they enlarge the perspective towards a multidimensional (or multifaceted) framework

including public (social) responsibility. This perspective has connections with a multifaceted win-win-win strategy.

One important feature, which the coopetition perspective adds or emphasizes compared with the discussions above, is the value creation or value net perspective, which is also typical of a dyadic, but especially of a multifaceted coopetition framework (see e.g. Brandenburger and Nalebuff, 1996). It is noteworthy that Walley (2007) refers to this kind of multidimensional coopetition as a *win-win-win* case.

4. Framework

Above we have noticed different value creation logics for competition, cooperation and especially for different branches of coopetition perspectives. These value creation logics became concentrated in the forms of win proposals. This section summarizes these features of value creation in the context of supply chain framework.

Table 1 consists of two dimensions: competition-cooperation and supply chain framework. In addition, along the competition-cooperation dimension the value creation logics culminates in value proposals in which, according the findings of section 2, cooperation follows a win-win structure, multifaceted coopetition a win-win-win structure, dyadic coopetition a win-win-lose structure and competition a win-lose structure (Table 1). Taking into the account the customary perspective in which competition is associated with downstream parts of the supply chain and cooperation with upstream or midstream parts of the supply chain, typical downstream activities between competing firms are following mainly win-lose logics, midstream activities win-win-lose or win-win-win structure and upstream activities win-win structure (Table 1).

Table 1. Connections between competition, coopetition and cooperation and the supply chain framework

Part of the supply chain		Cooperation win-win	Coopetition (multifaceted) win-win-win	Coopetition (dyadic) win-win-(lose)	Competition win-lose
	Upstream	Vertical, diagonal (or networked) cooperation in factor markets, e.g. in purchase or in production of raw material.	Horizontal and networked cooperation in factor markets, e.g. in purchase or in production of raw material.	Horizontal cooperation in factor markets, e.g. in purchase or in production of raw material.	Competition in factor markets
	Midstream	Vertical diagonal (or networked) cooperation in the production of semi-finished products, finished products, or in R&D.	Horizontal and networked cooperation in the production of semi-finished products, finished products, or in R&D.	Horizontal cooperation in production of semi-finished products, finished products, or in R&D.	Competition in the midstream parts of the supply chain
	Downstream	Vertical, diagonal (or networked) cooperation in marketing, sales and services.	Horizontal and networked cooperation in marketing, sales and services. <i>Illegal agreements are not multifaceted coopetition.</i>	Horizontal cooperation in marketing, sales and services. <i>Agreements upon prices or market areas are illegal: cartel or collusion</i>	Competition in marketing and other downstream parts of the supply chain.

Note: The most typical cases are in grey boxes.

Cooperation (win-win value creation logics) is based on vertical integration, diagonal integration or networks without horizontal integration. If horizontal cooperation is also involved in this relationship, it is an example of multifaceted coopetition with win-win-win value creation logics. If there is a horizontal integration between competing firms without any other participants from the value net, then the relationship is following dyadic coopetition with a win-win (-lose) proposal. In pure competition there is a zero-sum game without a cooperative element and win-lose value creation logics are followed. To take another example, e.g. the study of Ritala (2010), which emphasizes value appropriation, can be placed in the category of competition-based coopetition that mainly follows win-win-lose logics.

Conclusions

The main contribution of the study. The contribution of this study is related to developing and reshaping for its part competition, cooperation and especially coopetition perspectives combining value creation logics (win proposals) and supply chain perspectives with them (see Table 1). This study and introduced framework combines two alternative coopetition perspectives: coopetition as a context and coopetition as a process (Bengtsson et al., 2010) emphasizing the latter, however. In addition to the existing win proposals for competition (win-lose logics), cooperation (win-win logics) and multifaceted coopetition (win-win-win logics), this study discusses new alternatives to win proposals such as value creation logics for dyadic coopetition with a win-win(-lose) structure and competition-based coopetition in the case of value appropriation between competing firms (see also Ritala, 2010). Following the logics of win proposals, coopetition for opportunistic value appropriation has a win-win-lose or even a win-win/lose-lose structure, where the benefits of collaborating competitors are also threatened. Thus, the new forms of win proposals suggested in this article contribute to research discussion concerning the development of value creation in the context of coopetition.

Managerial implications with the case examples. This study provides several managerial implications. These implications redound upon the supply chain management. This study emphasizes the importance of the context in the business relationships. In one context other firm is a competitor and in another context this firm is a participant and co-operator in the multifaceted value net or in the dyadic coopetition. Because these coopetitive situations are contextual, their structure and par-

ticipants are case sensitive. These coopetitive connections might be vertical, horizontal or diagonal – or in the case of multifaceted coopetition all these directions are possible at the same time. Therefore, there is a need to map different coopetition situations for the strategic decision-making of the CEOs and management. This conceptual paper provides a tool for this need. Introduced framework in Table 1 is suitable tool to analyze different forms collaboration, such as strategic alliances, between companies. Furthermore, this study provides a renew linguistic tool to express different combinations of competition, cooperation and coopetition in business. This tool is based on value creation logics and win proposals. Actually, this study is launching user friendly expressions for different forms of cooperation and coopetition narrowing the conceptual gap between management research and managerial practices in the context of coopetition discussions.

In Table 2, which follows the structure of Table 1, the content is based on the gathered texts from some collaboration announcements in the beginning of 2012 and placed these cases in the introduced framework of Table 1.

“...PepsiCo will have exclusive rights to manufacture and distribute a portfolio of cranberry- and blueberry-based beverages through its Latin America Beverages division. The companies (PepsiCo and Ocean Spray) will share marketing responsibilities for the products and intend to collaborate on product innovation...” (PepsiCo, 2012).

This collaboration is based on vertical integration between companies. Ocean Spray is typically raw material producer and PepsiCo has intentions to maintain the whole supply chains. However, in this case collaboration covers vertically all three types of supply chain stages. Announcement do not emphasize another stakeholders of business environment (ibid.). Thus, basing on the media text, this collaboration follows mainly vertical win-win structure.

“Two leaders in blood pressure management, SunTech Medical Inc., a leader in noninvasive blood pressure products and technologies, and AtCor Medical (asx:ACG), the developer and marketer of the SphygmoCor(R) system, which noninvasively measures central blood pressures and arterial stiffness, announced today that the companies have formed a strategic alliance aimed at improving blood pressure measurement and overall cardiovascular health assessment and management. ...The alliance will bring together SunTech Medical’s expertise in motion-tolerant and other application specific blood pressure measurement technologies

and AtCor Medical's market-leading technology for the noninvasive measurement of central aortic blood pressure. Together, the companies will develop and deliver new blood pressure monitoring products and solutions to benefit patient diagnosis, hypertension management and the global research community... The announcement of this important strategic alliance builds on the agreement announced in July 2011, whereby AtCor Medical is the worldwide exclusive distributor of the SunTech Oscar 2(TM) twenty-four-hour blood pressure monitor to the pharmaceutical clinical trials market" (MarketWatch, 2012).

The collaboration between SunTech and AtCor is based on research and development collaboration between two competing firms. Although there are also vertical features, these firms are competing because they are providing the different products to the same market (blood pressure technologies). Therefore, this collaboration is mainly based on midstream coopetition, which is rather dyadic than multifaceted according to textual material of announcement. However, announcement does not mention anything about e.g. improved "competitive advantage", but nor another participants of alliance either.

Table 2. Three cases of business collaboration placed into framework introduced in Table 1

Part of the supply chain		Cooperation win-win	Coopetition (multifaceted) win-win-win	Coopetition (dyadic) win-win-(lose)	Competition win-lose
	Upstream	PepsiCo & Ocean Spray ^a			
	Midstream	PepsiCo & Ocean Spray ^a	RCD and InfoTech ^a	SunTech and AtCor ^a	
	Downstream	PepsiCo & Ocean Spray ^a	(RCD and InfoTech) ^a	(SunTech and AtCor) ^a	

Note: ^aThree cases of business collaboration.

"Reed Construction Data (RCD), a leading provider of construction information, and InfoTech International, a construction-focused technology company, today announced a strategic alliance to deliver the construction industry's first, interactive business intelligence and analytics application backed by a dynamic database of construction project information...The new, fully-integrated solution leverages large sets of information from Reed Construction Data's project database and packages it in a visual and intuitive format, which gives customers instant visibility into the market using live project information, as opposed to static data sets or statistical samples...This new offering gives building product manufacturers the ability to spontaneously build various types of reports relating to market size, market penetration, product demand, and competitive intelligence – reports that typically require extensive research and time to create..." (Reed Construction data, 2012).

This collaboration between RCD and InfoTech is based on two firms which are providing data for construction business. Therefore, they are competing firms, which now start to cooperate, that is cooperative with each other. Furthermore, they emphasize, at least in their official announcement, customer-orientation in this strategic alliance. Thus, this collaboration has, according to the announcement, multifaceted perspective, which is placed especially in midstream activities having reflection also into downstream parts of supply chain. In other words, RCD and InfoTech partnership is based on multifaceted coopetition with win-win-win structure because of new aimed customer-oriented solutions.

Already these three present examples of company collaboration show that coopetition discussions provide practical tools and background for managerial

analysis and strategy planning. The focal point of this study was in organizing generally, for its part, coopetition discussions. In addition, study also provides elements for further studies, for instance, practical company-level and industry-level case studies and portfolio analysis in the forms of introduced new managerial tool (Tables 1 and 2).

Testable hypothesis for further research. This study is a conceptual paper. However, in the conceptual analysis several interesting themes for further research has been risen. Supply chain framework is a significant platform for coopetition analysis. One important question is the direction of the coopetition activities. Whether the coopetition is mainly based on vertical, horizontal or diagonal interactions between firms? Another question is depending on the context, when there are mainly multifaceted coopetition and when dyadic coopetition? Which are the main variables affecting the features of coopetition generally and in dyadic and multifaceted coopetition especially? When these variables are based on the changes in the business environment and when they are industry-specific or firm-specific?

According to the analysis above and Tables 1 and 2 we get one interesting testable hypothesis, which is linked with supply chain framework. The grey areas in these tables show the assumed most typical ways to organize cooperation along the supply chain. Because of competition legislation forbids many forms of downstream cooperation (price agreements or agreements over markets or market shares), competition – according to legislation – is a more suitable strategy for downstream activities, and cooperation for upstream and coopetition with midstream parts of the supply chain (e.g. Bengtsson and Kock, 2000; Walley, 2007).

Hypothesis 1: For downstream parts of supply chain competition is the most popular strategy, coopetition for midstream parts and cooperation for upstream parts of supply chain.

For the branch of Finnish forest industry this hypothesis has been already tested: cooperation between competing firms (that is coopetition) was popular especially in midstream and downstream parts of the supply chain. However, in the early 20th century there was also upstream coopetition. Actually the center of gravity moved during the century from upstream parts to downstream parts in the Finnish forest industry (Rusko, 2011). There is need to test this hypothesis more widely in another industries and contexts, however.

The basic definition for coopetition is that it is “cooperation between competing firms” (see, e.g. Walley, 2007; Kylänen and Rusko, 2011). This definition reflects the fact that there is initially a horizontal (competitive) relationship between these firms and they start to co-operate in another activities, such as R&D.

Hypothesis 2: The coopetition strategy starts more likely between competing firms, that is to say, between firms which are horizontally related with each other, than between vertically or diagonally related firms.

Vertically related firms actually cooperate with each other. Are there competitive elements in their relationship? Wilhelm (2011) studies interesting case from automobiles in Japan, in which supply chain controller (Toyota) arranges meetings for supplier association. In this supplier association competing tier one suppliers meet each other with their common customer. In this case initiator is vertically integrated with the members of association. Actually, Padula and Dagnino (2007) considers coopetition from another direction: there is “the intrusion of competition in a cooperative game structure”. However, this hypothesis needs a careful empirical consideration.

Nearly all of the studies of coopetition consider production market coopetition. This raises a question whether the coopetition is also possible in factor markets.

Hypothesis 3: Coopetition is typical strategy for product markets but in factor markets or among consumers there are not significant coopetition.

Walley (2007) has already considered, on the general level, customer coopetition. Furthermore, Rusko (2010) has studied evidences about factor market coopetition in the Finnish forest industry in the roundwood and labor market. Wilhelm (2011) focused her qualitative study on supply-side networks in automobiles. Also Wu and colleagues (2011) emphasize supplier side in their study of buyer-supplier-

supplier triad, whereas Li and colleagues (2011) studies coopetition between manufacturer and distributors and their entrepreneurial orientation. However, these are only preliminary initiatives to study the characteristics of coopetition outside of the production market (or outside of R&D activities).

This study links the win proposals with competition, cooperation and dyadic and multifaceted coopetition perspectives. According to this paper, dyadic coopetition has a win-win structure or even win-win-lose structure and the multifaceted coopetition is following win-win-win structure. The real benefits or losses might be interesting to measure in the different types and contexts of coopetition.

Hypothesis 4: Multifaceted coopetition has a win-win-win structure. In other words, in business there might be countless cooperation situations between competitors in which customers, public sector and all relevant participants of value net (stakeholders) have incremented value.

Although Brandenburger and Nalebuff (1996) call multidimensional coopetition game as a “value net”, they find several problems and questions for the cooperative firm. Even the cartels (sales associations) might have many societal benefits at least if they are directed to abroad. This was the case in the Finnish forest industry during a century: the national government was one of the initiators of the cartel and it got benefits via the ownership of forest industry company and tax incomes. The losers in this case were abroad in the forms of higher customer prices (Rusko, 2011). Thus, the whole coopetition system in this sector had both the features of cartels (or dyadic coopetition) and multifaceted coopetition because of the value increment of (national) public sector and citizens. As a result, the average forest industry wages rose faster than in the other industries and the real Gross Domestic Product in forest industry rose remarkably during a century (Rusko, 2010; 2011). Furthermore, in the study of Mariani (2007), both the firms (in that case opera houses) and government have incremented their value. This was also the case in China among the coopetition between Nokia and Motorola and local governments (Luo, 2004a; 2004b). However, there is still the wide need for careful quantitative econometric analysis about the benefits of multifaceted coopetition.

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References

1. Act on Competition Restrictions 27.5.1992/480.
2. Ashton, S.R. (2001). Burma, Britain, and the Commonwealth, 1946-1956, *The Journal of Imperial and Commonwealth History*, 29 (1), pp. 65-91.
3. Barnes, B.R., Naudé, P. and Michell, P. (2007). Perceptual Gaps and Similarities in Buyer-Seller Dyadic Relationships, *Industrial Marketing Management*, 36 (5), pp. 662-675.
4. Barney, J.B. (2001). Is the Resource-Based Theory a Useful Perspective for Strategic Management Research? Yes, *Academy of Management Review*, 26 (1), pp. 41-56.
5. Bengtsson, M. and Kock, S. (2000). "Coopetition" in business networks – to cooperate and compete simultaneously, *Industrial Marketing Management*, 29 (5), pp. 411-426.
6. Bengtsson, M. and Kock, S. (2003). Tension in co-opetition, *Development in Marketing Science*, Vol. 26, Harlan E. Spotts, Ed. Academy of Marketing Science, Western New England College, pp. 38-42.
7. Bengtsson, M., Eriksson, J. & Wincent, J. (2010). "Co-opetition dynamics – an outline for further inquiry", *Competitiveness Review: An International Business Journal Incorporating Journal of Global Competitiveness*, 20 (2), pp. 194-214.
8. Bititci, U.S., Martinez, V., Alboresa P. and Parung, J. (2004). Creating and managing value in collaborative networks, *International Journal of Physical Distribution & Logistics Management*, 34 (3/4), pp. 251-268.
9. Brandenburger, A.M. and Nalebuff, B.J. (1996). *Co-opetition*, New York: Doubleday Currency.
10. Brodhag, C. (1999). From rationality to governance: the decision process of sustainable development, *International Journal of Sustainable Development*, 2 (3), pp. 388-396.
11. Bronfenbrenner, K. (2005). What Is Labor's True Purpose? *The Implications of SEIU's Unite to Win Proposals for Organizing New Labor Forum*, 14 (2), pp. 19-26.
12. Chan, A.P.C., Chan, D.W.M. and Ho, K.S.K. (2003). Partnering in Construction: Critical Study of Problems for Implementation, *Journal of Management in Engineering*, 19 (3), pp. 126-136.
13. Chan, A.P.C., Chan, D.W.M., Chiang, Y.H., Tang, B.S, Chan, E.H.W. and Ho, K.S.H. (2004). Exploring Critical Success Factors for Partnering in Construction Projects, *Journal of Construction Engineering and Management*, 130 (2), pp. 188-198.
14. Chen, M.J. (1996). Competitive Analysis and Interfirm Rivalry: Toward a Theoretical Integration, *Academy of Management Review*, 21 (1), pp. 100-134.
15. Dowling, M.J., Roering, W., Carlin, B. and Wisnieski, J. (1996). Multifaceted Relationships Under Coopetition Description and Theory, *Journal of Management Inquiry*, 5 (2), pp. 155-167.
16. Doz, Y.L. and Hamel G. (1998). *Alliance Advantage. The Art of Creating Value through Partnering*, Harvard Business School Press.
17. Dworksy, L.B. and Allee, D.J. (1998). The Western Water Policy Review Advisory Commission: An Opportunity Not To Be Lost, *Water Resources Update*, Issue 111, Water Policies for the Future, Spring 1998.
18. Eikebrokk, T.R., and Olsen D.H. (2005). Coopetition and e-Business Success in SMEs: An Empirical Investigation of European SMEs. *Proceedings of the 38th Hawaii International Conference on System Sciences – 2005*, <http://csdl2.computer.org/comp/proceedings/hicss/2005/2268/07/22680162a.pdf> (read 27.05.2011).
19. Elkington, J. (1994). Towards the Sustainable Corporation: Win-Win-Win Business Strategies for Sustainable Development, *California Management Review*, Winter, pp. 90-100.
20. Eriksson, P. and Kovalainen, A. (2008). *Qualitative Methods in Business Research*, Sage Publications Ltd (United Kingdom).
21. Gnyawali, D., He, J. and Madhavan, R. (2006). Impact of Co-Opetition on Firm Competitive Behavior: An Empirical Examination, *Journal of Management*, 32 (4), pp. 507-530.
22. Hagberg-Andersson, A. (2006). Does Adaptation Pay off? *Industrial Marketing Management*, 35 (2), pp. 202-209.
23. Hamel, G., Doz, Y. and Prahalad, C.K. (1989). Collaborate with your Competitors and Win, *Harvard Business Review*, 67 (1), pp. 133-139.
24. Jensen, T. & Nylén, U. (2006). Striving for Spontaneity – Bureaucracy Strikes Back, *Problems and Perspectives in Management*, 4 (2), pp. 144-158.
25. Jorde, T. and Teece, D. (1990). Innovation and Cooperation: Implications for Competition and Antitrust", *Journal of Economic Perspectives*, 4, pp. 75-96.
26. Kotzab, H. and Teller, C. (2003). Value-adding Partnerships and Co-opetition Models in the Grocery Industry, *International Journal of Physical Distribution and Logistics Management*, 33 (3), pp. 268-281.
27. Kuhn, T.S. (1962). *The Structure of Scientific Revolutions*, University of Chicago Press, Chicago, IL.
28. Kylänen, M. and Rusko, R. (2011). Unintentional Coopetition in the Service Industries: The Case of Pyhä-Luosto Tourism Destination in the Finnish Lapland, *European Management Journal*, 29 (3), pp. 193-205.
29. Lado A., Boyd N.G. and Hanlon, S.C. (1997). Competition, Cooperation, and the Search for Economic Rents: a Syncretic Model, *Academy of Management Review*, 22 (1), pp. 110-141.
30. Laird, D.A. (2008). The Charcoal Vision: A Win-Win-Win Scenario for Simultaneously Producing Bioenergy, Permanently Sequestering Carbon, while Improving Soil and Water Quality, *Agronomy Journal*, 100 (1), pp. 178-181.

31. Lamberg, J.-A., and Laurila, J. (2005). Materializing the Societal Effect: Organizational Forms and Changing Patterns of Dominance in the Paper Industry, *Organization Studies*, 26 (12), pp. 809-1830.
32. Lamberg, J.-A., and Ojala, J. (2007). The Evolution of Competitive Strategies in Global Forestry Industries: Introduction. In: Lamberg, J.-A., Näsi J., Ojala, J., and Sajasalo, P. (eds.), *The Evolution of Competitive Strategies in Global Forestry Industries*, Springer, Dordrecht, NL.
33. Li, Y., Liu, Y., and Liu, H. (2011). Co-opetition, distributor's entrepreneurial orientation and manufacturer's knowledge acquisition: Evidence from China, *Journal of Operations Management*, 29, pp. 128-142.
34. Luo, X., Slotegraaf, R. and Pan, X. (2006). Cross-Functional "Coopetition": The Simultaneous Role of Cooperation and Competition Within Firms, *Journal of Marketing*, 70, pp. 67-80.
35. Luo, Y. (2004a). *Coopetition in International Business*, Copenhagen Business School Press.
36. Luo, Y. (2004b). A Coopetition Perspective of MNC-host Government Relations, *Journal of International Management*, 10, pp. 431-451.
37. Luo, Y. (2005). Toward Coopetition within a Multinational Firm: A Perspective from Foreign Subsidiaries, *Journal of World Business*, 40, pp. 71-90.
38. Luo, Y. (2007). A Coopetition Perspective of Global Competition, *Journal of World Business*, 42 (2), pp. 129-144.
39. Lydeka, Z. and Benas Adomavičius, B. (2007). Cooperation among the Competitors in International Cargo Transportation Sector: Key Factors to Success, *Engineering Economics*, 1 (51), pp. 80-90.
40. Mariani, M. (2007). Coopetition as an Emergent Strategy, *International Studies of Management and Organization*, 37 (2), pp. 97-126.
41. MarketWatch (2012). *SunTech Medical and AtCor Medical Announce Strategic Alliance to Collaborate on New Blood Pressure and Cardiovascular Assessment and Management Solutions*, <http://www.marketwatch.com/story/suntech-medical-and-atcor-medical-announce-strategic-alliance-to-collaborate-on-new-blood-pressure-and-cardiovascular-assessment-and-management-solutions-2012-01-23>.
42. Stuart S. Nagel, S.S. (1997). *Super-optimum solutions and win-win policy: basic concepts and principles*, Greenwood Publishing Group.
43. Nagel, S.S. & Eckart, S. (2001). *Handbook of Win-Win Policy Analysis: Basic Concepts of Win-Win Analysis*, Nova Publishers.
44. Ordanini, A. and Pasini, P. (2008). Service Co-production and Value-Creation: The Case for a Service-Oriented Architecture (SOA), *European Management Journal*, 26 (5), pp. 289-297.
45. Padula, G. and Dagnino, G. (2007). Untangling the Rise of Coopetition, *International Studies of Management and Organization*, 37 (2), pp. 32-52.
46. Peng, T.-J., Bourne, A. & Pen, M. (2009). The Coexistence of Competition and Cooperation between Networks: Implications from Two Taiwanese Healthcare Networks, *British Journal of Management*, 20 (3), pp. 377-400.
47. PepsiCo (2012). *PepsiCo and Ocean Spray Announce Strategic Alliance in Latin America*, <http://www.pepsico.com/PressRelease/PepsiCo-and-Ocean-Spray-Announce-Strategic-Alliance-in-Latin-America01172012.html>.
48. Petersen, K.K., John A. Vasquez, J.A. & Wang, Y. (2004). Multiparty Disputes and the Probability of War, 1816-1992, *Conflict Management and Peace Science*, 21 (2), pp. 85-100.
49. Porter, M.E. (1980). *Competitive Strategy: Techniques for Analyzing Industries and Competitors*, New York, Free Press.
50. Porter, M.E. (1985). *Competitive Advantage: Creating and Sustaining Superior Performance*, New York, Free Press.
51. Porter, M.E. (1990). *The Competitive Advantage of Nations*, New York: Free Press.
52. Reed Construction Data (2012). *Announcing the Industry's First Dynamic Business Intelligence Application for Product Manufacturers*, <http://www.reedconstructiondata.com/corporate/press-releases/2012/01/announcing-the-industrys-first-dynamic-business-intelligence-application-fo/>.
53. Rijamampianina, R. & Carmichael, T. (2005). A Framework fo Effective Cross-cultural Co-opetition between Organisations, *Problems and Perspectives in Management*, 4, pp. 92-103.
54. Ritala, P. (2010). *Coopetitive advantage – How firms create and appropriate value by collaborating with their competitors*. Doctoral thesis, Lappeenranta teknillinen yliopisto, Kauppateollinen tiedekunta / Lappeenranta University of Technology, School of Business.
55. Rusko, R. (2008). Unintentional Coopetition and Supply Chain Management, In Kujala, J. and Iskanius, P. (eds.) *Proceeding of the 13th International Conference on Productivity and Quality Research, ICPQR2008*, Oulu, June 25-27, pp. 642-653.
56. Rusko, R. (2010). Upstream Coopetition in the Finnish Forest Industry – the Case of the Labour and Roundwood Markets, *International Journal of Business Environment*, 3 (3), pp. 349-368.
57. Rusko, R. (2011). Exploring the Concept of Coopetition: A Typology for the Strategic Moves of the Finnish Forest Industry, *Industrial Marketing Management*, 40 (2), pp. 311-320.
58. Sahay, B.S. (2003). Supply chain collaboration: the key to value creation, *Work Study*, 52 (2), pp. 76-83.
59. Smith, A. (1776). *The Wealth of Nations*, London.
60. Smith, P.C and Vogel, P.E. (2010). A Team of Rivals: Collaboration between U.S. Postal Service and UPS, in Crew, M.A. and Kleindorfer, P.R. (eds.) *Heightening Competition in the Postal and Delivery Sector*, Edward Elgar Publishing Inc.
61. Stock, J. and Boyer, S. (2009). Developing a consensus definition of supply chain management: a qualitative study, *International Journal of Physical Distribution & Logistics Management*, 39 (8), pp. 690-711.

62. Tellis, W. (1997). Introduction to Case Study, *The Qualitative Report*, 3 (2), July.
63. Toffler, A. (1980). *The Third Wave*, Batman Books.
64. Walley, K. (2007). Coopetition. An Introduction to the Subject and an Agenda for Research, *International Studies and Management and Organization*, 37 (2), pp. 11-31.
65. Wilhelm, M. (2011). Managing coopetition through horizontal supply chain relations: Linking dyadic and network levels of analysis, *Journal of Operations Management*, 29, pp. 663-676.
66. Wua, Z., Choi, T., Rungtusanatham, M. (2010). Supplier-supplier relationships in buyer-supplier-supplier triads: Implications for supplier performance, *Journal of Operations Management*, 28, pp. 115-123.
67. Vargo, S.L., Maglio, P.P. and Akaka, M.A. (2008). On Value and Value Co-Creation: A Service Systems and Service Logic Perspective, *European Management Journal*, 26 (3), pp. 145-152.
68. Yin, R.K. (2002). *Case study research: Design and methods*, Newbury Park, CA: Sage.
69. Zettinig, P. and Benson-Rea, M. (2008). What Becomes of International New Ventures? A Coevolutionary Approach, *European Management Journal*, 26 (6), pp. 354-365.