

Institutionalized coopetition in a highly regulated industry: The strategic role of formal institutional agents

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Abstract

Purpose – This study examines how a network of organizations utilizes institutionalized cooperative strategies to navigate the complexities of a highly regulated industry.

Theoretical framework – Drawing on institutional theory and the coopetition literature, the study analyzes how institutional forces shape the simultaneous cooperation and competition among organizations, highlighting the coordinating role of formal institutional agents.

Design/methodology/approach – A qualitative case study with multiple units of analysis was conducted within ACADE (Associação Catarinense das Fundações Educacionais), a network of higher education institutions in southern Brazil. Data were collected through 11 online semi-structured interviews and supplemented with official documents and public information.

Findings – Coopetition among higher education institutions emerges as a dynamic and adaptive process shaped by organizational heterogeneity, value creation and sharing mechanisms, and the strategic influence of intermediary institutional agents. It is intentionally mobilized as an institutionalized response to regulatory pressures.

Practical and social implications of the research – The study advances the understanding of the relationship between coopetition and institutional forces in a highly regulated sector. It provides managers and policymakers with practical insights on coordinating legitimate cooperative strategies and contributes to debates on how regulatory frameworks and inter-institutional dialogue can directly shape market dynamics and competitive balance. Furthermore, institutionalized coopetition directly impacts higher education institutions and their surrounding communities, primarily affecting financial sustainability and operational continuity.

Originality/value – The article demonstrates how formal institutional agents negotiate and align interests based on organizational cooperative strategies. It contributes to administrative theory by explaining the institutionalization of coopetition through organizational networks.

Keywords: Coopetition; institutions; formal institutional agents; higher education; highly regulated industry.

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I Introduction

The concept of coopetition, or the occurrence of competition and cooperation strategies between different stakeholders simultaneously, has gained increasing attention from researchers and practitioners (Chim-Miki et al., 2024; Klimas et al., 2024). This is justified by its ability to explain interactions that cannot be reduced to a static perspective of competition and cooperation. Furthermore, coopetition has been analyzed using a multistakeholder analysis approach (Séran et al., 2024; Woolley, 2023) that incorporates different paradoxical relationships (Raza-Ullah et al., 2020; Yrjölä et al., 2024) and balances tensions between coopetitors (Efrat et al., 2022; Virtanen & Kock, 2022). Thus, coopetition can be defined as a paradoxical relationship between two or more actors engaged in horizontal or vertical cooperative and competitive interactions simultaneously (Bengtsson & Kock, 2014).

Coopetition and institutional theory have also emerged as two promising areas in strategic management research (Klimas et al., 2024; Meena et al., 2024). Despite their importance, recent literature has failed to integrate these concepts and analyze how institutional forces influence the dynamics of coopetition among stakeholders (Monticelli et al., 2023). Consequently, more research is needed to understand how external pressures and regulatory frameworks can stimulate, define, and shape the behavior of actors engaged in coopetition (Nakanishi, 2020).

Despite the growing body of research on coopetition and institutional theory, existing studies have largely treated institutional actors as background conditions rather than active, strategic agents within coopetitive processes (Bouilloud et al., 2020; Costa et al., 2017). In industries with high regulatory density and volatile frameworks, however, institutions act as active strategic agents that orchestrate, legitimize, and sustain coopetitive arrangements (Monticelli et al., 2023). Consequently, our understanding of decision-making based on the relationship between institutional conditions and the resources and capabilities needed to comply with the law is limited (Crick et al., 2026). Moreover, previous studies have emphasized dyadic or firm-level interactions, providing limited insight into how networks of organizations strategically leverage coopetition (Chim-Miki et al., 2024; Woolley, 2023) through the influence of multiple formal institutional agents (FIAs), especially in highly regulated industries in developing countries (Monticelli et al., 2025). By positioning FIAs as strategic actors operating within an organizational field,

we investigate the mechanisms through which these agents deliberately orchestrate, legitimize, and stabilize coopetitive arrangements. This leaves a theoretical gap regarding how FIAs actively shape coopetitive strategies, outcomes, and inter-institutional negotiations within complex regulatory environments (Vieira et al., 2025).

Therefore, we formulated the following research question: How do networks of organizations leverage institutionalized coopetitive strategies to address the complexities of highly regulated industries? To answer this question, we analyzed the coopetition dynamics of a network of community higher education institutions (HEIs) that have shown different results in terms of market interaction and competitiveness. This network operates in a developing country and is consequently subject to a fragile and volatile institutional framework (Nuruzzaman et al., 2019). The performance of this network depends largely on its interaction with the regulatory environment and is influenced by government action, which characterizes a highly regulated industry (García-Canal & Guillén, 2008). At the same time, the performance of this network allows the HEIs to create opportunities and deal with threats, mainly to compete against large groups of HEIs operating in the same market (Dal-Soto & Monticelli, 2017). Thus, this study clarifies that regulatory frameworks not only limit strategic choices, but also serve as endogenous forces that transform individual institutional vulnerabilities into collective bargaining power.

This study contributes to the literature in three significant theoretical ways. First, it extends the institutional approach to coopetition by conceptualizing FIAs as strategic actors that actively co-construct coopetitive dynamics (Monticelli et al., 2025) and mitigate the dark side of rivalry, such as opportunism and information asymmetry, to ensure collective survival (Crick et al., 2022). This perspective deepens existing models that emphasize institutional pressure but understate institutional agency (Séran et al., 2024; Woolley, 2023). Second, we develop a network-level understanding of coopetition in highly regulated industries by demonstrating how collective organizational action, influenced by FIAs, reshapes competitive and cooperative boundaries within a developing country context (Monticelli et al., 2025). Third, we offer a novel explanation of how institutional legitimacy and bargaining power are generated within coopetitive networks by revealing how FIAs negotiate with one another based on the institutionalized coopetition enacted by their represented actors (Vieira et al., 2025).

2 Theoretical background

This study integrates coopetition and institutional theory, adopting a lens that emphasizes institutional agency operating within a specific organizational field in a highly regulated industry. Regulation is conceptualized as more than just top-down constraints; it represents the “rules of the game” (North, 1990) that act as an endogenous catalyst for orchestrating strategic interactions and future competitive trajectories. Considering that institutional pressures (e.g., regulatory, normative, and cognitive) influence how institutions interact (Boikanyo, 2026), this research moves beyond traditional models that treat institutions merely as stable background constraints (Bouilloud et al., 2020). Grounded in the perspective of institutional agency, we conceptualize FIAs as strategic actors who deliberately orchestrate, legitimize, and sustain coopetitive arrangements. This approach aligns with the concept of coopetition, focusing on the continuous and intentional efforts to influence collaborative and competitive boundaries and on the governance of organizational fields (Kostis et al., 2024). In these fields, FIAs can transform competing organizations into coalitions that generate legitimacy and bargaining power with regard to the regulator (Monticelli et al., 2023).

The theoretical framework supporting this research is organized into two topics, which are explored below. The first topic addresses coopetition dynamics and its positioning in theory. The second topic advances this theme by examining the influence of institutions in highly regulated industries.

2.1 Coopetition dynamics

Coopetition is a context-dependent strategy (Czakov et al., 2020) that considers different forms and multiple levels of analysis of structure, processes, and standards through orthogonal constructs (Padula & Dagnino, 2007). It has been defined as a multidimensional, complex, and dynamic concept (Raza-Ullah et al., 2020) that requires an institutional perspective to better understand strategic alternatives and tensions (Bahar et al., 2022; Monticelli et al., 2022).

Theoretical frameworks such as the resource-based view, network theory, game theory, and institutional theory can help explain the different relationships among multiple stakeholders (Chim-Miki et al., 2024). Shared values can boost coopetition between firms over time (Vu & Fath, 2024). Conversely, paradoxical tensions negatively impact coopetitive performance (Raza-Ullah et al., 2020).

Coopetition dynamics have been studied using different approaches. From a process perspective, coopetition consists of competing companies adopting strategies that combine competition and collaboration in various areas and levels of interaction (Bengtsson & Kock, 2000). From a contextual perspective, coopetition can be represented as a value-adding chain involving interaction with multiple stakeholders (Brandenburger & Nalebuff, 1995). From a results-oriented perspective, coopetition aims to maximize results through joint efforts (Peng et al., 2018). These perspectives have revealed premises of coopetition dynamics, such as resource asymmetry, market commonality (Hung & Chang, 2012), interdependence (Luo, 2005), and trustworthiness (Chim-Miki et al., 2024; Klimas et al., 2024).

Coopetition in networks requires considering interactions between multiple stakeholders and at different levels. For example, Manzhynski and Figge (2020) note that an interaction between two participants may have a positive outcome, yet a negative outcome for one or more of the networks they belong to. It is important to note that the levels of competition and cooperation strategies may constantly change, thereby redefining the coopetition relationships among those involved (Beraha & Gur, 2026; Niu et al., 2024) and the networks participating. In this sense, institutions play an important role in influencing coopetition between multiple stakeholders and between different networks.

2.2 Coopetition influenced by institutions in a highly regulated industry

Coopetition can be encouraged by multifaceted factors that are either independent (e.g., regulatory pressures) (Monticelli et al., 2023; Nakanishi, 2020) or combined (e.g., competitive intensity, increase in market size, creation of barriers against new entrants) (Ritala, 2012). One approach is to link coopetition to the creation, appropriation, and eventual destruction of value (Albert-Cromarias et al., 2022; Virtanen & Kock, 2022).

Despite the strategic benefits of institutionalized coopetition, scholars emphasize its dark side, where the paradox of simultaneous competition and cooperation yields undesirable outcomes (Crick, 2019). This is often seen through opportunistic behavior. Firms may exploit information asymmetries and trust to advance their own interests at the expense of collective value (Gnyawali & Park, 2009).

In networked environments, pronounced power and resource asymmetries often result in a win-lose scenario, wherein leading institutions capture the majority of benefits (Nieto & Santamaría, 2007). In higher education, these dynamics can lead to curricular homogenization, where pressure to standardize joint programs and admission processes diminishes regional uniqueness and reduces student diversity (Guyottot & Thelisson, 2024). Finally, heavy dependence on public policies can transform coopetition into a forced or transactional arrangement. This leaves institutions vulnerable to institutional dysmorphia. This is a condition in which formal agents overstep their regulatory roles. They do so by imposing arbitrary constraints that increase operational friction. This can lead to value destruction (Monticelli et al., 2023).

To mitigate the risks associated with coopetition, some authors have emphasized the positive impact of a third party moderating interactions between cooperating competitors (Monticelli et al., 2023). However, more research is needed to understand the negative effects of this relationship (Duarte et al., 2025). In this context, we define a third party that influences the coopetition relationship as a FIA, which is a public or private entity associated with the government or businesses that operate within the framework of organizational rules. Examples of these agents include government agencies, industry departments, tax authorities, state-owned banks, and commercial administration offices (He & Wei, 2013).

FIA that influence coopetition between firms may stem from private, public, or hybrid interests. From a hybrid perspective, FIAs can prompt firms to engage in coopetition on specific projects, such as the internationalization of a product, through government agencies and business associations (Monticelli et al., 2022). In this study, FIAs operate as hybrid institutional mechanisms at the intersection of economic coordination and political perspectives. From an economic perspective, FIAs act as strategic orchestrators that reduce coordination costs and facilitate collective responses to regulatory volatility. This stabilizes the field and improves network efficiency by pooling scarce resources (Hidalgo et al., 2022). From a political perspective, FIAs are conceptualized as strategic political actors that orchestrate organizational fields to generate collective bargaining power, not merely as neutral regulatory bodies. This perspective emphasizes inter-institutional negotiation mechanisms, in which industry-representative associations act as a unified voice to influence public policies and state-level regulatory frameworks in favor of their members' interests (Monticelli et al., 2022).

In developing economies, institutional environments are often inefficient and unfavorable to business models. Firms or institutions in these countries must navigate bureaucratic hurdles, political instability, inconsistent regulatory frameworks, and unpredictable legal systems (Cuervo-Cazurra & Genc, 2008). Heavily regulated industries, such as healthcare, education, and airlines, are crucial to the economic backbone of many developing countries. Government intervention is prevalent, and stringent regulations impose significant constraints (García-Canal & Guillén, 2008; Ramamurti, 2012). Firms in highly regulated industries manage cooperative tensions to strike a balance between competition and collaboration. They leverage regulatory compliance and partnerships with other entities strategically to gain competitive advantages (Thelisson, 2023). Consequently, these firms seek strategic benefits to improve performance, increase market share, and gain access to new resources (Crick et al., 2022; Czakon, 2018).

3 Method

This investigation was conducted through a single case study with multiple analytical units from a qualitative perspective. We chose this technique because it is widely accepted in the field of management, particularly when the research seeks rich detailed information. Based on Eisenhardt (1989) and Yin (2014), the phenomenon is complex and context-dependent.

ACAFE is our empirical field, and the units of analysis are the community HEIs that make up this network. ACAPE comprises fourteen community HEIs distributed throughout the state of Santa Catarina (SC) in southern Brazil. These HEIs represent around 70% of the state's university students, making ACAPE the largest higher education network in the state. Consequently, ACAPE's numbers are significant for the state: 142,000 students, 10,522 professors, and 7,125 technical and administrative staff (Associação Catarinense das Fundações Educacionais, 2025).

Community HEIs are particularly well-suited for studying institutionalized coopetition because they function under a hybrid non-profit model recognized by the Brazilian Federal Constitution. This model requires them to balance regional social missions with financial sustainability (Francisco et al., 2021). This context is analytically distinctive because these institutions must navigate a volatile and fragile institutional framework in a developing economy.

Survival against large educational conglomerates depends on the necessity of interacting with the regulatory environment for legitimacy. In this setting, FIAs act as strategic actors that transform individual institutional vulnerabilities into collective bargaining power through deliberately orchestrated, network-level strategies. Consequently, insights derived from this context regarding the role of FIAs in orchestrating mediated coopetition can be applied to other highly regulated industries, such as healthcare, energy, finance, and aviation, where state-driven frameworks primarily catalyze inter-organizational synergy and collective legitimacy is necessary to stabilize paradoxical tensions.

Brazil has 81 community HEIs, more than half of which are in the southern region of the country. ACAFE and the Consortium of Community Universities in the South of Brazil (Consórcio das Universidades Comunitárias Gaúchas, 2024), which also has fourteen community HEIs located in the state of Rio Grande do Sul, represent the main networks of this segment in the country. According to the logical foundations of Yin (2014), ACAFE is a rare case in the Brazilian context.

For data collection, we used two main approaches. The first approach was based on primary data collection through semi-structured interviews (Supplementary Data 1 – Appendix A: Interview Guide). We interviewed nine of the fourteen community HEIs that make up ACAFE,

all of which were represented by their deans. We also interviewed the Institutional and Government Relations Advisor of ACAFE and the Secretary of Education of the state of Santa Catarina. We organized the interviews from our initial contact with the aforementioned ACAFE Advisor, who provided indications based on his extensive knowledge of the network's institutions and their respective deans. We used the snowball sampling technique in the initial interviews to identify new interviewees until saturation was reached, as established by Biernacki and Waldorf (1981). This technique did not require us to conduct interviews with all of ACAFE's institutions.

Some of these interviewees are also part of important FIAs in the country, such as the National Education Council (Conselho Nacional de Educação – CNE) and the Brazilian Association of Community Higher Education Institutions (Associação Brasileira das Instituições Comunitárias de Educação Superior – ABRUC). Following He and Wei (2013), we consider government agencies (e.g., CNE, MEC, INEP, CAPES) and industry-representative associations (e.g., ACAFE, COMUNG, ABRUC) to be FIAs because they are public or private institutions associated with the government or businesses. The interviews were conducted via Google Meet from April to July 2024. All interviews were recorded and lasted between 48 minutes and 1 hour and 5 minutes (Table 1).

Table 1
Primary Data – Interviews

Code	Institution	Interviewee	Date (2024)	Interview Duration
I1	Universidade da Região de Joinville – UNIVILLE	Dean	April 3	1 h 5 min
I2	Associação Catarinense das Fundações Educacionais – ACAFE	Institutional and Government Relations Advisor	April 9	1 h 3 min
I3	Universidade do Oeste de Santa Catarina – UNOESC	Dean	April 11	50 min
I4	Universidade do Planalto Catarinense – UNIPLAC	Dean and Vice-President of ACAFE	April 18	57 min
I5	Universidade do Vale do Itajaí – UNIVALI	Dean	May 8	48 min
I6	Centro Universitário para o Desenvolvimento do Alto Vale do Itajaí – UNIDAVI	Dean	May 20	51 min
I7	Universidade do Extremo Sul Catarinense – UNESC	Dean, President of ACAFE, and member of CNE	May 20	54 min
I8	Government of Santa Catarina (SC)	Secretary of Education of the state of SC and member of CNE	June 21	57 min
I9	Universidade Comunitária da Região de Chapecó – UNOCHAPECÓ	Dean and President of ABRUC	June 28	54 min
I10	Universidade Regional de Blumenau – FURB	Dean	July 02	50 min
I11	Centro Universitário de Brusque – UNIFEBE	Dean	July 03	52 min

Source: The authors (2026).

The second approach to data collection was based on secondary data. These sources included ACAFE documents, such as statutes and institutional presentation materials, as well as public information available on the ACAFE website. Additionally, public information was obtained from the Santa Catarina government, particularly regarding the “*Universidade Gratuita*,” or “Free University,” program, including its website and specific legislation (Complementary Law No. 831/2023 and Decrees Nos. 450/2024 and 1,322/2025 [Santa Catarina, 2023, 2024, 2025]).

Combining primary and secondary data made triangulation possible. Crossing information obtained from different sources (e.g., interviews and statutes or the ACAFE website) and considering the same type of source (e.g., interviews) ensured the validity and reliability of the data, as proposed by Flick (2007) and Yin (2014). According to Denzin (1978), triangulation involves crossing data from different sources on the same phenomenon.

Regarding the interviews specifically, the data were processed through content analysis following the steps outlined by Cohen et al. (2017). The analysis began with coding and categorizing the transcribed interviews. The codes, as suggested, emerged from the interview contents and were used to condense or simplify the data while emphasizing its characteristics and connecting them to the concepts used. The categories were developed before the analysis and originated from the literature. They served as the main groupings of the key features of the text and as links between words and phrases (Supplementary Data 2 – Appendix B: Codebook). Moreover, connections between the categories were established through comparison, and the final step of theoretical considerations was based on the analysis results, including generating propositions for the theory (Table 2).

To ensure the validity of the study, we triangulated our evidence using multiple respondents and secondary data sources. We applied triangulation of evidence through multiple interviewees and secondary sources to guarantee the credibility of the described process and the validity of the analyzed data. We ensured reliability by comparing analyses among researchers to reduce potential biases in data interpretation. To enable other researchers and/or practitioners to transfer the findings detailed in this paper to their own settings and contexts, we provided details about the organizational field that influenced each decision-making process. This information could broaden perspectives on how the analyzed trajectory unfolded. Moreover, we provided insights into contextual phenomena to facilitate applying our findings to other contexts.

We developed a transparent and clear description of the research process, from the initial outline to the development of methods to the reporting of findings. We discussed emerging issues openly with research team members who have significant expertise in qualitative research. This allowed us to challenge assumptions and reach consensus. Additionally, two researchers conducted interviews based on multiple data sources to ensure the narrative accurately reflected the collective meaning conveyed by the interviewees. The process involved open, axial, and selective coding. Excerpts from the interviews were included in the study and analyzed using NVivo 14 software. All interviews were recorded with the interviewees’ consent, fully transcribed, and analyzed alongside secondary data to ensure transparency and traceability of the information. One researcher took real-time notes, and the entire secondary data inventory was accessible online.

Table 2
Categories and Codes Used in the Analysis of the Interviews

Categories	Codes
Coopetition strategies among community HEIs	Cooperation in political actions; interpersonal relationships as a cooperation mechanism; collaboration as an entry barrier or a restriction on the expansion of private HEIs; institutional partnerships established in teaching, research, and extension; collaboration opportunities among network HEIs; competition for market share and students; innovation as an impact and competitiveness factor; rivalry against private competitors.
Coopetition influenced by institutions in higher education	Network actions toward regulatory institutions or government agencies; influence of formal institutional agents; competition between the community HEI network and private HEIs; defensive market strategies; joint positioning in the highly regulated higher education market; influence of competitive and collaborative actions among the community HEI network; persuasion capacity and unity of network managers; active/reactive positioning of the network; impact of the network on economic and social development.

Source: The authors (2026).

4 Findings

The data analysis was divided into two main sections based on the data collected (Supplementary Data 3 – Appendix C: Coding Matrix). The first section examines how coopetition occurs between ACAFE's HEIs and other involved agents from cooperative and competitive perspectives. The second section focuses on the institutional perspective that influenced the coopetition processes and played a decisive role in this highly regulated industry.

4.1 Coopetition strategies among ACAFE's HEIs

ACAFE acts as a central coordination mechanism that formalizes the “rules of the game” within the network. Rather than mere administrative meetings, these internal chambers serve as forums for strategic orchestration where the tension between individual institutional goals and collective network survival is managed. This governance structure enables the standardization of competition, shifting it from aggressive, price-based rivalry to quality-based differentiation. When friction arises, ACAFE acts as a conflict-resolution hub, leveraging the shared “community” identity to normalize competitive behavior and ensure that operational disputes do not escalate into systemic value destruction:

I think the chambers fight a bit more because that's where it's supposed to happen. The people who sit on the council are usually very close to the deans. Sometimes they argue, but it's all in the spirit of helping. There's nobody there to cause harm, but sometimes there's a little friction. (Interviewee I2).

The dynamics of simultaneous competition and cooperation are negotiated within internal thematic chambers. These serve as deliberative arenas where deans and staff transform individual institutional goals into a collective strategic agenda. This process is evident in the standardization of academic routines in response to aggressive private competitors. Furthermore, the network uses a mechanism that builds legitimacy to convert individual institutional vulnerabilities into collective bargaining power. This mechanism was operationalized during the creation of the “*Universidade Gratuita*” program, when ACAFE functioned as a unified political voice to negotiate resource transfer mechanisms with state regulators. Although operational friction persists (e.g., difficulty implementing a central purchasing center), negotiation is maintained

through informal reciprocity and the necessity, driven by legitimacy, to preserve the community brand over individual commercial interests. Consequently, coopetition is enacted not merely through ad hoc acts of goodwill but through a stabilized dynamic of inter-institutional negotiation that enables the network to co-construct the “rules of the game” in a highly regulated environment.

Of course, we try to avoid getting drawn into a price war, not least because we don't have the same conditions as private, for-profit institutions to compete on that front. Our institutions have significantly improved the quality of face-to-face teaching compared to the situation we experienced during the pandemic, when distance learning proved to be inefficient in many respects. Our legitimacy lies in trust. In other words, students know they're investing in an institution that gives 100 per cent of its value back to the community itself. We are, without a doubt, an asset to our region. (Interviewee I4).

The interviewees perceive and describe cooperative actions as an important aspect of ACAFE, though not necessarily in a uniform or procedural way. Linked to pre-existing connections, some associates encourage HEIs to work together to develop actions toward a common goal. These practices generally take place in close geographical proximity, allowing for more frequent interaction. They are very much based on face-to-face interaction, which is characterized as one of the quality differentiators of community institutions. The main collaborative actions focus primarily on political pleas to state or federal institutions, as well as to those in the academic sphere. Examples include jointly offering master's and doctoral courses, or specific projects requiring expertise in a particular field of study, as seen below:

From a management and operational standpoint, I would say that academic cooperation has flowed in an interesting way, such as in research, extension, and teaching. But at the administrative level, there are certain difficulties. For example, we still haven't managed to implement a single central service and purchasing center. (Interviewee I1).

As community institutions, numerous situations of closeness and cooperative partnerships with local communities were identified. Such closeness reinforces the characteristics of HEIs in the form of local commitment or rootedness, providing a competitive market advantage.

Many of these social demands stem from needs in health and humanities, the latter of which is more concentrated in the training and qualification of teachers linked to the state of Santa Catarina. These teachers utilize university researchers' spaces and expertise through courses and training.

Competition between HEIs focuses on attracting new students, especially at the undergraduate level. This competition primarily occurs between HEIs located in close proximity, sometimes in the same city, which accelerates competitive behavior. Typically, the competition is for differentiated courses or program quality, but rarely for price. Deans and institutions generally respect and care for one another, avoiding advancing geographically into the areas of operation of neighboring HEIs. This would weaken ACAFE itself in the community and enable the growth of other exclusively private institutions.

I would say it's a very healthy relationship. Of course, situations of conflict and competition do arise from time to time, but these usually don't stem from management. Rather, they come from the commercial departments of the institutions, which end up fueling unnecessary rivalry, particularly at undergraduate level in the competition for new students. Today, management understands very well that we shouldn't compete with one another, not least because we aren't rivals in a hostile sense. We share common characteristics that bring us closer together and help us rather than drive us apart. (Interviewee I5).

However, despite the care taken to maintain the operating space, natural tensions arise from the competition for new students. This competition is sometimes fueled by administrative teams driven to achieve aggressive commercial targets. More traditional community institutions leverage their established symbolic capital and brand recognition to maintain leadership and often exert greater influence over ACAFE's strategic agenda. Conversely, smaller HEIs, while possessing less brand power, utilize their administrative agility to adapt quickly to regional market shifts. This sometimes creates friction when their aggressive commercial targets encroach upon the perceived territories of larger neighbors. This asymmetry creates a win-lose situation because, while the collective network gains bargaining power against the government, smaller institutions may feel a loss of strategic autonomy as they are pressured to align their unique regional missions with standardized, network-wide curricula and admission processes.

In these cases, ACAFE advises that the HEIs have the autonomy to resolve these types of disputes themselves and can intervene when necessary to seek a balance between those involved. For the most part, the deans signal to each other when one of the brands advances its position, and the issue is quickly resolved due to the association's close and collaborative nature. Regarding price rivalry, most interviewees say it occurs more frequently between private HEIs located near ACAFE's HEIs, as they seek to establish a more representative market position. The deans do not observe or suggest price reduction strategies among ACAFE's HEIs because they understand that they compete in the market based on the quality of their teaching staff and the excellence of their laboratories and other academic spaces. The local community recognizes this as a strength of ACAFE's HEIs and appreciates them for it, a perception greatly reinforced by the social actions already carried out to this end. The following points contribute to this analysis:

In other regions, however, we recognize that a certain level of political respect exists between the HEIs, but there's also competition between them, particularly at present in the far west of the state. So, there, the deans respect each other a lot, and there's a degree of friendship between them. However, at various times, their operations come into conflict with each other, to the point where one institution launches courses that are the same as the other's, which ends up dividing the market and making it unviable for both. (Interviewee I4).

However, despite these significant advantages over other competitors, the number of students seeking alternatives to face-to-face courses has also grown rapidly. This trend is not only present at ACAFE's regional level but also almost everywhere in Brazil.

4.2 Coopetition influenced by institutions in higher education

ACAFE emerged as a representative association in 1974, aiming to bring together, plan, and coordinate the HEIs of Santa Catarina. The association is dedicated to integration and committed to developing the local community. Throughout this process, the association has faced numerous challenges in strengthening its brand and establishing credibility with its members and stakeholders.

One of ACAFE's main objectives has always been to create the right level of joint legitimacy to represent all its members. The association has sought the necessary improvements in its internal processes to address the impasses and challenges facing higher education, especially during the post-pandemic period.

One of the main advantages of becoming an ACAFE member institution is belonging to an organization with the ability to advocate for and represent the shared interests of HEIs. Interviewees recognize the advantage of being part of the group because it supports them in their requests to state and federal public bodies. Together, ACAFE's HEIs have approximately 150,000 students, which contributes to the weight of their demands to public bodies. This approach has been consolidated over the years and has gained ground through public policies supporting higher education, with significant investments in quality teaching and fostering a sense of belonging among the local population.

I think that ACAFE is shaping up to be significantly different from what it has been in the past. I think it's the institution that's going to go through this process of transformation the most, acting politically, because it's linked to political dissociation, and you have to be very flexible, because at the municipal level, you have one party, at the state level you have another, and at the federal level, it's yet another. So we've seen that we have to be more articulate, more present, and that's what we're doing. (Interviewee I6).

ACAFE has built a track record of institutional achievements that lend it credibility with Santa Catarina's society and government agencies. For example, it transitioned from the "UniEdu" program (*Programa de Bolsas Universitárias de Santa Catarina*) to the "*Universidade Gratuita*" program. Both programs aim to provide study, research, or extension scholarships for economically needy students, which legitimizes the association's role as a representative of its members' interests. One of ACAFE's defining actions for many years was centralizing the entrance exams for its member HEIs, taking responsibility for the organization, planning, execution, and supervision of the new student admission process.

ACAFE's most significant recent achievement is the "*Universidade Gratuita*" program, established by Complementary Law No. 831 and subsequent amendments per Decrees No. 450/2024 and 1,322/2025 of the State of Santa Catarina (Santa Catarina, 2023, 2024, 2025).

This program provides financial assistance for higher education to socially and economically vulnerable young people. The State of Santa Catarina government covers all tuition fees, and in return, students perform community service during or after the course. The idea is to provide society with qualified services delivered by professionals trained at HEIs and aligned with local needs. During the creation and implementation of the program, ACAFE consistently collaborated with public bodies, establishing itself as an association engaged in discussions to develop a program that could meet the demands of Santa Catarina society, as well as the needs of its own members.

In addition to uniting ACAFE, ABRUC plays a crucial role in uniting public bodies, particularly at the federal level. These bodies include the Ministry of Education (MEC), the Anísio Teixeira National Institute for Educational Studies and Research (INEP), the Coordination for the Improvement of Higher Education Personnel (CAPES), and other entities. ABRUC has sought to vindicate the demands of all community institutions at the national level in the face of two main adversities. First, ABRUC has asked CAPES and INEP to distinguish between private educational institutions and community and non-profit institutions in their presentations of data because, in general, they are all grouped together as private institutions. This is detrimental to HEIs, since the reality and market strategies of private HEIs differ from those of community HEIs, making it difficult to obtain different resources and recognition. Second, ABRUC seeks to take a more defensive stance in the face of conflicting situations triggered by private institutions, even in the judicial sphere if necessary. ABRUC always seeks dialogue as a means of conciliation and encourages this practice among its member institutions. However, sometimes it is necessary to adopt a defensive stance to contribute to the development of the association and strengthen the position of HEIs at the national level.

Moreover, Santa Catarina has its own demands with ACAFE, such as creating similar curricula and structures among all the HEIs, which would make students' academic lives easier when they request a transfer from one city to another. The curricula are expected to be approximately 70% similar, resulting in nearly identical courses. This request emphasizes the highly regulated nature of the industry, which is overseen by the state-imposed regulations and evaluation systems that directly influence the administrative and academic management of HEIs.

The program was designed to be a great development tool for the state. They [HEIs] have another counterpart. They will have to start integrating their curricula by 2027, so that students who move between institutions don't waste time. (Interviewee I8).

Some deans are resistant because they feel this would detract from the unique character of the regions. Even though the regions are in the same state, they have regional differences that need to be respected. These differences make the courses attractive to students. An almost identical curriculum would limit these local characteristics, leaving ACADE in a similar situation to private institutions, which they criticize for having standardized curricula on a national scale and lacking regional individuality. However, everyone agrees that they would rather “lose” a student to another ACADE institution than to private competition.

The Free University Program essentially aims to harmonize the curricula of the various institutions. However, this is a complex process due to regional differences and the varying perspectives of each vice-chancellor. Furthermore, within ACADE, there are larger institutions of excellence that naturally take the lead over the others. Nevertheless, it is indisputable that the government of Santa Catarina and society itself recognize that these institutions represent the cornerstone of the state's development. (Interviewee I8).

Through a deliberate coordination mechanism, the FIA standardizes internal routines, serving as a network stabilization process that reduces individual institutional risk while ensuring the field remains resistant to external market shocks. This orchestration is fundamental to the process of building legitimacy, in which ACADE aggregates the symbolic and political capital of its fourteen member HEIs to generate collective bargaining power in negotiations with government agencies such as the MEC and INEP. The FIA facilitates this regulatory adaptation to ensure that the rules are co-constructed rather than imposed. This demonstrates a dynamic of institutionalization where cooptation transforms from an emergent market reaction into a stable, orchestrated, network-level strategy. Figure 1 summarizes the main actors mentioned in this research, as well as their institutional relationships and influences.

However, our findings underscore the potential downside of this strategy (Crick, 2019), in which an imbalance between value creation and capture can lead to value destruction (Vieira et al., 2025). When large community HEIs appropriate the majority of the collective reputation, smaller partners may perceive the arrangement as a win-lose scenario. This can lead to opportunistic information hiding or disengagement from the network. Without clear governance structures to manage these tensions, they can escalate into collusive behaviors that capture shared value without contributing to its creation. This ultimately destroys the collective legitimacy that the network was designed to protect (Crick & Crick, 2021).

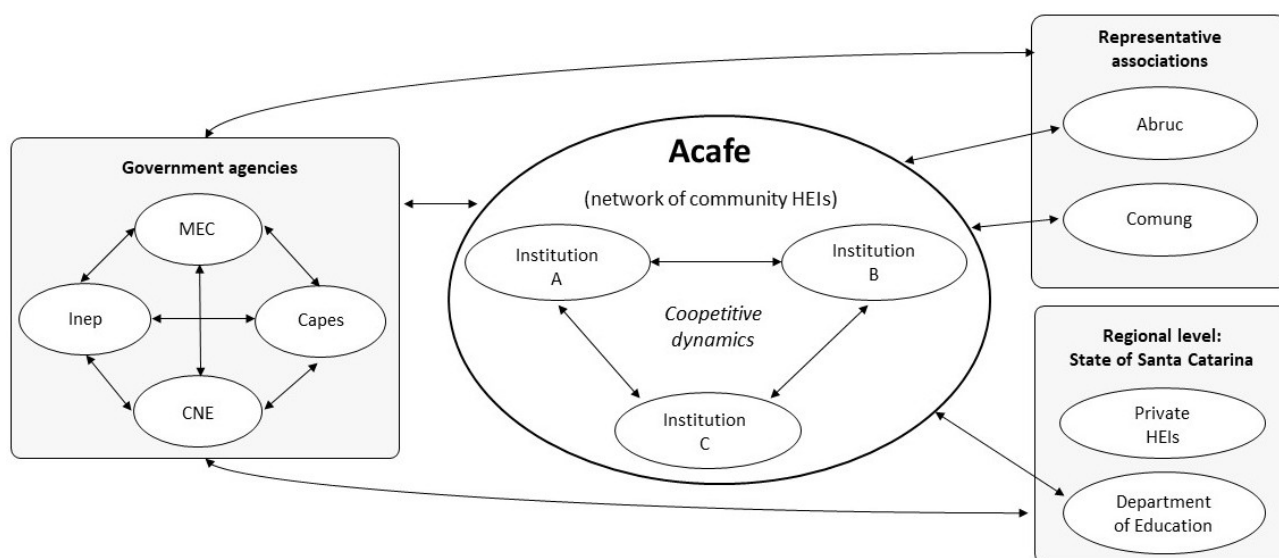


Figure 1. ACADE and the Institutional Relationships

Source: The authors (2026).

5 Discussion

Our findings reveal that coopetition in the ACAFE network is not just an emergent response to market forces, but rather, a deliberately orchestrated strategy shaped by the interaction between HEIs and multiple FIAs. The results show how institutional influence can transform competitive tensions into coordinated collective action. This enables the network to manage regulatory complexity, enhance legitimacy, and protect its market position.

This study contributes to the theoretical development of coopetition by showing that in highly regulated industries, coopetition emerges from both inter-organizational necessity and the strategic agency of formal institutional actors operating within networks. Unlike prior studies that frame institutional influence as exogenous pressure, our findings reveal FIAs as the endogenous architects of institutionalized cooperative strategy. They are capable of reshaping incentives, aligning interests, and stabilizing paradoxical relationships among competing organizations.

Considering their presence in a highly regulated industry, the adoption of cooperative strategies by HEIs has been guided by various factors relating to the organizational profile of each HEI and its network, the creation and sharing of value between HEIs, the strategic adjustment of HEIs in relation to FIAs, and the perceived benefits and risks of HEIs. Traditional HEIs tend to struggle more than smaller HEIs with leaner administrative structures to keep up with some market changes. Conversely, smaller HEIs generally have less brand penetration than more traditional HEIs. Considering the organizational profile, we found that coopetition leads to an organizational adaptation movement that can facilitate or hinder the operationalization of the process, mainly due to the characteristics of each HEI (Dal-Soto & Monticelli, 2017).

One of the premises of coopetition is creating and sharing value (Albert-Cromarias et al., 2022). However, the results of cooperative strategies can lead to the creation or destruction of cooperative value (Vieira et al., 2025). Our findings reveal a paradox in the relationship between HEIs and ACAFE. On the one hand, ACAFE membership gives HEIs joint access to gains that would be more difficult to achieve independently. This is mainly exemplified by the legitimacy that strengthens ACAFE's ability to represent the common interests of community HEIs vis-à-vis the FIAs that regulate the industry based on government priorities. Conversely, each HEI has administrative autonomy as long as it adheres to the regulations inherent in higher education.

In this sense, there are often geographical disputes over the market, especially since the product offering has eliminated the relationship between competing close to and cooperating far from the customer, as defined by coopetition. Therefore, our findings align with the original coopetition perspective that firms should compete close to the market for customers and cooperate far from the market in operational activities (Bengtsson & Kock, 2000), which complements the coopetition evidence found by Bahar et al. (2022).

To obtain benefits greater than they would individually, firms must adapt their strategies to balance competition and cooperation, sharing resources with competitors (Crick, 2019; Czakon, 2018). In highly regulated industries, FIAs moderate relationships between firms (Vieira et al., 2025). Our findings contribute to this literature by showing that an FIA (ACAFE) can represent HEIs, which gives them greater legitimacy and greater bargaining power compared to other FIAs (e.g., MEC, INEP, CAPES) that represent the government. Therefore, our study contributes to recent literature (Monticelli et al., 2025; Nakanishi, 2020) by showing that there is a strategic adjustment not only between firms (HEIs) and an FIA but also between FIAs. Furthermore, in contrast to Monticelli et al. (2023), we found that coopetition emerges as a deliberate strategy in highly regulated industries through the collaboration of stakeholders represented by the FIA. We summarize this finding in the following proposition:

Proposition 1 (P1): In highly regulated industries, institutionalized coopetition develops as a deliberate strategy from the coalition of actors represented by formal institutional agents.

Sharing resources and improving educational outcomes are motivating factors that encourage HEIs to engage in coopetition strategies (Muijs & Rumyantseva, 2014). However, when coopetition emerges as a joint reaction, it is more contentious and conflictual (Thelisson, 2023). This implies risks such as opportunism and even value destruction (Albert-Cromarias et al., 2022). Our findings show that coopetition influenced by an FIA (ACAFE) enhances legitimacy in negotiations with other FIAs in a highly regulated industry. At the same time, the HEIs that comprise ACAFE develop deliberate coopetition strategies to address pressure from FIAs representing government demands. Therefore, our findings differ from those of Monticelli et al. (2023), who found that transactional coopetition focused on unintended outcomes occurs in highly regulated industries to deal with institutional pressures (Czakon, 2018).

We believe this outcome results from the interaction between FIAs representing HEI and government interests.

Our findings confirm that coopetition in the higher education industry is orchestrated by FIAs, such as ACAFE, and regulatory agencies that act as endogenous architects of the network strategy. This mediated coopetition complements the work of Monticelli et al. (2022) because it transforms individual institutional vulnerabilities into collective bargaining power. In line with Guyottot and Thelisson (2024), our findings suggest that, in highly regulated industries, coopetition is a necessity driven by legitimacy because institutions that fail to adhere to FIAs' collective strategies risk being marginalized and becoming more vulnerable to aggressive pricing by purely private competitors. Thus, we developed the following proposition:

Proposition 2 (P2): In highly regulated industries, genuine institutional pressures encourage the intentional development of institutionalized coopetition.

Therefore, our findings reveal that, in highly regulated environments, coopetition is a strategic necessity shaped by institutional agency, not merely a voluntary market choice (Monticelli et al., 2023). Although the hybrid mission of community-based HEIs is specific to the Brazilian context, the underlying mechanism – where FIAs transform individual institutional vulnerabilities into collective bargaining power (Guyottot & Thelisson, 2024) – is a generalizable theoretical contribution that can be transferred to other highly regulated industries. Furthermore, developing countries, which are characterized by institutional voids and volatile regulatory frameworks, act as a catalyst for this phenomenon (García-Canal & Guillén, 2008). In these settings, institutionalized coopetition functions as a survival mechanism, reducing transaction costs and generating relational rent unachievable through isolated competition (Vieira et al., 2025).

Together, these propositions extend coopetition theory by introducing the concept of institutionalized coopetition, in which formal institutional agents actively structure the conditions under which cooperative strategies are designed, legitimized, and sustained within networks (Supplementary Data 4 – Appendix D: Propositions). This perspective shifts the theoretical focus from firm-level tension management to network-level institutional orchestration. Appendix D illustrates the connections among propositions, theoretical background, categories of analysis, and interview excerpts.

6 Concluding remarks

This research advances our understanding of inter-organizational dynamics by demonstrating that, in highly regulated environments, coopetition is a strategic necessity, not a voluntary market choice, institutionalized through the actions of formal agents. Moving beyond viewing institutions as mere background constraints, this study identifies a shift toward network-level orchestration where collective legitimacy is co-constructed to navigate complex regulatory landscapes (Boikanyo, 2026). While the findings highlight the substantial advantages of resource sharing and regional professionalization, the vulnerability of these network relationships is a significant concern. Evidence of potential conflicts and the dark side of coordinated action suggests that the sustainability of such arrangements depends heavily on formal governance structures that balance individual institutional autonomy with collective survival.

Our findings contribute to the existing literature on coopetition in three ways. First, we explain how FIAs negotiate with each other based on the coopetition developed by actors represented by an FIA. This approach complements previous studies (e.g., Monticelli et al., 2023; Vieira et al., 2025) that presented the moderation of FIAs to foster coopetition among actors. Second, we analyze how coopetition develops within a network in a highly regulated industry. The characteristics of a developing country require that coopetition strategies be planned and executed while considering governmental influence on the institutional framework. Third, because the study deals with the influence of FIAs representing the government, its findings can help practitioners successfully manage the challenges and opportunities arising from institutionalized coopetition in a highly regulated industry.

6.1 Research implications

Our research has several implications for scholars, HEI managers, policymakers, and society as a whole. For scholars, the findings suggest reorienting coopetition research toward institutional agency, network governance, and multi-level strategic coordination. For institutional leaders and policymakers, the study shows how regulatory framework design and inter-institutional dialogue can directly influence market dynamics and competitive balance. The results of this study can be applied to other highly regulated industries, such as energy, health, mining, finance, and aviation.

For HEI managers in particular, the actions of an FIA such as ACAFE are essential for dealing with other FIAs and achieving aims that would otherwise be difficult. For example, ACAFE's extensive efforts in developing the “*Universidade Gratuita*” program have been instrumental in maintaining the financial stability of the HEIs within the network. Moreover, an FIA such as ACAFE serves as an important mechanism for resolving conflicts among HEIs, particularly those related to competition. It also functions as an excellent forum for discussing common issues and sharing successes and failures in academic and administrative activities.

Addressing policymakers, we have observed that regulation can foster coopetition while preserving local identity. The “*Universidade Gratuita*” program is an example of this, as its implementation – governed by laws and decrees – is a significant achievement resulting from inter-institutional negotiations involving FIAs and HEIs. For programs of this magnitude, regulation is essential to standardize criteria, resource transfer mechanisms, and counterpart requirements, all of which require significant cooperation. Furthermore, regulations must preserve institutional diversity, enabling the recognition of regional vocations and distinct local characteristics.

In the social field, institutionalized coopetition directly impacts HEIs and their surrounding communities. Several initiatives developed through coopetition positively impact the financial sustainability and operational continuity of HEIs by generating employment and income for those involved. There are also countless benefits for society, such as expanded access to quality higher education, retention of local talent, enhancement of local human capital, and effective contributions to the development of the regions where these HEIs operate. This is a core element of their institutional mission.

6.2 Limitations and future research

This study offers valuable contributions but also has certain limitations. One limitation is its focus on a single country and its unique characteristics, which may restrict the scope of the results or produce an overly localized perspective. Comparative studies using a quantitative approach could provide insight into the extent to which FIAs influence coopetitive strategies. Another limitation relates to respondents' perceptions. Since the study has a cross-sectional design, the responses reflect participants' views at a specific point in time. These views may include those of people with more or less experience in the role, as well as highlight current actions or devalue older ones.

Conducting longitudinal research could help determine whether the relationship between FIAs and coopetition remains consistent over time. It is important to not only to assess whether FIAs play a role in fostering emergent coopetition, but also to understand the significance of their influence over time.

Additionally, the focus of the data collection through interviews was on the strategic level of community HEIs, which can produce bias and restrict the ability to capture the reality of coopetition practices. Including the perspectives of professionals in areas such as research, innovation, and marketing, could provide more examples of routines or practices and reveal tensions and conflicts in the simultaneous activities of competition and cooperation. Furthermore, collecting data from more FIA representatives could expand the scope of the results obtained by incorporating different points of view and considering the perspective of the actors that make up the network studied.

Upon completing this study, new research opportunities have emerged. Our findings on government pressures do not clarify their role in fostering cooperation between competitors. Future studies could determine whether this phenomenon is context-specific. Another promising research direction is examining how political decisions impact FIAs. Lastly, an important aspect to explore is the role of informal institutions, which often step in to reduce uncertainty when formal mechanisms are absent or insufficient.

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SUPPLEMENTARY MATERIAL

Supplementary material accompanies this paper.

Supplementary Data 1 – Appendix A: Interview Guide

Supplementary Data 2 – Appendix B: Codebook

Supplementary Data 3 – Appendix C: Coding Matrix

Supplementary Data 4 – Appendix D: Propositions

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