

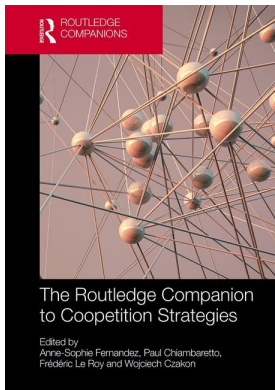
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### **Coopetition and group dynamics**

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# Coopetition and group dynamics

*Aleksios Gotsopoulos*

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## Introduction

*Coopetition*, the involvement of two or more organizations in interactions that are simultaneously cooperative and competitive in nature (Bengtsson & Kock, 2014: 14; Brandenburger & Nalebuff, 1997), has come to occupy a central position in modern business practice and research. In an ever faster-changing technological and market environment, organizations' ability to tap into the resources and the expertise of other organizations or to pool together resources in order to benefit from scale economies and increased bargaining power has become key to their sustained success.

The majority of research on coopetition has focused on coopetition between pairs of organizations (Davis, 2016). Individual organizations might maintain elaborate networks of cooperitors (Ahuja, 2000) and such networks might demonstrate considerable levels of overlap and closure (Coleman, 1988); yet, the unit of analysis generally remains that of the cooperative dyad—the pair of organizations that simultaneously compete and cooperate (Gimeno, 2004; Ahuja et al., 2009).

Coopetition, however, also occurs in groups that involve multiple members. In such groups, members are invested in a common cause, but at the same time compete against some or all other organizations in the group (Das & Teng, 2002; Fonti et al., 2017; Zeng & Chen, 2003), and/or against other groups or organizations outside the focal group (Gnyawali & Park, 2009). The presence of multiple members in a group can alter the dynamics of coopetition materially, accentuating both the expected benefits and the potential problems. Cooperative groups can differ significantly from cooperative dyads on the basis of coopetition, the scope and the duration of the cooperative relationship, the dynamics of partner selection, and the form and function of monitoring mechanisms. The dynamics and the function of such multi-party cooperative groups are the focus of this chapter.

## Cooperative groups

Organizations form cooperative relationships in order to gain access to their partners' resources (Gulati, 1995) and strengthen themselves vis-à-vis competitors (Gimeno, 2004). Because multi-member cooperative groups are generally larger than cooperative dyads, they promise access

to more diverse resources and can offer significant competitive advantages to their members (Morris et al., 2007). Such advantages can be particularly pronounced when individual group members are small or when markets are characterized by heightened uncertainty.

In this vein, Fonti et al. (2017) analyzed the case of a diverse, forty-member cooperative group that included universities, firms, and government agencies, and aimed at technological innovation. As each group member contributed to the common goal in ways that reflected their individual expertise, the size and the diversity of the group created significant complementarities among members' contributions and increased the group's innovation potential considerably. Similarly, Cusumano et al. (1992) highlight how, under the conditions of high market uncertainty that characterized the early VCR industry, the sizeable and diverse cooperative group that formed around JVC played a crucial role in establishing VHS as the dominant technological design in the industry and enhanced group members' competitiveness.

When cooperative groups form among organizations of the same type, expected benefits are associated more with size than with access to diverse resources. Large organizational size has been associated with lower failure rates, as it enhances both the legitimacy and the competitive strength of organizations (Dobrev & Carroll, 2003; Haveman, 1993). Cooperative groups of similar organizations offer member organizations many of the benefits of large size, while still allowing them to maintain their independence and flexibility. Membership in a cooperative group allows even small members to benefit from scale economies and increased bargaining power vis-à-vis buyers and suppliers (Morris et al., 2007). Fine-grained information sharing among members reduces duplication efforts (Gnyawali & Park, 2011) and eases adaptation to environmental change (Kraatz, 1998). Perhaps most importantly, cooperative groups allow member organizations to pool together their resources. Sharing slack resources buffers individual members from environmental shocks and helps them to better withstand temporary disruptions (Uzzi, 1997). At the same time, as group members join forces, they become better able to launch competitive attacks against other groups or individual organizations, and to withstand similar attacks that emanate from outside the focal group (Gnyawali & Madhavan, 2001).

### Challenges of competing in groups

Despite the promise of significant advantages that cooperative groups hold over more limited, dyadic cooperative relationships, their potential benefits appear to remain untapped much more often than those of dyadic relationships (Davis, 2016; Fonti et al., 2017). This is because the same factors that create a greater potential for advantages also accentuate problems of opportunism and free-riding that are generally endemic to cooperative relationships.

In cooperative groups that comprise heterogeneous members, the expectations and behavior of different types of members are often governed by different institutional logics (Jones et al., 2012). If the social norms that prescribe expectations regarding cooperative behavior, accepted levels of in-group competition, and schemes of benefit appropriation differ significantly among types of organizations, incentive misalignment and confusion occur (Fonti et al., 2017). As expectations of appropriate behavior conflict, member organizations are likely to withhold effort or defect, causing the group to dissolve or, at a minimum, underperform (Gulati et al., 2012).

Even in cooperative groups that are more homogeneous, the sheer presence of multiple members increases the risk of conflict and mistrust almost exponentially. Multi-party relationships require each party to enact multiple partner-specific roles simultaneously (Simmel, 1950). When the diverse or even conflicting expectations of different parties are not met, or when one or some parties feel even just temporarily excluded from collaborative interactions, mistrust ensues (Davis, 2016).

The increasing tendency to mistrust one's partners as a group grows larger is not entirely misplaced. Organizations in coopetitive groups face a constant challenge of optimizing the allocation of limited resources between individual priorities and collective goals. Even though a stronger collective benefits all members, any individual organization might have a strong incentive to free-ride on others' contributions and redirect its own resources toward individual goals (McCarter et al., 2011). Such tendencies are accentuated as a coopetitive group grows larger; group size makes it more difficult to monitor and accurately assess the contributions of each individual member, and increases the incentives to act opportunistically (Zeng & Chen, 2003). Even if an organization wishes to cooperate, however, the sheer expectation that others will behave opportunistically can lead it to engage in *defensive defection* (McCarter et al., 2011); it might defect first and withhold effort toward the collective goal in order to avoid being labeled a "sucker" (Fonti et al., 2017; Gulati et al., 2012).

Despite their numerous potential advantages then, large coopetitive groups are often difficult to manage. As monitoring becomes more difficult with size, and as conflicting priorities or norms of interaction diminish trust, large groups are at constant risk of breaking up or fragmenting. The smaller-in-size, but more cohesive small worlds of fewer-in-number and similar-in-type organizations that might result from such fragmentation (Baum et al., 2003) are perhaps more functional; however, given their more limited size and scope they generally also lack the potential that brought larger groups together in the first place.

### Monitoring mechanisms and formal sanctions

The significant benefits that coopetitive groups promise but often fail to deliver increase the need for effective governance mechanisms that will keep opportunistic behavior in check. Contracts that specify each member's contributions to the group and sanctions for those that fail to meet their obligations are, perhaps, the most straightforward of such mechanisms, and have been studied extensively (Williamson, 1991). Compared to dyads, larger coopetitive groups are better able to enforce contracts and apply sanctions on deviants. This is because both the severity and the credibility of sanctions depend crucially on whether the benefits that the enforcer(s) receive(s) from applying the sanctions are sufficient to compensate for the costs of sanctioning (Das & Teng, 2002; see also Coleman, 1990). Because in groups the costs of the sanctioning activities are shared across multiple members, the sanctioning capacity increases and the threat of sanctions becomes more credible.

The higher credibility of sanctions, however, does not address the increasing difficulty of detecting defectors as a group grows larger. As a group grows in size, interactions among group members become increasingly complex; assessing individual contributions accurately becomes problematic (Zeng & Chen, 2003) and any form of contract becomes incomplete, as even the most elaborate contracts fail to plan for all contingencies in an increasingly complex web of interactions (Fonti et al., 2017; Williamson, 1991). Formal sanctions become correspondingly irrelevant, if no breach of contract can be established. Rather unsurprisingly then, in larger coopetitive groups formal contracts do not constitute a particularly effective governance mechanism, but are rather better suited to offer guidance and complement other forms of governance (Poppo & Zenger, 2002).

### Rational relational mechanisms of governance

In complex exchanges that are characterized by uncertainty and/or a difficulty of measuring contributions and performance, relational forms of governance appear to fare better than formal

contracts (Dyer & Singh, 1998; Poppo & Zenger, 2002). Not relying on formally specified obligations and sanctions, but rather on fine-grained information exchange, flexibility, and shared norms, relational mechanisms are superior at dealing with the unforeseen circumstances that arise in complex, multi-member interactions.

Prior literature distinguishes between relational governance mechanisms with rational origins, in which expectations of future benefits encourage actors to cooperate in the present, and those with socially derived, normative underpinnings that can lead to cooperative behavior even in the absence of economic benefits (Poppo & Zenger, 2002; Uzzi, 1997). Among the relational governance mechanisms that have rational origins, reputation is, perhaps, the most significant. In groups where ties among members are characterized by a high degree of redundancy and closure (Burt, 1992; Coleman, 1990), focal organization A can learn about the behavior of organization B vicariously from organization C. As structural embeddedness increases, reputation becomes an asset (Granovetter, 1985; Gulati, 1995); establishing a reputation as trustworthy in its dealings with organization C allows organization B not only to benefit from an ongoing relationship with C, but also to develop a relationship with C's partner, organization A. In contrast, being labeled as an opportunist by C jeopardizes B's relationship not only with C, but with all of C's partners as well, and might cause B to be ostracized from the group. Notably, because reputation depends on partners' common understanding of what constitutes appropriate behavior in a cooperative setting, a negative reputation and the resulting sanctions do not depend on formally proving violation of contract, but on a more nebulous and thus easier-to-establish breach of trust.

Relational governance mechanisms such as reputation address some of the problems that formal contracts cannot fully account for. Especially as closure increases, so does the probability that opportunistic behavior will be detected and penalized (Coleman, 1990). Such mechanisms, however, do not change the motives of organizations' behavior, which remain focused on the maximization of individual benefits. If the short-term benefits of opportunistic behavior are higher than the long-term costs, or if the end-game is in sight, organizations still have an incentive to behave opportunistically. In such cases, rational relational governance mechanisms fall apart: loss of reputation or the threat of expulsion from the group lose their effectiveness as sanctioning mechanisms, and defection becomes the dominant strategy (Murnighan, 1994; see also Uzzi, 1997).

### **Social relational mechanisms of governance and the emergence of group identity**

Formal contracts and rational relational mechanisms attempt to enforce cooperation by increasing the economic costs of defection. However, by focusing group members' attention solely on the economic consequences of defection, they enforce a calculative approach to cooperation that encourages members to exploit loopholes, if doing so is possible, and to behave opportunistically, if detection can be avoided (McCarter et al., 2011). This becomes an increasingly pressing problem as groups grow in size; increasing complexity renders contracts incomplete, whereas relational mechanisms that are based on a rational cost-benefit analysis do little to prevent organizations from "self-interest seeking with guile" (Williamson, 1979) when doing so becomes easier.

Because of the shortcomings that characterize formal monitoring mechanisms and rational incentives, in larger cooperative groups effective governance has to hinge more on members' voluntary prosocial behavior. Prosocial behavior—that is, an actor's willingness to accept sacrifices in order to assist her peers—requires a significant change in an actor's motives so that considerable value is placed on the well-being of the group. Granovetter (1985) attributes this kind of

behavior that departs from neoclassical profit maximization to actors' desire "to derive pleasure from the social interaction that accompanies" their business interaction. As the continuation of such interaction presupposes the well-being on one's partner(s), the success of the partner(s) becomes a goal in its own right. Rather than attempting to take advantage of a weak or faltering partner (Ahuja, 2000), organizations might therefore volunteer resources and assistance, even if payback is uncertain both in time and type (Uzzi, 1997).

Essentially, prosocial behavior emanates from a sense of common fate that bounds together actors facing common threats (Portes & Sensenbrenner, 1993). In other words, altruism most often reflects an explicit or implicit understanding that stronger peers strengthen the aggregate group and thus, in the long-run, benefit the focal actor too (Audia & Rider, 2010; Uzzi, 1997). Yet, while the origins of prosocial behavior might be inherently rational, over time identification with the group becomes internalized. Because threats are perceived as originating from outside the focal group, often in the form of competition from a salient outgroup, they vividly highlight the distinction between members and non-members. A shared group identity quickly emerges to stress a sense of "we-ness" and clearly define the in-group in opposition to the out-group (Ingram & Yue, 2008; Portes & Sensenbrenner, 1993; see also Rao et al., 2003).

Identification with the group redefines members' priorities. The well-being of the collective becomes an important goal in its own right, even if it requires material sacrifices that might jeopardize the maximization of individual benefits. In some cases, the collective goal might assume such symbolic value that it takes precedence over an actor's more instrumental, individual goals; the *hedonic* benefits of contributing toward the group's success might more than compensate for the required sacrifices (Gottschalg & Zollo, 2007; Willer, 2009).

In other words, as group identity and collective goals are internalized, prosocial behavior becomes voluntary. The role of any form of monitoring mechanism correspondingly recedes, to the extent that such mechanisms are often fully absent in coopetitive groups that display a high degree of cognitive embeddedness (Uzzi, 1997). This absence of monitoring mechanisms is indeed meant to reinforce the moral rather than contractual nature of members' obligations. As norms of prosocial behavior become internalized, members abstain from opportunism not because of a threat of external sanctions, but because engaging in such behavior would damage their self-image (Gulati et al., 2012; McCarter et al., 2011).

Technically, the lack of monitoring mechanisms increases the risk that some members of the group will take advantage of others' trust and behave opportunistically (Coleman, 1988; Granovetter, 1985). In practice, however, the emergence of a shared identity and macroculture that emphasizes solidarity and moral integrity in business dealings has been found to keep the occurrence of malfeasance particularly rare (Carnevali, 2011; Das & Teng, 2002; Granovetter, 1985). As a result, when monitoring is inherently problematic—as it is in sizeable coopetitive groups—reliance on relational governance mechanisms that nurture and stress a shared group culture and identity might be the only viable option, yet an option that can be highly efficient.

## Group size and the choice of group members

Previous research on coopetition has noted that strategic interdependencies and complementary resources maximize the potential of coopetitive relationships (Fonti et al., 2017; Gulati, 1995). In contrast, coopetition among organizations that are too similar and compete directly can lead to incentive misalignment, as coopetitors attempt to pursue private benefits at the cost of common benefits (Gimeno, 2004).

In sizeable coopetitive groups, however, these dynamics might be flipped. Organizations that come from diverse sectors or are otherwise significantly different (e.g., research universities

versus profit-oriented firms) tend to abide by different and potentially conflicting institutional logics (Jones et al., 2012). As diversity increases, convergence on a shared group identity and macroculture becomes harder or altogether impossible, and might thus deprive sizeable coopetitive groups from the only effective governance mechanism available. Despite the significant potential benefits of resource complementarities, then, in larger groups diversity is more likely to cause conflict and fragmentation that precludes the realization of benefits (Fonti et al., 2017).

The crucial importance of shared macroculture implies that, to be successful, sizeable coopetitive groups have to display high levels of homogeneity (Audia & Rider, 2010; Carnevali, 2011). In contrast to arm's-length coopetitive relationships where homogeneity accentuates direct competition (Gimeno, 2004), in coopetitive groups with strong, shared identity, relations among members tend to be more commensalistic. Because competitive threats are framed as emanating from outside the group, solidarity characterizes interactions in-group, and competitive efforts are directed primarily against the out-group (Ingram & Yue, 2008).

The need to maintain a shared group identity that breeds trust and voluntary prosocial behavior also determines how group members are selected. Membership may require a direct referral or be a matter of birthright. Coopetitive groups that rely on a shared identity often emerge around a specific locale and rely on ethnic bonds or otherwise dense and overlapping network ties; the Modena knitwear industry (Lazerson, 1995), the Providence jewelers (Carnevali, 2011), or New York's Jewish diamond merchants (Coleman, 1988) provide some well-known examples. Strong identification with the locale or the ethnic group fosters a sense of common fate, facilitates enforceable trust, and reinforces a strong group identity that might exist independently of and even predate the business relationship (Audia & Rider, 2010; Portes & Sensenbrenner, 1993; Uzzi, 1997). In such groups, specialization and the development of strategic interdependencies among members might occur after the coopetitive relationship has started, rather than act as a prerequisite for its formation (Khanna & Rivkin, 2006).

In a similar vein, the need to maintain a strong group identity might impose limits on group size. Trust and goodwill in a group depend crucially on the strength of ties among members (Zeng & Chen, 2003). As a group grows larger, the number of ties that any focal organization needs to maintain grows exponentially, and can quickly become prohibitively taxing in terms of time and effort (Ahuja, 2000). While dropping some redundant ties might not cause a significant loss of information (Burt, 1992), it still increases the social distance among partners and can quickly diminish prosocial behavior (Baldassarri, 2015). As a result, a group whose success relies on a shared identity and the voluntary prosocial behavior of its members is likely to experience an upper threshold of size. As growth beyond such a threshold weakens the group's identity, it puts governance through moral suasion at risk, and can cause the group to underperform or fragment (Baum et al., 2003).

## Conclusion

Despite the recently rich stream of literature on coopetition, coopetitive groups remain rather understudied and poorly understood. Because of their larger size and their ability to bring together numerous and diverse partners, coopetitive groups hold significantly higher potential than dyads. However, because size also accentuates problems of opportunism and free-riding that are inherent to coopetitive relationships, groups fail to achieve their potential much more often than dyads do (Fonti et al., 2017). The inadequacy of formal contracts and monitoring mechanisms as effective governance structures in the case of coopetitive groups implies that such

Table 22.1 A comparative analysis of governance mechanisms in the case of cooperative groups

	<i>Formal Contracts</i>	<i>Rational Relational Mechanisms (e.g., reputation)</i>	<i>Normative Relational Mechanisms (e.g., internalized norms of behavior)</i>
Basis of compliance	Contract specifies partners' obligations and sanctions for deviants	Compliance is voluntary, based on a rational cost/benefit analysis of compliance versus deviance. Costs and benefits are not limited to the current period and partner(s), but also have to do with one's ability to form cooperative relationships in future periods and/or with other partners	Compliance is voluntary, based on internalized values and principles of what constitutes appropriate behavior. Because group members value the group's well-being as a significant goal, they behave in a prosocial way, even if doing so requires sacrifices in terms of individual performance
Advantages	Simplicity: obligations and sanctions are well-defined	Reputation and trust require that an organization not only adhere to the letter of an agreement, but also demonstrate goodwill toward (a) partner(s). As a result, reputation constitutes a governance mechanism better suited than contracts to dealing with the unforeseen contingencies that emerge in complex relationships	When compliance and prosocial behavior are voluntary, monitoring mechanisms and sanctions become largely unnecessary. Because monitoring is inherently difficult in sizeable cooperative groups that are characterized by complex interactions, normative relational mechanisms that promote voluntary compliance fare better than any other forms of governance mechanisms in sizeable groups
Disadvantages/challenges	In sizeable cooperative groups, contracts fail to account for all possible contingencies; as the web of interactions among members grows increasingly complex and as individual behavior becomes difficult to monitor, contracts lose their effectiveness	Rational relational mechanisms of governance do not change the underlying motives of group members' behavior, which remains focused on maximizing individual performance. A member is still expected to behave opportunistically, if she expects to get away with it, or if the endgame is in sight	The need to maintain a strong, shared group identity that is a prerequisite for voluntary prosocial behavior can pose constraints on diversity and group size. Conflicting institutional logics or size above a threshold can cause a group to fragment and fail to achieve its potential



groups need to rely much more on relational mechanisms that foster the emergence of a shared group identity and internalized values that promote members' voluntary prosocial behavior.

This phenomenon of (cognitive) embeddedness, puzzling as it is from a neoclassical point of view, has been studied in its own right and has augmented significantly our understanding of the role that trust, a shared macroculture, and a common identity play in economic transactions (Baum et al., 2003; Granovetter, 1985; Uzzi, 1996). Despite the importance of perceived common adversity in driving potential direct competitors to coalesce and cooperate, however, the origins and limits of such cooperation, as well as the circumstances under which it occurs, remain rather unclear. Geography and ethnic bonds are often evoked as explanations (Portes & Sensenbrenner, 1993; Uzzi, 1996), yet their role is likely less important in the case of larger and more mobile organizations or in today's more interconnected world, where common values rather than spatial collocation might drive cooperative behavior (Weber et al., 2008). Literature on social movements that coalesce around a common goal and often compete against other groups with conflicting goals might offer some insights (Rao et al., 2000), yet it tends to focus predominantly on individuals who often pursue symbolic rather than profit-oriented goals. Research on cooperative coalitions that form at the early stages of new industries to promote competing perceptions of the industry (Grodal et al., 2015; see also Weber et al., 2008) perhaps takes a step further. This stream of literature, however, is still at its very early stages and does not address the occurrence and performance of embedded cooperative groups in more mature industries.

In conclusion, cooperative groups, their types, formation, and performance, as well as the governance mechanisms that can maximize their potential are topics significantly less understood than cooperative dyads and their dynamics. Overall, effective cooperative groups seem to be more prevalent in young industries and to form among small organizations that share strong bonds based on ethnic ties, similar location, or investment in a common cause. To what extent effective cooperative groups can also form among larger organizations or in industries that are older is less clear. Better understanding the dynamics of cooperative groups is important, however, given the increasing prevalence of cooperation in modern business. From a managerial perspective, a lack of better understanding of cooperative groups and their dynamics is likely to limit the use and effectiveness of cooperation as a strategy. From a theoretical perspective, cooperation blurs the boundaries between individual organizations and the larger cooperative groups they belong to, complicating the analysis of a number of related phenomena and calling for more research to be conducted in this field (Gotsopoulos & Pitsakis, 2017).

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