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PARADOXICAL NATURE OF COOPETITION

Abstract. This study aims to identify the distinctiveness of the paradoxical nature of coopetition, and its significance in the context of cooperative relationships. Methodologically, this research follows a qualitative approach, where focus group interview techniques was used to gather data from two groups of representatives of manufacturing firms in Poland. The study findings suggest, that the paradoxical nature of coopetition is a critical element in cooperative relationships and that paradoxicality is an inherent and indispensable aspect of coopetition, with the evaluation of risks being a complex and multidimensional process. This paper's original contribution lies in its empirical evidence of the paradoxical nature of coopetition in the manufacturing sector.

Keywords: coopetition, paradoxicality, cooperation, inter-organizational relationship.

1. Introduction

Interest in coopetition research has grown rapidly in recent years (Gnyawali & Park, 2011; Jakobsen, 2020; Bills et al., 2021; Cordo et al., 2022; Klimas et al., 2023a). Coopetition, as defined by various researchers, is the practice of organizations simultaneously engaged in both cooperative and competitive behavior (Bengtsson & Kock, 2000; Gnyawali & Park, 2011; Dorn et al., 2016; Gnyawali & Song, 2016; Christ et al., 2017; Chen et al., 2019; Devece et al., 2019; Bengtsson & Kock, 2000; Raza-Ullah, 2020). Concerning coopetition studies, there has also been a burgeoning interest in comprehending the concept of cooperation as a complementary mechanism that operates under selective pressures (Ricciardi et al., 2021).

Coopetition is widely conceptualized as a paradoxical relationship (Bengtsson & Kock, 2014; Czakon et al., 2014; Chiambaretto & Fernandez, 2016; Bouncken et al., 2018; Crick & Crick, 2019; Raza-Ullah, 2020), regardless of whether it occurs horizontally or vertically (Pellegrin-Boucher

et al., 2013; Akpınar & Vincze, 2016; Cozzolino & Rothaermel, 2018; Monticelli et al., 2018; Jakobsen, 2020). Unlike sequential cooperation and competition, coopetition involves a dynamic and ongoing interplay of contradiction – firms collaborate in some areas while competing in others (Crick & Crick, 2019). Because of this duality, the relationship is inherently tension-laden (Fernandez et al., 2016).

New evidence highlights the complexity of the coopetition paradox and emphasizes the importance of managing tensions between cooperative and competitive aspects (Crick & Crick, 2019). Although coopetition has gained significant popularity, it remains a developing subject of research (Czakon, 2014) which calls for exploring the intricacies and developments (Liu et al., 2015). The ability to navigate paradoxical tensions and find equilibrium between competition and cooperation is vital in determining how competing partners can simultaneously compete and cooperate with one another (Peng et al., 2018). Therefore, a deeper understanding of paradoxical tension in coopetitive relationships is crucial (Cozzolino & Rothaermel, 2018). Also, there is a gap in understanding how the fundamental properties of paradoxes interact in various contexts and intersect with other complex paradoxes, specifically within the domain of coopetition (Manzhynski & Biedenbach, 2023). Also, the understanding of the circumstances under which organizations can positively impact the relationship between paradoxical tension and performance is limited (Raza-Ullah, 2020). Given the above this paper addresses the following research question:

RQ1 *Is paradoxicality important in coopetitive relationships?*

The process of answering the question mentioned above was rooted in qualitative studies. The research design incorporated two distinct phases to provide a comprehensive understanding of the subject matter. The first step involved conducting a systematic literature review to gather and synthesize relevant information from existing studies. The second step was qualitative field research, which aimed to gather firsthand insights and data on the topic. The qualitative field research was conducted using the focus group interview technique (FGI), among which two were FGIs where conducted. The interviews were carried out with representatives of manufacturing firms in Poland from Low and High – tech sectors.

The structure of this paper for the remaining sections is as follows. In the theoretical section, the fundamental lexicon pertaining to coopetition paradoxicality is expounded upon, alongside an articulation of the definition of coopetition paradoxicality in a relational view framework. Following this, the research methodology is delineated, culminating in the fourth

section where the field research findings are deliberated upon. Finally, the paper concludes by answering the research question posed earlier and finally, the paper is brought to a close with suggestions for avenues of future exploration.

2. Theoretical background

In the realm of coopetition research, a new trend emerged in which scholars are utilizing a “paradox” framework to analyze the concept of coopetition. This approach involves examining the seemingly contradictory nature of coopetition, which involves firms simultaneously cooperating and competing (Raza-Ullah et al., 2014; Stadtler & Van Wassenhove, 2016, Raza-Ullah, 2020).

By definition, the concept of coopetition is inherently paradoxical in nature (Chiambaretto & Fernandez, 2016; Chen et al., 2019; Crick & Crick, 2019) as it involves two seemingly conflicting elements, cooperation and competition, coexisting and interacting with each other where in essence, firms engaged in coopetition are simultaneously collaborating with their competitors while also striving to gain advantages (Czakov et al., 2014; Akpınar & Vincze, 2016; Chiambaretto & Fernandez, 2016; Mathias et al., 2018; Monticelli et al., 2018; Crick & Crick, 2019). Coopetition in paradoxical approach challenges the trade-off between cooperation and competition as it manages opposite forces and generates synergistic outcomes. It is not the mere combination of cooperation and competition, but the two forces mutually define and rely on each other where the tension arising from the contradiction between these forces can lead to instability in inter-firm relationships, but also promote partners’ effectiveness and creativity (Liu et al., 2021).

The approach of coopetition as through paradoxical lenses recognizes that, both cooperation and competition are necessary and interdependent elements in achieving success in a cooperative environment, where organizations should embrace the paradoxical nature of coopetition and develop strategies that effectively balance these contradictory elements to achieve their goals (Raza-Ullah, 2020). Embracing coopetition and inter-firm rivalry can offer companies a logical approach to gain access to resources, capabilities, and opportunities that may not be attainable through an independent business model (Crick & Crick, 2019). “Paradoxical nature of coopetition becomes visible in the way in which this positive potential also creates possible threats and risks” (Bouncken et al., 2018, p. 393). The upcoming discussion

and research presented in this paper will adopt this conceptualization of the paradoxical nature of coopetition. In this paper, paradoxicality in coopetition is understood as the simultaneous coexistence of mutually dependent yet contradictory forces of cooperation and competition, whose interaction generates both synergistic opportunities and inherent tensions.

The concept of paradox can be understood as an inherent contradiction that exists between two opposing, yet intricately interconnected elements, where dual nature of paradox is characterized by its contradictory and interdependent qualities, which serve to emphasize the complex and often paradoxical relationships that can exist between seemingly disparate entities (Smith and Lewis, 2011; Bengtsson & Kock, 2014; Liu et al., 2021). In coopetition as a paradoxical relationship (Chen et al., 2019; Crick & Crick, 2019) the process of organizing is not a simple one as it involves several tensions that are inevitable, such as the balance between collaboration and control, individualism and collectivism, flexibility and efficiency, exploration and exploitation, and profit and social responsibility (Smith & Lewis, 2011). Given that coopetition is a paradoxical and inherently tension-laden relationship, fostering a psychological interdependence between firms can prove to be a considerably more demanding task as compared to relationships that involve lower levels of tension (Jakobsen, 2020). The relationship between the organizations may be jeopardized due to the ambivalent emotions and tensions that arise from coopetition, ultimately affecting the actors involved as effectively managing paradoxical tension and striking a balance between competition and cooperation are pivotal strategies that dictate how rival partners can compete and collaborate simultaneously (Peng et al., 2018).

Understanding the interplay between competition and cooperation is crucial for successful collaborations. There is a need to unravel the intricacies of coopetition and its role in shaping organizational dynamics (Manzhynski & Biedenbach, 2023). A limited understanding exists of how organizations can positively impact paradoxical tension, hindering their ability to leverage the benefits of cooperation and competition as research suggests these concepts can coexist and complement each other, the specific conditions are unclear (Cozzolino & Rothaermel, 2018; Raza-Ullah, 2020). The complex interplay between core paradox properties in diverse empirical contexts (Manzhynski & Biedenbach, 2023) and their relation to other interdependent paradoxes to enhance the understanding of the coopetition dynamics require a deeper understanding (Gnyawali & Song, 2016). All in all, as coopetition is widely considered in the literature as a paradoxical relationship, characterized by high levels of tension (Bengtsson & Kock, 2014) it is important to deep deeper into coopetition tension theoretically and develop

measures that grasp the fundamental aspects of tension and its relationship with different types of coopetition, including competition-dominant, cooperation-dominant, and balanced coopetition (Gnyawali & Song, 2016). The paper attempts to address the above research gaps.

3. Methodological design

The principal objective of this paper is to investigate and delineate the intricacies of the paradoxical nature of coopetition, a phenomenon that involves the simultaneous existence of cooperation and competition among actors through answering the following question:

RQ1 *Is paradoxicality important in coopetitive relationships?*

The above question was addressed through qualitative research methods. By employing this method, it was possible to capture the research experience and interpretation of the paradoxical nature of coopetition. This approach facilitated the gathering of first-hand accounts and perspectives, enabling to gain a more nuanced understanding of the paradoxical nature of coopetition. The insights gained from the respondents' experiences and interpretations (Schutz, 1962) were crucial in shaping the overall findings and conclusions of the research (Altinay & Brookes, 2012). The aim, through the qualitative study framework, was to gain a deeper insight into the significance of the paradoxical nature of coopetition as perceived by the respondents.

The research process was divided into two distinct phases. The initial phase involved conducting a systematic literature review (SLR) (Klimas et al., 2023b) and the second qualitative field research¹. The first step involved a rigorous and comprehensive analysis of the existing research on coopetition phenomena. This enabled to gain a broad understanding of the topic and identify any knowledge gaps or areas of interest that required further investigation. The second step involved qualitative field research, which enabled to collect primary data from the participants through qualitative methods. This approach allowed to gain deeper insights and a more nuanced understanding of the subject matter, which were then integrated with the findings from the systematic literature review to produce a comprehensive analysis.

Field research was conducted by utilizing the focus group interview technique (FGI), which involved gathering a group of individuals to participate in a discussion on a coopetition.

Data collection was limited to one industry – manufacturing. The data was collected in Poland in a total of two FGI. The duration of each interview lasted 120 minutes. In both FGI there were 6 participants (O1; O2; O3; O4; O5; O6), with knowledge of cooperation between business entities and competitors, representatives of companies classified as low-tech (PFG1) and high-tech (PFG2). Participants were selected through purposive sampling, ensuring that all individuals had direct experience with cooperation and competition between firms.

The general characteristics of the surveyed participants is presented in Table 1.

Table 1
Characteristics of the surveyed firms

Low-Tech	High-Tech
Gender of firm's representative	
Male – 5 people Female – 1 person	Male – 2 people Female – 4 people
Nuner of coopetition partners	
One – 5 firms Three and more – 1 firm	One – 3 firms Three or more – 3 firms
Size of the company	
2–9 employees – 2 50–249 employees – 1 250 and more employees – 3	2–9 employees – 1 50–249 employees – 2 250 and more employees – 3
The year the company was founded	
2005 – 1 2009 – 1 2013 – 1 2020 – 2 No information – 1	1910 – 1 1990 – 1 2002 – 2 2008 – 1 2020 – 1

The geographic scope of activities for the surveyed firms differed by technology level. In the low-tech group, operations extended to global, national, and international markets, whereas in the high-tech group, they were primarily local, regional, and national. All firms operated within the manufacturing sector. The low-tech group included companies engaged in the production of foodstuffs; manufacture of equipment, instruments, and medical devices (including dental); manufacture of plates, sheets, pipes, and sections of plastics; manufacture of other furniture; and execution

of electrical installations. The high-tech group comprised firms involved in the manufacture of computers and peripheral equipment; manufacture of electric lighting equipment; manufacture of medicines and other pharmaceutical products; and manufacture of bearings, gears, gearing, and drive components.

Both FGIs were conducted by a research company at the end of 2022. They were led by a professional moderator, audio-recorded, and complemented by non-participant observation conducted by a member of the research team from behind a one-way mirror.

4. Findings

The paradoxical nature of coopetition was conceptualized based on the definition of Bouncken et al. (2018) where the paradoxical nature of coopetition is manifested in the fact that its positive potential also gives rise to potential threats and risks. This duality can be observed in the way in which the collaborative and competitive aspects of coopetition intersect, leading to complex and sometimes unpredictable outcomes. While the collaboration aspect of coopetition can lead to synergies and mutual benefits, the competitive aspect can create tensions and conflicts, potentially resulting in negative outcomes. This paradoxical relationship between cooperation and competition lies at the heart of the concept of coopetition.

This understanding of the paradoxical nature of coopetition was confirmed by the respondents, who on one hand admitted that paradoxicality is inscribed in the coopetitive relationship, and on the other – they perceive this duality as a natural, requiring no special attention or reflection situation: “this is the natural state of things, there is no rift here, every company cares about its development, so it is automatic to select any path that leads to this development, and the use of resources of people who are theoretically our opponents...” [PFG1; O6]. In the line with the research question (RQ1) the answer is positive as paradoxicality in coopetition was found significant and more is the natural state of matter as “this is a natural process, it will be everywhere, for people it is natural” [PFG1; O6]. Summing up the above, the respondents confirmed that the paradoxical nature of coopetition is a natural state and is essential to the relationship. It is considered automatic to the use resources of coopetitors for company development.

In the opinion of the respondents, paradoxicality manifests itself in many aspects of competition. Based on the responses of the partici-

pants, the concept of paradoxicality in competition with partners is multi-dimensional. One aspect of this paradoxicality involves risk-taking and calculation – “in fact, you just have to estimate the risk and sort of deduce whether it’s going to rain or not, whether you should take an umbrella or whether you should not take that umbrella going out of the house” [PFG2; O3]. The respondents indicated that estimating risks in coopetitive relationships can be difficult, and making decisions based on those estimations can be a challenge. There is a risk calculation as there “always has to be somewhere in your head and it always stays in your head” [PFG1; O2]. The above goes in line with the paradoxical nature of coopetition and becomes evident in how the positive potential of collaboration creates opportunities for mutual gain while also exposing participants to potential risks and uncertainties (Bouncken et al., 2018).

Operating in the paradoxical nature of coopetition respondents compared to marriage: “it’s a bit like the situation in marriage – on the one hand we want to be with each other so that someone can bring us tea in our old age, and on the other hand there is a risk that we may divorce. Such we do not know what will happen when it happens...” [PFG2; O4] “so it’s that kind of experience and either something cool comes out of it or not...” [PFG2; O1].

Coopetition is a paradoxical but effective approach where competing organizations collaborate to leverage their respective strengths and knowledge for mutual benefit and competitive advantage through interactions that involve complementing, integrating, sharing, and generating knowledge, learning for organizations, ultimately leading to mutually beneficial outcomes (Raza-Ullah et al., 2014, Monticelli et al., 2018). The respondents’ opinions were consistent with the above as even if coopetition relationships have paradoxical nature they have “more of these pluses why we are undertaking this cooperation and there are times when there are more minuses” [PFG1; O1] and in “such relationships have more pluses than minuses, because if these relationships symmetrically gave more losses than gains, no one would enter such relationships” [PFG1; O4].

Mainly paradoxicality of coopetition occurs in the aspect of knowledge sharing – “such a split, (...) there are new ideas and natural curiosity, everyone tries to not to unveil too much and not too little...” [PFG1; O2]. It goes in line with literature where from a paradoxical perspective exploring the effectiveness of coopetition can offer a clearer understanding of the inter-firm relationship when partners engage in the mutual transfer of technologies for innovation (Liu et al., 2020).

5. Discussion

This study set out to explore the paradoxical nature of coopetition, with particular attention to how managers in manufacturing firms perceive and navigate tensions between cooperation and competition. The findings offer three key insights. First of all, paradoxicality is perceived as a natural and inevitable feature of coopetitive relationships, rather than a phenomenon requiring special intervention. Then, a risk awareness and continuous risk calculation are central to how actors manage coopetition. Also knowledge sharing constitutes both the main area of collaboration and the principal source of tension.

Perceiving paradoxicality as a natural state

Respondents consistently described paradoxicality as “the natural state of things” in inter-firm relations, requiring no deliberate mitigation strategies. This perception partially aligns with Bouncken et al. (2018), who conceptualize the coopetition paradox as a condition where positive potential is inseparable from possible risks. However, while prior literature tends to frame paradoxicality as a managerial challenge necessitating active balancing (Fernandez et al., 2014; Raza-Ullah, 2020), the present study extends this view by showing that, in some contexts, actors normalize paradoxicality to the point where it becomes an implicit assumption in strategic thinking. This normalization may reduce perceived cognitive strain but could also risk underestimating latent conflicts.

Risk calculation as an embedded managerial logic

Risk emerged as a dominant theme, expressed through metaphors of everyday decision-making (“whether to take an umbrella or not”). This finding supports prior work emphasizing the role of tension management in coopetition (Peng et al., 2018) but adds nuance by revealing how managers incorporate risk assessment into routine mental processes, rather than treating it as a discrete, formalized activity. In line with Smith and Lewis’s (2011) dynamic equilibrium model, this suggests that paradox management may occur through continuous, low-intensity micro-decisions rather than periodic strategic interventions.

Knowledge sharing as both enabler and threat

Consistent with Liu et al. (2020), the study confirms that knowledge exchange is central to coopetition’s value creation. Yet, the findings elaborate on the subtle behavioural dynamics of selective disclosure: managers

aim to “not unveil too much and not too little,” balancing curiosity-driven collaboration with competitive secrecy. This duality reflects the interdependence of opportunity and risk embedded in paradoxicality (Cozzolino & Rothaermel, 2018) and suggests that knowledge-sharing protocols in coopetition are inherently shaped by tacit, relational judgments rather than purely contractual safeguards.

Comparative synthesis of findings and prior literature

Table 1
literature vs findings

Literature finding	Present study finding	Contribution / difference
Coopetition paradox creates tensions requiring active management (Fernandez et al., 2014; Raza-Ullah, 2020)	Paradoxicality seen as natural and requiring no explicit intervention	Adds nuance: normalization of paradox may reduce perceived tension but risk under-recognition of latent risks
Risk management in coopetition involves balancing co-operation and competition (Peng et al., 2018)	Risk assessment embedded in everyday intuitive decision-making	Extends understanding by showing continuous, micro-level risk evaluation
Knowledge sharing drives innovation but creates vulnerability (Liu et al., 2020)	Selective disclosure balances mutual curiosity and secrecy	Provides behavioural-level detail on how firms operationalize selective sharing
Tension management often framed as formal strategy (Smith & Lewis, 2011)	Paradox management occurs through informal, ongoing practices	Shifts emphasis from formalized frameworks to embedded managerial routines

Source: Own elaboration.

The normalization of paradoxicality was consistently observed across all participants. Although respondents differed in the way they articulated this normalization (e.g., strategic vs. intuitive framing), no subgroup or firm type deviated from the overall pattern.

The study’s findings contribute to paradox theory (Smith & Lewis, 2011) by highlighting normalization as a potential third pathway alongside resolution and persistence in managing tensions. In the context of coopetition, normalization reframes paradoxicality as an ambient condition rather than an episodic challenge, potentially influencing how managers allocate attention and resources. Furthermore, the micro-level accounts of risk and knowledge sharing offer empirical granularity to the coopetition paradox framework (Bengtsson & Kock, 2014), underscoring that the lived experience of paradox is mediated by subtle, interpersonal judgments within and

across organizational boundaries. This suggests that future research should examine how normalization interacts with formal governance structures and whether it affects long-term coopetition performance.

6. Conclusions

The theoretical discussions and empirical findings presented in this study contribute to the ongoing discourse on the paradoxical nature of coopetition, offering a deeper understanding of the complexities inherent in inter-organizational collaboration among competing entities, and shedding light on the potential for such collaboration to yield cooperative and competitive outcomes concurrently (Gnyawali & Song, 2016; Cozzolino & Rothaermel, 2018; Raza-Ullah, 2020; Manzhynski & Biedenbach, 2023). The findings underscore that paradoxicality is not merely a theoretical abstraction but a lived reality, perceived by managers as a natural and inevitable element of cooperative relationships.

Theoretical contributions

First, the study advances the existing literature on coopetition by proposing and empirically substantiating a conceptualization of the paradoxical nature of inter-firm relationships involving both cooperation and competition. This conceptualization is grounded in established definitions (Bengtsson & Kock, 2014; Czakon et al., 2014; Chiambaretto & Fernandez, 2016; Bouncken et al., 2018; Crick & Crick, 2019; Raza-Ullah, 2020) and enriched with empirical evidence, thus representing a significant step forward in refining the understanding of this multifaceted and dynamic phenomenon. Through the integration of relevant theoretical frameworks, the study identifies and explains key aspects of paradoxicality, particularly the normalization of tensions, micro-level risk assessment, and selective knowledge sharing.

Second, the empirical evidence confirms that paradoxicality is regarded by participants from both low- and high-tech sectors as inherent to coopetition. This aligns with prior literature indicating that actors engaged in cooperative and competitive interactions simultaneously experience constructive synergies and disruptive frictions (Bengtsson & Kock, 2000; Akpınar & Vincze, 2016; Chiambaretto & Fernandez, 2016; Bouncken et al., 2018). By framing paradoxicality as a “natural state,” the findings extend paradox theory (Smith & Lewis, 2011) by introducing normalization as an alternative pathway for tension management, alongside balancing or resolution.

Managerial implications

From a managerial perspective, recognizing paradoxicality as a natural condition may reduce cognitive strain, but it also risks underestimating latent threats. Managers should therefore complement this mindset with deliberate safeguards – both formal (e.g., contractual arrangements, joint governance structures) and informal (e.g., trust-building routines, mutual monitoring) – to prevent tensions from escalating. In knowledge-sharing settings, clear disclosure protocols and boundary-setting mechanisms can help sustain collaboration while protecting critical resources. Embedding continuous, micro-level risk assessments into everyday decision-making can enhance agility and responsiveness in cooperative contexts.

Managers can operationalize these insights by implementing simple, routine-based mechanisms such as brief, regular risk-scanning practices or informal boundary-setting conversations before knowledge-exchange interactions. Developing lightweight relational routines that clarify what can be shared – and under which conditions – may further help maintain trust while protecting competitive interests.

Limitations and future research directions

This study is subject to certain limitations. Its focus on the manufacturing sector in Poland limits the generalizability of the findings, and the qualitative approach does not allow for statistical testing of observed relationships. Future research should replicate the study in different industries, national contexts, and cultural settings, using both qualitative and quantitative methods to test and validate the conceptualization of paradoxicality. Longitudinal designs could further illuminate how normalization, risk management, and selective knowledge sharing evolve over time, and how they influence the sustainability and performance outcomes of cooperation.

In sum, by integrating systematic literature review with qualitative field research, this study contributes both theoretically and practically to the understanding of cooperation as a paradoxical inter-organizational relationship. Recognizing paradoxicality as a natural and embedded condition – while simultaneously managing its inherent risks – emerges as a central requirement for unlocking the potential benefits of cooperation and mitigating its vulnerabilities.

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N O T E

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