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Strategies of multilateral coopetition: Experienced tensions and coopetition capabilities

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Abstract

Prior work has focused on understanding coopetition tensions and response in bilateral coopetitions. Even though multilateral coopetitions are prevalent in practice they have not been fully studied in terms of coopetition tensions and their management. This omission is problematic. Multilateral coopetitions can complement what we know in prior work because they are inherently complex with multiple actors and greater coordination needs. Hence, we asked: how are tensions experienced and managed in multilateral coopetitions? We answer this question by drawing on 31 interviews and archival data from seven multilateral coopetitions. We found three types of multilateral coopetitions comprising member companies and independent central coordinating organization. We show that actors within each coopetition type experience tensions differently and have varied capabilities to manage these tensions. Our contribution is twofold. First, we complement insights from prior work by opening the black box of coopetition tensions to show that not all coopetition tensions are salient for actors within and across coopetitions. Second, unlike prior work that locates capabilities within focal firms, we show that coopetition capabilities are dispersed across actors, which has implications for value creation and capture.

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INTRODUCTION

Coopetition as a form of inter-firm relation has received considerable scholarly attention in the last few years (Bengtsson & Kock, 2000; Bengtsson & Raza-Ullah, 2016). Scholars have argued that coopetition has many benefits such as increasing innovation and firm performance, resource or knowledge acquisition and learning (Czakov, Mucha-Kuś, & Sołtysik, 2016) but also has knowledge and intellectual property spillover and appropriability risks (Fernandez & Chiambaretto, 2016; Laursen & Salter, 2014). A firm's ability to manage the risks of coopetition for value creation and capture is a salient managerial problem (Gnyawali, Madhavan, He, & Bengtsson, 2016).

The extant literature on coopetition sheds light on the paradoxical tensions of coopetition – simultaneous competition and cooperation – and provides much insight into the nature of diverse tensions (Gnyawali & Charleton, 2018; Gnyawali et al., 2016; Stadler & Wassenhove, 2016). However, extant studies have been limited to bilateral or dyadic relations (Bengtsson & Kock, 2000; Bouncken & Kraus, 2013; Gnyawali & Park, 2011; Padula & Dagnino, 2007), where tensions can be managed through governance structures (Fernandez & Chiambaretto, 2016).

Empirically, however, we see that coopetitions involve stakeholders within and across sectors and in the horizontal and vertical value chain (Gnyawali, He, & Madhavan, 2008). In

essence, many coopetitions are multilateral. Typically, in multilateral coopetition¹ competing firms find themselves cooperating together on common industry issues. Traditionally organizations such as trade or industry associations represented the shared interests of competing firms but increasingly firms collaborate outside of these more traditional organizations. Generally, multilateral coopetition focuses on regulatory concerns, industry-level certification and compliance, or industry standard setting (Barnett & King, 2008; Bowen, Bansal, & Slawinski, 2018; Tashman & Rivera, 2016). Two recent examples of the latter include the R3 consortium of financial companies and the cross-sector project Hyperledger.²

With greater public scrutiny for firms to be socially and ecologically responsible, we also see a proliferation of multilateral coopetitions that involve competitors in the context of sustainability in various sectors. In the agri-food sector, there is the Sustainable Initiative Fruits and Vegetables, or in the textiles and apparel sector the Better Cotton Initiative and the Sustainable Apparel Coalition. In the financial services sector, there is the Global Alliance for Banking on Values and the UN Principles of Responsible Investment. The increasing number of multilateral coopetition in a sustainability context shows the pressing need to cooperatively address overarching industry issues and affect transformational industrial change.

Thus, empirically we see a myriad of multilateral cooperative arrangements, yet the literature has not particularly addressed this form of coopetition. We propose that multilateral

¹ For consistency, we use the term multilateral coopetition but we see multilateral coopetition as a part of the larger set of multi stakeholder partnerships.

² Founded in 2015, R3 is consortium of worldwide financial institutions that developed an open-source distributed ledger platform based on blockchain technology for use in financial trading (www.r3.com). Hyperledger is a Linux Foundation project that started in 2016 and aims to collaboratively advance blockchain technology (www.hyperledger.org).

coopetition as an inter-organizational form functions differently than bilateral coopetition. Due to the complexity of moving from two partners to many, multilateral coopetition requires centralized coordination and coopetition capabilities (Gnyawali et al., 2016) to align and manage activities of the many member companies. In multilateral coopetition tensions (e.g. knowledge sharing vs. protecting or proactive vs. reactive member engagement) are likely to be salient indicating the need for greater coordination and control.

Our paper answers the call from coopetition scholars to have more focused studies of multilateral contexts (Bengtsson & Kock, 2014; Raza-Ullah, Bengtsson, & Kock, 2014). We ask the question: *how are tensions experienced and managed in multilateral coopetitions?* We conducted an inductive, comparative, multiple-case study of seven multilateral coopetitions that included competing firms in four industry sectors: apparel, coffee, chemicals and financial services. We investigated multilateral coopetition in the rich context of sustainability because of the numerous multilateral coopetitions focused on sustainability in several industrial sectors and the need to involve multiple stakeholders in addressing sustainability issues. It is an ideal empirical setting to study multilateral coopetition in more depth. We collected data from 31 in-depth interviews with various members of coopetitions including competing member firms, intermediary project management organizations, and non-governmental organizations, and from publicly available archival documentation about the seven multilateral coopetitions. The breadth of our sample allows us to comparatively analyze multilateral coopetition between cases and industries.

It was evident in our data that the coordination of multiple actors requires a centralized coordinating organization (CCO) that is neutral and external to the actors participating in the coopetition. We find three types of multilateral coopetitions—networks, collaborations, and

equity partnerships. Secondly, we identify different kinds of tensions and show that the actors within and across these coopetition types experience tensions differently. Lastly, we show that coopetition capabilities are developed differently by actors in multilateral coopetitions. In other words, coopetition capabilities are dispersed across actors, reinforcing the interdependency in coopetition configurations.

We contribute to the literature by building on earlier studies that highlight the complex nature of coopetition (Bengtsson & Kock, 2000; Gnyawali et al., 2008; Yami & Nemeh, 2014). We open the black box of multilateral coopetition to not only show the types of actors but also the dynamics in managing coopetition tensions. In doing so, we relate coopetition tensions to coopetition type and build on more recent insights that point to the importance of considering coopetition effectiveness based on contextual factors such as focal issue (Bowen et al., 2018). Second, prior literature has argued that managing coopetition tensions requires specific capabilities that member companies develop (Gnyawali & Park, 2011). We find that capabilities to manage multilateral coopetition tensions are dispersed across actors implying variance in how actors create and capture value from coopetition.

LITERATURE REVIEW

Coopetition Tensions

Coopetition is a paradoxical relationship and dynamic process between two or more actors that simultaneously and jointly create and capture value through cooperative and competitive interactions, regardless of whether their relationship is horizontal or vertical (Bengtsson & Kock, 2014; Bouncken, Gast, Kraus, & Bogers, 2015; Chen, 2008). Value is broadly defined as “the willingness to pay from the end-customer perspective” such that value creation in the

case of coopetition “takes place through integrating complementary and supplementary resources among competitors with the aim of creating a higher value than would otherwise be possible” (Ritala & Tidstrom, 2014: 500).

Coopetition allows firms to pool and access resources, expertise, markets or technologies for new product and process innovation that improve firm and industry performance (Bouncken et al., 2015; Brandenburger & Nalebuff, 1998; Gnyawali & Park, 2011). From these studies, we know that coopetition can be beneficial for innovation (Belderbos, Carree, & Lokshin, 2004; Belderbos, Gilsing, & Lokshin, 2011; Gnyawali & Park, 2011) and can lead to network externalities or spillovers that benefit other industry actors than just those involved in the coopetition (Gnyawali & Park, 2011; Rusko, 2011).

Even so, more nuanced studies show that creating and capturing value from coopetition is complex (Ritala & Hurmelinna-Laukkanen, 2009; Tsai, 2009) and curvilinear such that when strong coopetition relations increase, as part of an alliance portfolio, firm innovation performance decreases (Park, Srivastava, & Gnyawali, 2014; Wu, 2014). Successful coopetition builds an inter-firm dependency that can provide substantial competitive advantage (Bengtsson & Kock, 2014; Dagnino, 2007; Dagnino & Padula, 2002) but this interdependency also poses appropriability risks such as unintended knowledge spillovers and free-riding (Bouncken & Fredrich, 2012; Jorde & Teece, 1990; LeRoy & Czakon, 2016; Park & Russo, 1996; Ritala, 2012) to the extent that “above 50% of cooperative relationships fail to produce the desired results” (Bengtsson & Raza-Ullah, 2016: 31)

Tensions between cooperation and competition have been framed as the main reason why it is difficult to create and capture value from coopetition (Gnyawali et al., 2016). Scholars have described coopetition tension as multi-faceted under the broad umbrella of the

tension between creating common value and appropriating private gain from the common value (Fernandez, LeRoy, & Chiambaretto, 2014). In the coopetition process, tension between the partners manifest in various ways such as knowledge sharing versus receiving (Fernandez & Chiambaretto, 2016), or more broadly not knowing how to strike the right balance between what and how much knowledge, resources and strategic intention to share with competitors (LeRoy & Czakon, 2016).

Gnyawali and colleagues (2016) suggest that partners in coopetition see and experience these tensions differently. These authors further argue that duality – or seeing interdependence between value creation and capture – poses cognitive strain on actors. Further, there are deep rooted contradictions, such as differences in identity of member firms, that would make interactions difficult and hence prompt conflict.

In sum, strain because of dualities and conflict because of contradictions underlie felt tension. Gnyawali and colleagues (2016) posit that actors develop analytical capabilities to identify and evaluate interdependence and executional capabilities to manage tensions, maintain balance and avoid conflict in the coopetition.

Managing coopetition tensions

Existing literature has described various ways in which coopetition partners manage these tensions, such as formal coordination and control mechanisms like policies or contracts or informal control mechanisms like peer pressure (Fernandez & Chiambaretto, 2016). Similarly, actors may also temporally and spatially separate cooperation and competition activities. Temporally, cooperation may take place in the exploration phase while competition in the exploitation phase (Gnyawali et al., 2008; Yami & Nemeah, 2014). Spatially, cooperation and competition activities can be separated between upstream and downstream activities such that

competitors cooperate on raw material development far from the customer but compete in marketing activities closer to the customer. As a result, the spatial separation also manifests in different business units (e.g., research and marketing) within a company (Bengtsson & Kock, 2000).

In contrast to such separation strategies, some scholars have focused on the organization and senior management's capabilities to integrate the contradictory elements (Gnyawali & Park, 2011). Coopetition capability is the "capacity to perceive and analyze key issues and challenges in inter-firm relationships and to devise appropriate managerial responses" (Gnyawali et al., 2016: 13). Scholars have identified several kinds of coopetition capabilities such as analytical capabilities that help in "accurate assessment of paradoxical situation" and execution capabilities that help in "design and implementation of actions" to address the tension between cooperation and competition (Gnyawali et al., 2016: 13). Along the same lines, Raza-Ullah, Bengtsson and Gnyawali (2018) argue for three dimensions of capabilities: analytical dimension, which is similar to analytical capability; balancing dimension that argues for developing and using routines and processes that allow managers to balance opposing demands; and emotional dimension or the capacity to identify and accept conflicting emotions.

Multilateral competition: Opportunities and gaps

Despite the rich insights on tensions and their management, the focus of scholarship has primarily remained on dyadic coopetition. Even though prior studies have described coopetition at multiple levels (Le Roy & Czakon, 2016; Raza-Ullah et al., 2014), scholars argue for moving beyond a dyadic focus (e.g., Bengtsson & Kock, 2000; Ritala & Tidstrom, 2014) to consider different ways in which competitors can collaborate, for example, competitors within strategic

groups versus across strategic groups.

A multilateral cooperation is “between more than two firms, vertical – *players who are vertically adjacent to each other in the industry value chain – or horizontal – players who are rivals at the same stage in the industry value chain and who collaborate with each other in order to compete with rival pairs or groups*” (Yami & Nemeh, 2014: 250, emphasis original). Tidström & Rajala (2016) describe multilateral cooperation as a cooperation at macro level “which comprises the market, industry and actors external to the focal business relationship” such that external events play an important role in the competitive and cooperative dynamics in the relationship. Similarly, Bowen, Bansal and Slawinski (2018) identify two kinds multilateral cooperation, one in which the focus is on coordination of activities such as certification, monitoring, and penalty for non-compliance; and the other in which the focus is on sharing resources and technologies. In another example, Stadler and Wassenhove (2016) studied cooperation-competition tensions in a collaboration of four global logistics companies and humanitarian organizations to support disaster relief efforts. Thus, multilateral cooperation is prevalent in multi-stakeholder partnerships and networks (Owen-Smith & Powell, 2004; Pathak, Wu, & Johnston, 2014; Powell & Johnston, 1996; Ritala, 2012; Ritala, Huizingh, Alpanopoulou, & Wijnbenga, 2017; Rusko, 2014; Wilhelm, 2011) that involve multiple levels of the value chain.

Understanding multilateral competitions is important for a few reasons. First, the form of cooperation—dyadic or multilateral—is related to the value that actors capture. Yami and Nemeh (2014) argue that multilateral cooperation is relevant for radical innovation, and dyadic cooperation is more suitable for incremental innovation, which has implications for value captured by all parties. Second, implicit in the cooperation literature is the idea that

coordinating activities between competitors is important for the cooperation's success, and hence such cooperation introduces another actor to play a coordinating role. In a study from Bengtsson and Kock (2000) on the Swedish brewing industry, they describe cooperation between brewers who competed for distributing beer bottles but collaborated for bottle collection. The Swedish Brewing Association was an important player for coordinating the flow of empty bottles. However, the coordinating role has remained outside the purview of most of cooperation research.

In general, our understanding of managing cooperative tensions in multilateral cooperations continues to be ambiguous. We argue that the nature and dynamics of multilateral cooperation differ substantially from dyadic cooperation simply because the experience of tensions, the structures of organization and the management of tensions differ. For example, Stadtler and van Wassenhove (2016) argue that separation and integration strategies do not fully explain tensions and their management in multilateral cooperations. The authors show how individuals in the multilateral cooperation use nested identities and task segmentation to identify and manage tensions. Similarly, Ansari et al. (2016) in their study of TiVo show how a disruptive market entrant gained the support of incumbents in the ecosystem. The authors theorize how cooperation is multilateral, intertemporal and dynamic as the disruptive market entrant balances cooperative tensions. Along the same lines, more recent work shows that competitors do not have to be working on a product or innovation to experience the tensions between competition and collaboration (Jarzabkowski & Bednarek, 2017; Mathias, Huyghe, Frid, & Galloway, 2017). Sonenshein, Nault and Obodaru (2017) show that actors in niche industries such as the food truck industry, treat value capture in terms of the industry's collective identity rather than a zero-sum game, again indicating that tensions likely manifest and are managed differently when we take our attention beyond

coopetitive relationships that are dyadic.

In summary, the tensions in coopetition are likely to play out differently when the number of partners increases. However, we do not have a full understanding of the nature, dynamics and management of multilateral coopetition, which has implications for value captured by different actors. To move beyond the dyadic focus in the literature, we unpack multilateral coopetition to better understand tensions and their management. Hence, we ask: *how do actors in a multilateral coopetition experience and manage coopetition tensions?*

METHODS

We designed a qualitative, inductive, multiple case study and use the multilateral coopetition as the unit of analysis. Inductive qualitative studies are appropriate methods for “opening up the black box” of organizational processes (Doz, 2011: 583) and provide a missing link between the conceptual abstraction in the extant literature on theory testing and the grounded progression of theory building (Glaser & Strauss, 1967). Multilateral coopetition in a context of sustainability is a relatively unexplored area and an inductive inquiry allows theoretical insights to emerge from a systematic and iterative analysis of the collected data. Our cases are illustrative examples of multilateral coopetition and allow us to probe and gain deep insights into multilateral coopetition tensions and their management (e.g., Eisenhardt, 1989; Siggelkow, 2007; Yin, 2003)

Research context

We contend that the context of the coopetition for sustainability matters and offers additional insights into the phenomenon of multilateral coopetition. The sustainability context is unique for a couple of reasons. First, the drivers of multilateral coopetition in a sustainability context stem primarily from external pressures, for example changing

government regulation or consumer advocacy, compelling firms to cooperate for economic, reputational and altruistic reasons. Secondly, the collective benefits, such as reputational gains, accrue to the industry as a whole while individual gains are challenging to achieve (Barnett, 2006). These contextual differences, due to a sustainability focus, may influence the ways in which actors experience and manage tensions in multilateral cooperation. A sustainability context, therefore, provides a rich setting in which to study tensions in multilateral cooperation.

Our study extends over four industry sectors: apparel, commodities (coffee), chemicals and financial services. Each of these sectors face unique and different ecological and social sustainability challenges. For example, although climate change is a shared concern across all sectors the effects of changing weather patterns differs considerably for each industry. Apparel and coffee sectors grapple with the effects of draught on cotton growing and coffee tree plantations but are developing different approaches to managing these effects. In the financial services industry, particularly insurance services, natural weather disasters as a result of climate change are of increasing concern and require specific solutions. The diversity of approaches to these sustainability challenges allows us to compare and contrast sectoral differences to similar problems.

Case selection

An essential feature of the multilateral competitions included in our study is that competitors are required to cooperate to achieve collective goals. We began by preparing a list of more than 60 initiatives worldwide that address sustainability issues and involve competitors. The list was compiled from prior research and from keyword searches on the Internet. We narrowed down the list by focusing on four sectors (apparel, coffee, chemicals and professional services). There were essentially two main criteria that a selected multilateral

coopetition had to meet (1) the members must include direct competitors (those that sell similar products and services), although it could also include other stakeholders, and (2) the focus was to improve sustainable impact or address sustainability challenges. We selected seven multilateral coopetitions that were a theoretical fit (see Table 1).

Insert table 1

Data collection

We collected data from several sources. Our primary source of data included 31 in-depth, semi-structured interviews with representatives from the central coordinating organizations and with managers from member companies. Each interview lasted approximately 60 minutes. In the interviews, we gathered data on the history and activities of the coopetition and asked questions focused on understanding the coopetition drivers, accomplishments, processes and organization. All interviews were recorded and transcribed.

Additional data sources included publicly available documentation from web sites and press coverage that helped us to better understand the coopetition structure, and other important details such as member fees. We also attended and observed a stakeholder conference call of one of the coopetitions. As well, we held two meetings with a group of international executives from each sector to discuss emerging and preliminary insights and whether these insights resonated with their experiences in multilateral coopetitions. Sparring with these executives provided further input and refinement of our data. These additional sources of data provided triangulation and verification of our primary source of interview data, aiding the internal and external validity of our insights. Table 2 provides an overview of our data sources.

Insert Table 2

Data analysis

We started our analysis by coding the interview transcripts and documentation. Both authors coded the transcripts and we discussed and reconciled differences. We also created narratives of the seven multilateral coopetitions to illuminate the historical sequence of events. As we iterated between theoretical and empirical observations, focusing in particular on the constructs of felt tension and coopetition capabilities (Gnyawali et al, 2016; Raza-Ullah et al, 2018), we reviewed our data and further developed our coding scheme, drawing initial, emerging insights.

To deepen our analysis, we derived inductively from our data first order concepts, second order themes and aggregated explanatory constructs (Gioia, Corley, & Hamilton, 2013) (Figure 1). The second order themes focused on the organization, tensions and coopetition capabilities of multilateral coopetition. From there, we created the explanatory constructs of the type of multilateral coopetition, the experienced (or felt) tension and the management of tensions. We analyzed our data using these explanatory constructs, making comparisons and uncovering patterns to explain why or how tensions were felt and managed.

Insert Figure 1

FINDINGS

Our findings show that multilateral coopetition differs from bilateral coopetition in significant ways. We make three claims from our data analysis. First, the coordination of multiple actors requires a centralized coordinating organization (CCO) that is neutral and external to the actors participating in the coopetition. We see that the CCO is formed in different ways and provides

a common space of mutuality among the actors. Secondly, we see that the multitude of actors in multilateral cooperation leads to dissimilar experiences of tensions. Lastly, we show that cooperation capabilities, such as evaluating benefits and challenges, resolving conflicts and implementing actions, are developed differently by actors in multilateral cooperations. In other words, the cooperation capabilities are shared and dispersed across actors, reinforcing the interdependency in cooperation configurations.

We begin this section by explaining the types of multilateral cooperations we found in our data. We then present the tensions that actors in these cooperations experienced. We follow on by showing the capabilities that were used to manage tensions.

Coordination and control in multilateral cooperation

We see from our data that multilateral cooperations are coordinated in distinct ways by organizations external to the member firms. We call this independent and neutral organization the centralized coordinating organization (CCO). In our sample of multilateral cooperations focused on sustainability issues, the CCOs were non-profit legal entities, such as foundations or associations. From our comparative analysis, we categorized the CCOs and member companies into three main types: networks, collaborations and equity partnerships (see Table 3).

Insert Table 3 here

Network type. Three of our multilateral cooperations (RC, FWF and UNEP-FI) fall into the category of a network. This type was typically an industry-based association that had a relatively large membership with varying interests. Member companies paid membership dues which was the primary, and often the only, source of revenue or funding.

Due to the broad scope of activities, a network type of cooperation generally had various task forces or working groups that focused on specific projects. Members volunteered to work on specific projects according to their interests but there were differences in how CCOs encouraged engagement. For example, RC had a leadership council and required top management representation in projects, as our respondents pointed out:

That whole element of leadership is really important, and we insist on it. It's something we measure. It's something that we assess companies against. (RC-CCO1)

The entire organization is broken up by geography into these four leadership groups and they're each chaired by one of the members. (RC-MC1)

Members paid a membership fee according to firm size or sales and expected benefits in return. For example, in UNEP-FI, which is a large multilateral cooperation network, some members were satisfied with the benefit of reputational association, which prompted a respondent from the UNEP-FI CCO to reflect, "Are we getting the most active members or are they just ... [writing] a check for \$20,000?" She further explained that the "niche investment firms [join] every little green initiative" because they gain visibility for recruitment of new clients and investors.

Finally, we saw that the time horizon of the network type of multilateral cooperation was long term and continuous. In essence, the broad scope of activities were infinite and these organizations could exist for as long as the member companies could identify common issues and projects of interest. Indeed, RC and FWF were two of the longest running multilateral cooperations in our sample, founded in 1985 and 1999 respectively. Even though these organizations were non-profit entities, their long-term survival required them to compete, change and adapt their services in order to continuously provide value to their members.

Collaboration type. This type of multilateral cooperation had distinct characteristics when compared to the other types. First, these emerged from overarching, imminent threats in the industry that needed urgent attention. All of the cases categorized in this type addressed a specific industry issue. SCAP focused on reducing both industrial and consumer textile waste in the UK; ZDHC started as a reaction to Greenpeace's Detox Campaign to eliminate 11 hazardous chemicals in textile production by 2020; and ALL aimed to improve factory worker safety by improving fire and building safety in Bangladesh. All of these issues were specific in their material or geographic scope and limited by a time frame, making the type of multilateral cooperation significantly different than others.

The revenue source of the collaboration type included several sources, such as membership fees, sponsorships and/or government funding. For example, SCAP, as a part of the UK's Waste and Resources Action Programme, had been funded by the UK government. There was no fee for members to join. However, after losing 70% of its government funding in 2014, it became a charity organization funded partially by donations.

Compared to SCAP and ZDHC, ALL had the most formal commitment as it required members to sign a legally binding contract. Member firms were legally bound to participate in factory inspections and develop corrective action plans. They were also required to provide compensation to workers if factories were temporarily or permanently closed. Furthermore, ALL members were charged penalties for not complying with the contractual agreements. The ALL contractual agreement was publicly available, and a respondent from the CCO verified the process:

Failure to take action, failure to follow the member agreement of the Alliance, of course results in an escalation to the compliance committee of the board and ultimately there are warnings and eventual termination with a financial penalty. That is part of the contract, or the member agreement. (ALL-CCO2)

The coordination of the collaboration type varied from highly formalized and contractual to more informal and obligational. The urgency and visibility of the issue gave shape to the formality or informality. If the issue was highly publicized, such as the collapse of Rana Plaza in Bangladesh, then the CCO had more leverage to impose formality and conditions in the organization of multilateral cooperations.

Lastly, this type of multilateral cooperation was bounded by a limited time frame with specific goals. For example, ZDHC had 2020 goals and ALL was defined by the contractual period of five years. In 2018, ALL extended the agreement for an additional six months to transfer practices to the Bangladesh government. SCAP, as well, was defined by its initial period of government financing and associated goals. These cooperations remained steadfast in achieving defined goals and less focused on competing for long term survival.

Equity partnership. This type of multilateral cooperation was typically formed as a joint venture. Only one of our sampled multilateral cooperations, C&C, fell in this category. Again, this type was significantly different than the network and collaboration types. Most obviously, the equity partnership in the form of a joint venture was a legal entity (profit or non-profit) and required investment from its owners (the competing firms). Membership, or rather ownership, was highly exclusive and generally limited to a few partners because of the legal and financial commitment. In a multilateral cooperation joint venture, a CCO was still required to coordinate and control the activities of the joint venture. One of the respondents from a member company underlined this difference, stating:

It's not like me being a part of the National Coffee Association Task Force where we meet twice a year at the National Coffee Association conference and talk and share. It's a formal entity that we buy into. (C&C-MC1)

The equity partnership type, like the network type, was a long-term organization. However, unlike the network type, it did not necessarily compete for its survival. In C&C, the owners made investments in the joint venture, a form of philanthropy, charity or corporate venturing, and funded the projects that it pursued. The continuity of the organization persisted so long as the joint venture pursued the interests of its owners in a timely manner and delivered the expected results.

Tensions in multilateral cooperation

We identified the following tensions in our cases: alignment of interests, engagement of members, and transparency in knowledge sharing. Although tensions in multilateral cooperation are similar to tensions in bilateral cooperation, the actors involved in multilateral cooperation experienced and managed the tensions differently. We explain the findings for each felt tension highlighting the differences among actors and the type of multilateral cooperation (Table 4). Appendix A provides additional supporting evidence.

Insert Table 4 here

Alignment of interests. This type of tension stemmed from disparity in what member companies were interested in pursuing. It was experienced by all actors in all types of multilateral cooperations, and especially by representatives of the member companies. We see from our data that CCOs of networks experience interest alignment tension to a greater degree than other types of cooperations because of their open, inclusive membership and lack of formal member commitments. For example, CCO respondents from both RC and UNEP-FI expressed tension of alignment. In the case of RC, the CCO wanted member companies to publicly communicate their participation in RC but this didn't align with individual member interests.

I've tried a number of times to get our industry to have a united face ... and the answer is always "no" because [company D] wants to participate and wants to be seen as a sustainability leader and [company P] wants to participate and be seen as a sustainability leader and the same for [others]. (RC-CCO1)

Our data further indicate that member companies of the collaboration type felt tension in the alignment of interests internally in their own individual organizations. Even though these collaborations were formed around specific industry issues (e.g. climate change) and the members agreed about the urgency and importance of the specific project or scope, they still needed to rally support within their organizations. CCOs of collaborations, however, did not have to rally interests of member companies to support a project and therefore experienced this tension less. In member companies, however, this tension was felt at an operational level, for example the kinds of information to gather and share, and therefore was experienced more intensely in the member companies themselves. This is vividly expressed by one of the member companies of ZDHC:

There was a question [about measuring] your energy consumption. That was it. There was no question like how much energy do you use, and can we compare your energy usage per product versus maybe your competitors? There was a letter of resistance from other brands who said "no, we don't want this". Our suppliers aren't ready for that and this means a lot of training (ZDHC-MC1)

Progress is extremely slow because there's always the larger the good, there's always somebody who says no, I have to talk to my board or my leading department and then there's different cultures. The more leading departments are involved, the more challenges you have that nothing is actually realized. (ZDHC-MC1)

In equity partnerships, the alignment of interests among the partners was experienced less intensely because of their issue-specific focus and selective membership. Ownership in the cooperation allowed them to develop mechanisms to align interests. One member company representative claimed:

There's a lot of trust in your business partners because of the shared success and the aligned cultural values. (C&C-MC1)

However, our data show that for C&C, an equity partnership, the difficulty in aligning interests was beyond the cooperation, for example with communities or interest groups. In the alignment of stakeholder groups, such as smallholder coffee farmers in rural areas, the CCO explained:

It is complex and difficult because they [meaning] the team, and the groups [communities, stakeholders, farmers] have to be aligned in time in order to progress, and it's not easy. In fact, it is easy to get zero [agreement, resulting in a] re-estimation of the project (C&C-CCO1)

Member engagement. The COOs and member companies across the multilateral cooperation cases felt this tension differently. The tension was prominent among the CCOs of the network type of multilateral cooperation. As the central coordinating unit that was the linking pin between the member companies, they had knowledge about which members were participating or engaging compared to others. They were also responsible for monitoring, safeguarding and stimulating member engagement. The member companies of networks did not experience this tension as conflicting. Even though member companies were frustrated by differences in member engagement, they had the option to choose whether to continue or discontinue their participation, as expressed below by the CCO from UNEP-FI.

... [it] comes down to the individual in terms of how active ... It really, really does. A lot of the people who are particularly active, there's a whole host of reasons, whether they're very passionate about the topic or whether they're using it as a way that they gain visibility within their institution (UNEP-FI-CCO2)

Our data also show that the tension of member engagement was experienced both by cooperation members and CCOs of the collaboration type of multilateral cooperation. However, there was variance within this type of cooperation because of contractual or formal arrangements. For example, members and CCOs of ZDHC and SCAP, where there were no contractual agreements, experienced a greater level of tension in member engagement than ALL. The CCO and members of ALL, having

very a formal and legally binding commitment, experienced less tension in member engagement than in the network type. Our respondent from ALL explained:

Generally speaking, I am pleased with the active status of most of the member companies (ALL-CCO2)

Similarly, the members and CCO of C&C, the equity partnership, remained engaged and the tension around member engagement was not salient for them due to their vested interests through equity ownership.

Transparency in knowledge sharing. For this tension, our data show that member companies across the multilateral cooperation types were positive about their own willingness to share knowledge. Several of our respondents expressed this view:

“we are totally open ... We're not hiding anything.” (FWF-MC-HG)

“It's very much an open collaboration to share learning, whether it's in areas of process safety or security or any new regulatory or product stewardship issues ...” (RC-MC2)

“We are very much open and share with [others] ... we are very happily ... sharing [about compliance] ...” (ZDHC-MC1)

At the same time, member companies defined boundaries for the information and knowledge they shared. For example, the CCO respondent from UNEP-FI expressed that information slated for public release was more easily shared:

They (member companies) are collaborating, they are sharing. ... [but] these are competitors, so there's a certain amount that they do hold back but they're pretty supportive in sharing what they were doing internally, and maybe that's because a lot of these things are set up in terms of public relations. It is information that they want to get out anyway, so they're sharing it amongst one another. (UNEP-FI-CCO2)

Members also separated the kind of information that can be shared from the kind that cannot, as a member from FWF emphatically explained:

We will not share everything. I will not share the cost of a T-shirt. This is private. I will not share the exact volume. I will not share some specific design. I'm not an idiot, but on the level of workers, security, overtime workers, improvement of the conditions, I can share a lot of things, a lot. (FWF-MC-SW)

Members in C&C also placed clear boundaries around the information they discussed and shared.

The partners, they only address technical issues around climate change, other strategies, how this experience can be brought to farmers, how farmers can be supported in upgrading their adaptive capacity and to become more resilient towards climate change. (C&C-CCO1)

Our data also show that member companies and CCOs recognized the limitations in how other companies shared information, and that is when the strain of this tension became salient for them. Representatives from FWF and SCAP express this strain below.

“... a lot of brands are not transparent. They don't want everybody to know they produce in this or that factory, so they don't want to share anything. They want to maybe to keep the supplier only for themselves ... I can understand, but I don't respect this point of view. (FWF-MC-SW)

Some brands are quite cagey about... they're a little bit uncertain of communicating between themselvessome have had large reductions in the carbon, water and waste; some have had none and have actually increased their carbon, water and waste. That's a key issue ... what each brand and retailer is doing they're anonymizing the data ... [but] there's been a whole issue about, 'we think we're this brand ...'(SCAP-CCO1)

Capabilities to manage tensions in multilateral coopetition

We find that coopetition capabilities developed asymmetrically among the actors in the different types of multilateral coopetition. We make a distinction between two coopetition capabilities: 1) analytical capabilities which are the ability to identify, evaluate and assess the opportunities and challenges in multilateral coopetition, and 2) executional capabilities which are the ability to implement plans, manage and control activities and resolve conflicts.

Our data show that member companies in multilateral cooperation develop analytical capabilities and centralized coordinating organizations develop executional capabilities. Table 5 provides an overview of the cooperation capabilities. Appendix B provides more supporting evidence.

Insert Table 5 here

Analytical capabilities. The first set of cooperation capabilities pertain to the analytical processes of recognizing and assessing opportunities and challenges. These capabilities were salient for member companies, and less so for the CCOs. Analytical capabilities helped the member companies evaluate the alignment of interests and member engagement.

Our respondents gave several indications of recognizing and evaluating the benefits of cooperation. They acknowledged that the issues that needed to be resolved could not be addressed alone and that cooperation with competitors and other organizations was necessary.

This was evidenced in the following:

... they cannot get there alone. They have to collaborate with other stakeholders, and competitors because they each bring different expertise to the table. (RC-CCO1)

... we have no chance to work alone towards the goal of ZDHC, so it was the logical consequence to go in this group. (ZDHC-MC2)

Along the same lines, the member companies also recognized the benefits of learning from their competitors and bundling resources and knowledge.

... we learned that it is really useful to bundle our influences. (FWF-MC-KNJW)

... in terms of quality ... because we don't have [the] same level ... we do not have the internal knowledge about the cultural [aspects] ... the management or the cost production (C&C-MC1)

I see is really a lot of incremental steps which means that ... every time there is something to learn, there is something to try, there is some improvement to do ... in terms of finding better ways of doing things, finding more interesting activities ... (C&C-MC1)

Analytical capabilities were also evident in the member companies' ability to select members to join the cooperation and align their interests. For example, in the case of C&C, member companies actively solicited other competitors and partners to join, and at the same time, recognized the challenges in having companies of different sizes as members. For example, a member company from C&C described the difference in a company's approach to the same sustainability goals depending on where they are in their journey,

Very mature companies have this mindset of collaboration, a company that's more emerging on their journey is going to take a different look at how sustainability is managed. They'll probably just go for low hanging fruit that they can manage and control on their own.(C&C-MC1)

In equity partnerships, member firms as owners with vested interests are closely aligned in their goals, values and commitment. Therefore in equity partnerships the need for members to develop analytical capability to manage this tension is absent.

Executorial capabilities. These capabilities were evident in the processes and routines related to supplier management, project management, support for system and tool development and data processing, and member engagement monitoring. CCOs developed these capabilities to manage tensions depending on whether there was significant strain and conflict from the tension in the cooperation type.

As the linking pin connecting the various actors in multilateral cooperations, CCOs developed the majority of executorial capabilities, with the exception of supplier management. Member companies had existing supplier relations and had capabilities for supplier management. However, CCOs of the collaboration and equity partnership types, who managed

the activities pertaining to the goals and scope of the multilateral cooperation, also had some responsibility for managing suppliers. For example, ALL had specific capabilities to manage factory inspections, corrective action plans and compliance. In this case, as well as in ZDHC and C&C, the CCOs were closely involved in helping the member companies manage their suppliers.

Another aspect of the CCO's execution capability was related to project management. We saw this capability across all types of multilateral cooperation. This capability allowed the CCO to sustain member engagement by doing coordinating activities that members were not be able to do themselves. The CCOs in all cooperation types worked with the member companies to nudge them toward action, and kept the companies accountable, as explained by this CCO representative from SCAP.

The Metrics working group meets every 2-3 months. The same applies to all the other working groups, so there's a constant three-month cycle of meetings where everyone gets together which is formally organized and administered. Annually there is the SCAP annual event and that's sort of like an open day, getting all the working groups, all the signatories together in one place and discuss what's been achieved, where the targets are, what the results have been, developments, areas that need improving, etc. (SCAP-CCO1)

In all of the cooperation types, CCOs also provided support to the member companies by creating standardized formats, measurements, guidelines, protocols or procedures for a variety of activities (e.g. compliance auditing, reviews, training, factory inspections), and other means of data processing. These systems and tools provided a platform for transparent knowledge sharing and standardized requirements for information that members needed to share. Systems and tools addressed the tension around knowledge sharing, and member engagement in many ways, as reflected below by SCAP:

[We are] providing neutrality, providing technical support. There is an element of sharing but I guess we act as the middle man there. It's an area they really

need to address more, the whole sharing element, but I guess [we] provide a sort of middle ground. (SCAP-CCO1)

CCOs' data processing as an executional capability included data collection, aggregation, analysis and reporting. A centralized approach to handling sensitive information that comes from competitive sources was necessary to facilitate the exchange of valuable knowledge. This was a very distinct capability for CCOs and required much time and effort to collect and process data and then redistribute it to member companies.

... simply helping and cleaning up the data effectively, a lot of brands and retailers have really complex systems, or often it's just a variety of Excel worksheets internally within the organization and all sort of data just dumped on these sheets. One area that we provide support in is cleaning up this data, collating it and putting it in a format that the SCAP FootPrint Calculator can read quite simply. It's incredibly time consuming ... to get a consistent submission (SCAP-CCO1)

Finally, the CCOs had the executional capability to monitor member engagement. They had processes that held members accountable, ranging from very formalized legal agreements, as in ALL, to strong peer pressure, as in RC.

Some [members] are incredibly active, incredibly detailed, like micromanaging, kind of a tremendous amount of work at the factory level. Others are a little too relaxed and we hope that they become a little more active. Ultimately, we hold them accountable [if] they are too inactive. (ALL-CCO2)

... as new standards are put in place, there is a process to check that people are doing what they actually said they would do and if they don't, well there is a conformance process to move them out. (RC-CCO1)

Summing up, our findings show that multilateral cooperations have centralized coordinating organizations that have distinct characteristics according to specific types – networks, collaborations and equity partnerships. Further, actors vary in how they experience

the strain and conflict of coopetition tensions – alignment of interests, engagement of members and transparency in knowledge sharing. Lastly, we find that coopetition capabilities in multilateral coopetitions are distributed among the actors and that member companies develop analytical capabilities to recognize and assess opportunities and centralized coordinating organizations develop execution capabilities that help to manage tensions in multilateral coopetitions.

DISCUSSION AND THEORETICAL CONTRIBUTION

Our study responds to the call to better understand tension by focusing on multilateral coopetition – coopetition in which more than one pair of competitors are involved (Bengtsson & Kock, 2000). We contend that by studying multilateral coopetitions one can gain unique insights on coopetition tensions and their management because of the unique characteristics, such as multiplicity of actors, and easy spillover of value to the collective (Barnett, 2006; Ritala & Tidstrom, 2014).

We found three kinds of multilateral coopetitions representing different configurations of member companies.. More importantly, we uncovered tensions similar to those described in prior work (e.g., Gnyawali et al., 2016), but unlike prior insights, we found that these tensions are experienced differently by actors within coopetitions and across coopetition types. We also found coopetition capabilities were important for managing tensions (Gnyawali & Park, 2011; Raza-Ullah et al., 2018, 2014) and we show that these capabilities are distributed differently across actors (member companies and CCOs) within the coopetition. We present a conceptual model of our findings in Figure 2 and describe our theoretical insights below.

Insert Figure 2 here

Experience of tension in multilateral cooperation

Our framework depicts three kinds of multilateral cooperations such that they are configured differently in terms of characteristics, e.g. member commitment, and length of cooperation. These types offer several theoretical insights. First, prior work has not fully described the differences in how multilateral cooperations are configured. For example, Yami and Nemeh (2014) show the differences between bilateral and multilateral cooperations and their relation to desired outcomes such as innovation. But they do not fully explore differences in multilateral cooperation types. Multilateral cooperation, including their various configurations, are important to understand since they have been found to be linked to degree of innovation (Yami & Nemeh, 2014) and value creation and capture (Ritala & Tidstrom, 2014).

In our study, we describe three types of multilateral cooperation—network, collaboration, and equity partnerships. These types are not exhaustive, other scholars may find more types; rather we use these cooperation types as analytical devices to garner theoretical insights. Specifically, we show that the characteristics of multilateral cooperations, such as funding, duration and issue urgency, impact the way actors experience tensions. For example, a high level of visibility of controversial issues (e.g., the Rana Plaza fire for ALL members) permitted a higher level of formality in collaboration type. Similarly, equity ownership in joint ventures allowed for more formal and contractual governance providing control mechanisms to reduce tension and conflict. As well, tensions were more salient in network types that were more loosely structured. Others (Bowen et al., 2018) have shown the importance of issue type, and cooperation stage (e.g., pre-competitive Bogers & West, 2012) in cooperation effectiveness. Along the same lines, we show that how a multilateral cooperation is configured is related to

how actors within the coopetition experience tensions.

Second, recent work has described rich relationships between coopetition and competition as two elements of tension. For example, Chen and Miller (2015) argue for hybrid forms on the spectrum between cooperation and competition. Others, have redefined competition in terms of collective identity to show that competition arises only when an industry member does not adhere to the collective identity (Mathias et al., 2017; Sonenshein et al., 2017). In other words, the relationship between competition and collaboration is rather complex such that tension is not always relevant for coopetition members. Our study complements these insights to show that tensions cannot be taken as given in a coopetition. We found that network and collaboration types experienced all three kinds of tensions as opposed to equity partnership where transparency in knowledge sharing was the primary concern.

Third, we show that tension is experienced differently not just across coopetition types, but also within. In our study, CCOs and member companies, within a coopetition type, experienced tensions differently. Bengtsson and Raza-Ullah (2016) identify the complexity in coopetition by arguing for understanding coopetition tension within participating firms, and across competitors and other players in the coopetition. They encourage scholars to open the black box of coopetition tensions by taking into consideration who is experiencing tension and how. We respond to this call by clearly specifying the experience of tension differently between the actors in a coopetition and showing how that relates to managing them.

Distributed capabilities

Capabilities are important to managing coopetition tensions. However, prior work describes these capabilities as being in the focal firms of the coopetition. For example, Gnyawali and colleagues (2016) describe analytical and executional capabilities of focal firm managers for

managing coopetition tensions. Similarly, Bengtsson and colleagues (2016) argue for the manager's coopetition capability to sustain moderate level of tension between cooperation and competition, necessary for coopetition performance.

By focusing on multilateral coopetition, we are able to unpack the distribution of coopetition capabilities such that some are developed by the member companies while others by the CCO. Bengtsson and Kock (2000) argue for managing coopetition tension by separating activities such that the same actor cannot compete and cooperate and hence these activities must be separated across business units. We show that not only are competitive and cooperative activities separated across actors and business units, but also the capabilities to manage both competitive and cooperative elements of tension are separated across the member companies and CCOs.

Further, by identifying this capability distribution, we are able to clearly show the specific capabilities needed to manage specific tensions. For example, we found that executional capabilities are relevant for all kinds of tensions whereas analytical capabilities are less relevant for tension around member engagement. This insight sheds light on the complexity of coopetition capabilities where previous work (e.g., Bengtsson et al., 2016; Gnyawali et al., 2016; Gnyawali & Park, 2011; Raza-Ullah et al., 2018) has assumed equal relevance to all types of coopetition capabilities among all actors.

Managerial implications

Our study has several implications for practice. First, managers of companies participating in multilateral coopetitions and the CCOs managing the coopetitions can find value in the differences we describe in the three types of coopetition. Given that members within each type experience tensions differently, CCO managers may want to deliberately choose one type over the other, and prepare to address the tensions that are found to be salient for each type.

Second, we identify coopetition capabilities that are salient for different actors within the coopetition. Although certain capabilities such as project management (under executional capabilities) are clearly relevant for the CCO, others capabilities such as those relevant for alignment in member interests may be less so. We offer insights for member companies and CCOs to develop different capabilities such that they complement each other's strengths.

Limitations and future research direction

The diversity of industries afforded explanatory power to our inductive approach; we were able to tap into the differences. However, we did not connect our framework to coopetition outcomes. Even though we collected data on coopetition performance outcomes, industry diversity made comparisons on performance challenging. For example, coffee growing practices to adapt to climate change (C&C) are different from factory inspections for safe manufacturing practices (ALL). We encourage future work to use our framework and further test coopetition performance differences by studying coopetitions with similar focus.

In addition, our point in time data did not allow us to offer causal or process-based explanations. Our proposed framework is not causal, what we describe are patterns across coopetitions. Future research can enrich this framework by investigating multilateral coopetitions across time, and hence investigating the causality between tension and capabilities to manage them across different multilateral coopetition types.

Conclusion

Multilateral coopetitions are important for addressing issues that affect industries as a whole, such as technological or sustainability issues. However, such coopetitions are challenging given the diversity of actors. We offer an empirically based framework to understand and manage tensions in such coopetitions. We show that such coopetitions are organized in different ways

which has implications for how they experience coopetition tensions, who experiences them, and who has the capabilities to manage tensions so as to create value for businesses and their stakeholders. We encourage both researchers and practitioners to continue to explore how businesses and their stakeholders can effectively come together to address common and intractable problems.

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Table 1. Sample of multilateral cooepitions

Coopetition	Purpose	Year started	Geographic Focus	Number of members	Number of interviews
Responsible Care (RC)	To innovate for safer and more environmentally friendly products and processes, and to work to eliminate harm throughout the entire life cycle of their products	1985	Canada	51 chemical firms	3
Fair Wear Foundation (FWF)	To work with brands, factories, trade unions, NGOs and governments to verify and improve workplace conditions	1999	Western Europe and 11 production countries in Asia, Europe and Africa	80 apparel firms	9
United Nations Environment Programme Finance Initiative (UNEP-FI)	To better understand, prevent and reduce environmental, social and governance risks, and better manage opportunities to provide quality and reliable risk protection.	2012	Worldwide	60 insurance or financial services firms 50 supporting institutions	4
Alliance for Bangladesh Worker Safety (ALL)	Alliance: improve worker safety by upgrading factories, educating workers and management, empowering workers, and building institutions	2013	USA, Bangladesh	29 apparel firms	3
Zero Discharge Hazardous Chemicals (ZDHC)	To advance towards zero discharge of hazardous chemicals in the textile, leather and footwear value chain to improve the environment and people's well being	2011	Worldwide	29 apparel firms 38 value chain affiliates 14 associates	5
Sustainable Clothing Action Plan (SCAP)	To re-invent how clothes are designed and produced; to re-think how we value clothing by extending life of clothes; and to re-define what is possible through re-use and recycling	2012	UK	80 apparel retailers	3
Coffee & Climate (C&C)	To respond to changing climate conditions by collecting, consolidating and disseminating best practices for adaptation in the project's coffee growing regions	2012	Brazil, Tanzania, Guatemala, Honduras, El Salvador and Vietnam	11 coffee firms	4

Table 2. Overview of data sources

Case code	No. of inter-views	Position of respondents	Respondent code	Publicly available documentation
RC	3	CEO, RC Member 1, CEO Member 2, CSR	RC-CCO1 RC-MC-A RC-MC-B	Information from web site, reports
FWF	9	9 Member companies	FWF-MC-SW FWF-MC-FK FWF-MC-JW FWF-MC-AA	Information from web site, member social reports, factory complaints, performance checks, guidance documentation, financial reports
UNEP-FI	4	UNEP-FI project manager 1 UNEP-FI project manager 2 Member 1 Member 2	UNEP-FI-CCO1 UNEP-FI-CCO2 UNEP-FI-MC1 UNEP-FI-MC2	Information from web site; statement of commitment, tools and publications
ALL	3	Legal consultant Implementation manager 1 Member 1	ALL-CCO1 ALL-CCO2	Information from web site, member agreement and bylaws, progress reports, impact assessments, inspection reports, corrective action plans
ZDHC	5	ZDHC manager 1 ZDHC manager 2 Member 1 Member 2 Member 3	ZDHC-CCO1 ZDHC-MC1 ZDHC-MC2	Information from web site, roadmap/plan, protocols, research reports
SCAP	3	SCAP manager 1 Member 1 Member 2	SCAP-CCO1 SCAP-MC1 SCAP-MC2	Information from web site, voluntary agreement, member stories, clothing guide, market situation reports
C&C	4	C&C manager 1 Member 1 Member 2 (2 interviews)	C&C-CCO1 C&C-MC1 C&C-MC2	Information from web site, videos, tool and practices documentation

Table 3. Categorization of centralized coordination organizations of multilateral cooptition

	Networks	Collaborations	Equity partnerships
Organizational form	Association Society Group	Alliance Project-based	Joint venture
Business model	Non-profit	Non-profit	Non-profit
Revenue source	Membership dues Government funded projects	Membership dues Government funded projects Sponsors (private firms)	Owner investment
Scope of activities	Broad Multiple projects	Specific Issue related	Specific Issue related
Membership	Inclusive Open	Exclusive Selective	Exclusive Closed
Commitment	Non-committal No formalized, legal contracts	Obligational or contractual	Contractual
Time frame	Long term Continuous organizations	Short term (time bounded) Project-based	Long term Continuous organization
Cases	UNEP-FI FWF RC	SCAP ZDHC ALL	C&C

Table 4. Coopetition tensions experienced by actors and multilateral coopetition type

Experience of tension by actor	Networks	Collaborations	Equity partnerships
Alignment of interests			
CCO's	High	Low	Low
Member companies	High	High	Low
Community stakeholders	Low	Moderate	Moderate
Engagement of members			
CCO's	High	Moderate	Low
Member companies	Low	Low	Low
Transparency in knowledge sharing			
CCO's	Low	Low	Low
Member companies	High	Moderate	Low

Table 5. Actors that develop coopetition capabilities by type of multilateral coopetition

	Networks	Collaborations	Equity partnerships
Analytical coopetition capabilities			
Opportunity recognition	Members	Members	Members
Execution coopetition capabilities			
Supplier management	Members	Members & CCO	Members & CCO
Support in standardization, system and tool development, training and data processing	CCO	CCO	CCO
Project management	CCO	CCO	CCO
Monitoring member engagement	CCO	CCO	CCO

Figure 1. Coding template of concepts, themes and explanatory constructs

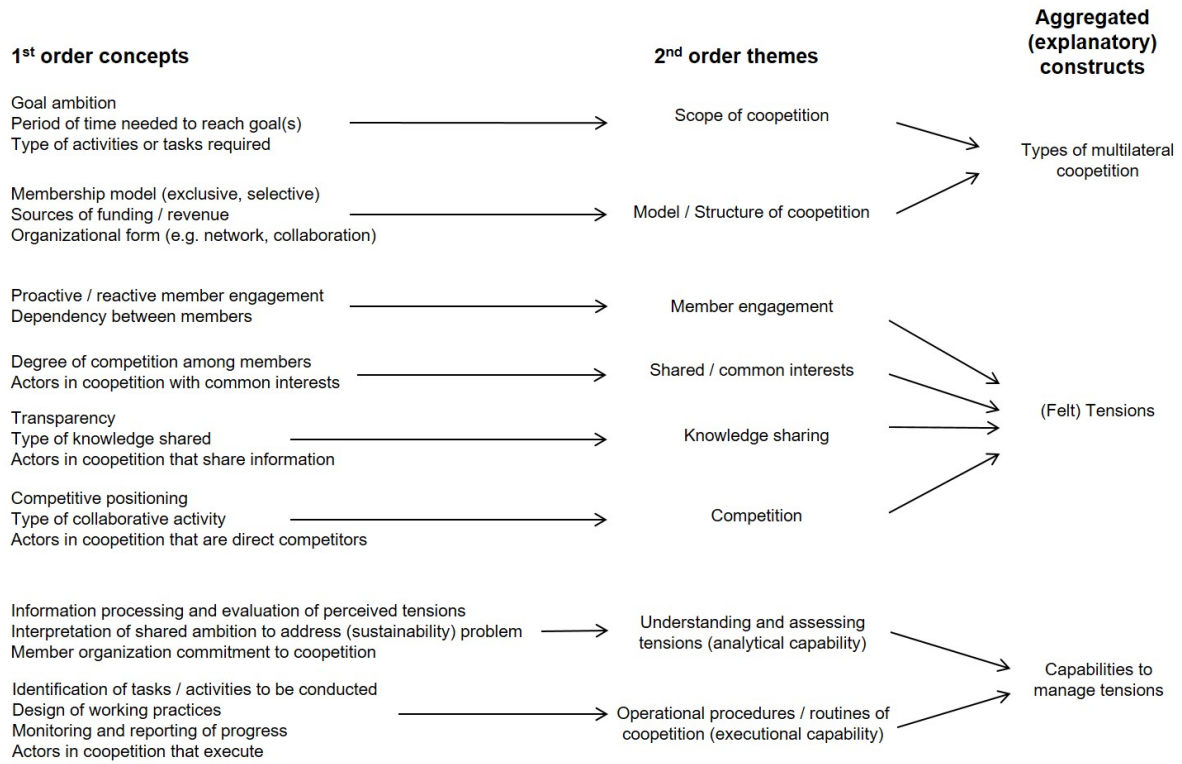


Figure 2. Conceptual model of multilateral competition types, tensions and capabilities

