Coopetition typology revisited – a behavioural approach

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Abstract: Coopetition strategies have been recognised as complex and dynamic inter-organisational phenomena. Yet, the heterogeneity of coopetition has very seldom been empirically investigated. Our study contributes to fill this gap by exploring coopetition strategies adopted on the polish energy market. We test the relationship-intensity-based coopetition typology with behavioural variables. The serial case study conducted on 20 firms unveils coopetition as the juxtaposition of competition and collaboration in active and passive forms, yielding nine instead of four theoretically possible coopetition types. Our results also suggest that mandated coopetition displays moderate or weak levels, while resource-driven coopetition is active.

Keywords: coopetition; typology; behaviour; mandated; case study.


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1 Introduction

Coopetition as an emerging strategic paradigm generates a wide interest among researches since the second half of the 1990s. Researchers link liberalisation, deregulation, and globalisation processes, which contribute to intensify competition, to
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the search for new, more effective strategies (Zineldin, 1998). Firms increasingly collaborate and compete with each other at the same time. Empirical research confirms that collaboration with a strong competitor may bring significant improvements of market performance (Gnyawali and Park, 2011), financial performance (Robert et al., 2009) or innovativeness (Gnyawali and Park, 2009).

Among key motivations for adopting coopetition strategies the literature identifies: increasing the size of the market, the creation of a new market, increased efficiency of resource utilisation or improving competitive position (Ritala, 2011). Having achieved collectively an increased value, firms compete for a share in it. This behaviour has been labelled as syncretic rent seeking (Lado et al., 1997), and proved distinct from ideally collaborative or competitive strategies. Hence, we define coopetition as a strategy adopted to achieve better performance levels and ultimately above average profitability, through collaboration with a firm’s competitors.

Coopetition is recognised as a complex, multifaceted and dynamic phenomenon. Its paradoxical nature has been translated into a typology depending on competition and collaboration degree (Luo, 2004), suggesting distinct firm’s behaviours models for different mixes of high and low intensities. However, beyond theoretical propositions the typologies have been seldom tested.

The aim of this paper is to test the coopetition typology based on relationship intensity and explore its drivers. We adopt the view that coopetition is a heterogeneous phenomenon, and that firm’s coopetitive behaviours reflect different types of coopetition strategies. Consequently, we use behavioural (Lado et al., 1997) instead of structural variables (Fernandez et al., 2010) for identifying coopetition strategies. Recently, empirical studies have been privileging high technology industries assuming that complex products, rapid technology change and intensive competition will induce coopetition (Ritala, 2011). Consequently, traditional industries have been relatively less in focus. Our paper contributes to alleviating concerns that coopetition is an industry specific phenomenon by scrutinising a traditional industry.

The paper is organised in four sections. Firstly, we provide an overview of coopetition literature focused on available typologies. Thus a theoretical background for identifying ideal-type models of coopetition is discussed. Secondly, we describe our empirical research design. The study findings are presented in section three, and discussed in the following section.

2 Theoretical background

The coopetition concept has been initially proposed in order to grasp a growing complexity of interfirm relationships, and the role or coordinated action in the value network (Brandenburger and Nalebuff, 1996). Indeed, competition or collaboration alone fail to adequately explain firm’s behaviours and their drivers. A strong assumption in the alliances literature has been that collaboration and competition between the same firms are mutually exclusive. A more moderate stance suggests that beyond a certain degree of competition, the collaborative relationship ceases to benefit partners. According to this perspective some researchers expect an inverted u-shaped relationship between coopetition and performance (Luo et al., 2007). For extreme intensities, coopetition impact on performance is expected to be low, while a
A moderate level should bring an optimal balance between the bright and dark sides of coopetition.

From a collaborative perspective, competition between partnering firms is seen as a source of tensions (Tidström, 2009), a managerial problem (Park and Russo, 1996) and has been recognised as a factor of failure (Inkpen and Beamish, 1997). Researchers demonstrate how the collaborative agreement itself can generate competitive behaviours, in particular when the distribution of value is perceived as unjust (Czakon, 2009). In turn, the competition literature clearly considers alliances as a way to limit the intensity of competition in an industry, or is presented as collusive and therefore harmful (Vonortas, 2000).

All in all, there is a discrepancy between theoretical ideal-type-collaboration or ideal-type-competition stances and real behaviours of firms. Regardless of whether collaboration is introduced into competition, or competition into collaboration, theoretical tensions typical to paradoxes arise. Moreover, researchers have identified the intensity issue, linking benefits and negative effects to collaboration and competition, depending on their intensity. The paradoxical concept of coopetition juxtaposes both relationships and allows the simultaneous study of different collaboration-competition intensity mixes.

2.1 Coopetition typology

Empirical studies unveil various types of coopetitive strategies of firms, just as firms display various competitive or collaborative strategies. For instance, within the value network at least three stances might be useful to explore coopetition:

1. vertical coopetition focusing on supplier-customer diads along the value flow
2. horizontal coopetition between direct competitors
3. lateral or network coopetition, which involves complementors or other actors in the value network.

The roles played by firms in the value network follow the initial Brandenburger and Nalebuff’s (1996) proposition. Network coopetition has been empirically studied on a set of actors: competitors, suppliers, customers and complementors (Rusko, 2011). However attractive for scrutinising coopetition morphology, these approaches fail to address its paradoxical nature.

Researchers tackled the juxtaposition of competition and collaboration by offering a typology based on the relative strength of the two relationships (Bengtsson and Kock, 2000). Case studies show that firms act differently depending on their dominant orientation towards others. Three types of relationships have been identified in this perspective: a collaboration-dominated relationship, an equal relationship, and competition dominated relationship.

Furthermore, a typology based on each relationship intensity has been developed (Luo, 2004). Relationship’s intensity results mainly from contributed resources, and from mutual interdependency. Seen from this perspective four types of coopetitive relationships have been theoretically proposed (Figure 1).
When neither competitive nor collaborative interactions appear, the relationship can be located at the 0 point, representing coexistence. For pure competition or collaboration firms locate on the X, or Y axis, representing each type of relationship respectively. The axes require intensity measures for each relationship.

Coopetition is the area represented as a mix of both relationships, divided in four squares. For low-low intensity the literature proposes the label of estranger, or monoplayer (Chin et al., 2008) privileging individual actions. Estranger coopetition is expected to appear in deregulated industries, and applies for firms relying largely on their own resources. Multinational firms displaying this type comply to regulations, or less frequently avoid them. The integrator type displays high-high intensities of relationships with others, mainly connected with goal divergences. Integrator coopetition is expected to appear in newly deregulated industries with interdependent actors, and to take the form of various partnerships between them. In addition to the diagonal squares, we find contenders who display a strong competitive preference, and partners who are predominantly collaborative.

This typology allows to capture the paradoxical nature of coopetition. Also, it refers to two types of drivers: regulation and resources. While industry regulation degree can create a favourable environment for coopetition appearance mostly by impacting on competition, resource interdependencies induce collaborative actions. However, this typology has been applied only to a limited sample of Hong Kong manufacturing firms (Chin et al., 2008), and to three cases belonging to the partner type of relationship (Osarenkhoe, 2010).

A similar typology uses collaborative and competitive orientations to propose a four quadrants matrix (Lado et al., 1997), referring to rent seeking behaviours: monopolistic for low-low, and syncretic for high-high behaviours. Mixed behaviours are respectively labelled collaborative and competitive rent-seeking. Behaviour remains a central line of inquiry, drawing attention to orientations, actions, and patterns. While the resulting matrix is quite similar to the intensity-based typology, it inherent logic captures behaviours instead of structural variables. Moreover, this approach integrates theoretical foci. The resource-based view provides insights on drivers for collaborative behaviours,
based on the assumptions that firms have heterogeneous resource profiles and that resources are not perfectly mobile (Barney, 1991), which induces collaborative behaviours.

For the purposes of our study we adopt the relationship intensity based typology, and test it to identify the types of coopetitive behaviours together with their drivers in our empirical setting.

3 Empirical research design

A strategic perspective on coopetition implies that firms may use coopetition as a deliberate strategy (Robert et al., 2009) or an emerging one. By deliberate we mean a firm’s autonomous formal decision process implemented on the market. Inversely, emerging means a pattern of firm’s actions which has not been formally decided, but results from external contingencies such as mandatory regulations (Mariani, 2007) or inter-firm relationship’s dynamics (Czakon, 2009). Consequently, exploring patterns of firm’s behaviours allows to identify their coopetition strategies be those deliberate or emerging.

3.1 Method

We have adopted a case study approach to look at coopetitive relationships between the incumbent electricity seller and other retail electricity sellers, who are both its competitors and customers. Cases help identify variables which are invisible or imperceptible during the standard literature research, and contribute to theory development (Eisenhardt and Graebner, 2007), by enabling process investigation within a specific context, to provide a sharp picture of the phenomenon under scrutiny (Yin, 1984). The serial case study approach to analyse a series of coopetitive relationships between one incumbent retail electricity seller and his numerous customers, followed by the analysis of documents allows for data and research method triangulation (Dul and Hak, 2008), in order to ensure objectivity and validity of the results.

3.2 Sample

The Polish electricity market was regulated in 1997 following the Polish Energy Law which, which transformed a natural monopoly into a competitive electricity market. The depth of change is reflected by a dynamic growth in number of licensed retail electricity trading companies, from 33 firms in 1997 to 301 in 2011. Given the liberation of energy prices and the liberty to change suppliers for corporate customers, competition on the market has significantly intensified. Customer mobility increases since then: the change in 2011, when compared to 2010 accounted for 285%, whereas the change in 2010, in relation to 2009, amounted to as much as 469%.

Electricity sellers may purchase electricity for resale:

1 on the wholesale market on their own, or through various intermediaries, i.e., brokerage houses, investment houses
2 from the wholesale electricity sellers
3 from other retail electricity sellers, who are their own competitors.

The sourcing choice offers opportunities to investigate coopetition strategies adopted by firms operating on that market.

The industry displays diverse strategic approaches, which in turn impact firm’s behaviours. Polish retail electricity sellers can be broadly divided into:

1. sales companies, which account for 42% of their total number
2. diversified electricity companies which account for the remaining 58%.

Many firms trade energy with the purpose of achieving better performance through: profit generation, loss minimisation, energy cost savings. Yet, some firms treat energy trade as a mandatory supplementation of their various business activities, resulting from their history, or assets such as industrial distribution grids. Coopetition can be identified among those sellers for whom the trade in energy is a method to achieve business benefits. Only in these cases firms compete for their customer portfolio, and enter into collaborative agreements with other players on the market.

3.3 Data

The data gathering process included 20 individual in-depth interviews with representatives of electricity trading companies: presidents, vice presidents, directors responsible for electricity turnover. All interviews have been conducted in the first quarter of 2012. The typical interview lasted between 1 to 2 hours and was performed in the firm’s headquarters. It consisted of three parts:

a. general information about firm
b. the reasons why firm decided to outsource the electricity purchase department/to offer these activities in the case of outsourcer
c. information about coopetition drivers, behaviours and experience of the firm.

We have also used a historical document analysis in order to triangulate interview data. The data were acquired from secondary information sources, in the form of: research papers on the electricity market, statistical data from the Energy Market Agency, information from the Energy Market Information Centre and the Energy Regulatory Office, legal acts, websites of researched entities and other materials, published and unpublished, by institutes and bodies connected with the issues in question.

3.4 Variables

Applying Luo’s (2004) typology requires the measurement of both collaboration and competition intensity. The literature offers two approaches to measurement: structural and behavioural.

The structural approach has been developed in recent years in empirical studies (Fernandez et al., 2010). Structural measures capture the relative or absolute frequency of competitive actions, their duration, or scope. Similarly, variables measuring network position of firms have been used as proxies for collaboration intensity. Prior coopetition studies have adopted such structural variables, as contact frequency in simulator industry in Taiwan (Chien and Peng, 2005), or the frequency of collaborative and competitive
actions in French professional football (Robert et al., 2009). Yet, the structural approach faces a challenge of precisely delineating low intensity from high intensity. Also, structural variables provide little insights on antecedents such as resources, strategies or positions (Chien and Peng, 2005), as their purpose is to capture the relationship’s picture at a given point in time. Our study aims at overcoming this limitation.

Behavioural measures aim both at focusing research and guiding managerial practice by addressing the strategic behaviours of firms (Lado et al., 1997). It helps to avoid measurement and delineation issues as behavioural variables are logical, descriptive in nature. While investigating into a relationship, the behavioural approach incites to address its drivers. We adopt it to address the objective of our research, namely to test coopetition typology and unveil its drivers. We have used the following descriptions:

- Passive collaboration represents firms’ mutual interactions mandatory by law, thus generating a low commitment. We label this as passive collaboration because firms have to accept collaboration if asked to, but do not initiate collaboration.
- Active collaboration refers to voluntary collaboration in the form of agreements or coordinated market actions.
- Passive competition refers to: non-personalised, indirect marketing, sales actions conducted in the media, and reactive sales initiated by potential customers.
- Active competition include active sales activities of firms involving: the direct, intentional and aggressive sales aimed at the customers.

4 Results

4.1 Coopetition drivers

Our data show that about 77% of Polish licensed retail electricity trading companies purchase electricity from other retail electricity sellers, i.e., their competitors, instead of operating the wholesale energy market. This choice is justified by high costs of wholesale energy market operations, relative to specific assets such as: qualified staff, dedicated software for servicing energy trade, transaction costs relative to forward rate transactions. For smaller sellers, these costs per energy unit turn out to be prohibitively high. Therefore, small sellers opt for outsourcing of the whole energy purchasing department to other, larger sellers which possess the competencies required to operate directly on the wholesale electricity market. Outsourcing providers are usually firm’s competitors on the retail market. This is confirmed by data from Power Exchanges which expressly indicate that mainly large retail sellers, including incumbent sellers operate on the wholesale energy market.

Our respondents have underlined that coopetition is driven by expected benefits. For the outsourcees, the benefit is connected with:

- comfort
- time savings
- capital savings
- reduced uncertainty
Outsourcers find that their benefits from coopetition are connected with sales margins and with the energy volume sold to their partners, which expands their own energy trade portfolio. Thus, the outsourcers have an opportunity to secure energy supplies with relation to the whole energy portfolio contracted by them on the wholesale energy market. They rather do not fear that through outsourcing partnerships they may create new market players, since, as a President of one of the companies revealed [Respondent A]: If not me, someone else will sell energy to them [smaller competitors], so, it is better to cash in on this operation, minimising any eventual losses, than to sit on my hands and wait for them to knock at the doors of my customers and sell it to them. (…) The seller and the trader must be ready to do businesses with anyone. If there is a demand, there should also be a supply. He also adds, that apart from current risks, his involvement in outsourcing provides him with complex and valuable knowledge about sales potential of his competitors, thus allowing to better prepare for any prospective expansion risks from their side. Thus, the coopetition on the retail energy market has been declared by our informants as beneficial for both parties involved in the relations.

Resource interdependencies reveal to drive coopetition on this market. While outsourcers are able to take advantage of their partner’s selling competencies, the outsourcees in turn exploit their partner’s purchasing competencies. Purchase outsourcing reveals to be a key strategic choice, which brings coopetition into inter-organisational relationships. Indeed, within the scope of outsourcing developed between retail electricity sellers, we can observe both collaboration and competition on the energy market. In each identified coopetition relationship, outsourcees are the retail sellers who have not developed the necessary competencies for participation in the wholesale electricity market, creating a resource dependency. On the other hand, the role of outsourcers is adopted by retail sellers which purchase energy directly on the wholesale energy market, and which perceive more business benefits than hazards resulting from collaboration with their competitors. Thus, the prerequisites for the emergence of coopetition between sellers are the following:

1. this procedure should operate between two retail electricity sellers, and not between one retail and one wholesale seller, since competition between them may emerge solely under the first condition

2. relations are laterally directed to achieve benefits from electricity trading, since firms can compete for current and prospective customers.

4.2 Competition and collaboration within the outsourcing relationship

The transactions concluded between the incumbent retail seller and its competitors can induce collaboration during realisation of the contract due to legal regulations, contractual clauses and active firms’ behaviours. When collaboration appears, partners seek informal agreements aimed at reducing direct competition for each other’s clients.
Many small sellers who trade electricity within the scope of their own/leased distribution grids, are not interested in competing for the remaining part of the market. The outsourcers tacitly count on reciprocal collaboration. Their expectations range from competitors’ limited expansions plans, but also on their competitors’ loyalty and restrain from picking on sellers’ customers. They say: *Partners should not jump down their throats and steal the customers* [Respondent K], and this is what they implement in the coopetitive relations. For small firms losing even a single customer may turn out to be a significant blow to customer portfolio, which cannot be compensated by attracting a new client ‘from outside’, as they do not pursue relevant expansive actions. Therefore, the sellers rely on their coopetitors to minimise the risk of customers’ leaving.

Nonetheless, active collaboration does not mean that there is no competition between electricity sellers. Even if the outsourcer ceases to actively attract his counterpart’s customers, it still uses passive methods, such as: national sales campaigns, TV and radio commercials, press advertisements. This encourages customers to contact him and become familiarised with his electricity sales offer. The outsourcee in turn is not able to either hinder such competition, or block it by more formal or informal agreement. Therefore all surveyed respondents, who are engaged in coopetition, underline that a relevant margin policy is an indelible ingredient of any coopetition relationships between companies. Through adjustment of price levels to their competitive environment, they are able to prevent customers from going to other suppliers and to withstand a great majority of sales campaign launched by their competitors, including business partners. *With our low margin, we try to convince all our recipients to stay with us, what significantly minimises the risk of their leaving.* [Respondent F]. If someone is better than me and is picking my customers; it means for me either trying to be better or winding up – this is for me a sign that something should be changed [Respondent N]. Hence, the coopetitive relationship reveals to be unstable, as the outsourcees are constantly forced to implement competitive actions.

Apart from prices, competitive actions refer to the development of electricity products that are created by outsourcees on the basis of purchased electricity. The products are distinguished by their delivery times, tariff groups, energy sources including green energy, or some additional services such as free of charge or cheaper energy audits. The retail electricity sellers compete in terms of output activities – the ones which are the closest to the customers’ product perception. The territorial scope of their competitive actions is determined by their strategies. Thus, the small sellers compete solely for recipients connected to their grids, or for the ones intended to be connected (e.g., Respondents C and N). Meanwhile larger firms, who consider electricity trading as core business activities, often go beyond their own distribution grids, whereas their activity covers some, several dozens or even all electricity distribution areas located in Poland (e.g., Respondent S).

These behaviours are reflected in the forms of preferred competitive behaviour. Those sellers who focus solely on existing customers use mainly passive forms of competitive actions, which are reactive to customers. Other sellers whose intention is to attract new customers, usually behave actively: they address directly potential clients by telephone, letter, fax, or e-mail. In the same time passive competition is still carried out. Among those active competitors, we find all incumbent energy sellers such as Respondent A., or other sellers, e.g., Respondent S.
4.3 Coopetition strategy models

Our data allowed to identify four models of coopetitive behaviours on Polish retail energy market. Competitive and collaborative behaviours distinguish them from one another (Figure 2).

**Figure 2** Models of coopetitive relationships of Polish retail electricity sellers

<table>
<thead>
<tr>
<th>Coopetitors’ mutual interactions</th>
<th>Passive collaboration</th>
<th>Passive and active collaboration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passive competition</td>
<td><strong>Passive coopetition</strong> (Respondents: A with C, E, F, I, J, L, O, R)</td>
<td><strong>Mixed coopetition – collaborative and passive interactions-dominated</strong> (Respondents: A with K, M, N)</td>
</tr>
<tr>
<td>Passive and active competition</td>
<td><strong>Mixed coopetition – competitive and passive interactions-dominated</strong> (Respondents: A with S, T)</td>
<td><strong>Flexible coopetition</strong> (Respondents: A with B)</td>
</tr>
</tbody>
</table>

On the one hand, firms maintain with each other and with their prospective receivers, passive or active competition. On the other hand, firms initiate active collaboration arising from outsourcing of electricity purchasing departments and from additional, frequent, informal agreements banning competing for their own customers. Passive collaboration is generated solely by activities connected with the outsourcer’s services.

**Figure 3** Passive coopetition
The first model of passive coopetition is mandated by law, passive collaboration, combined with a passive competitive behaviour. Respondent C affirmed: by picking our customers, our supplier [coopetitor] cannot gain a lot but he can lose almost everything during the next period of contract. Our own consumption of energy is so big in relation to our receivers, that he would gain much less, stealing our customers than he would lose, when we would give his services and products up. This statement confirms that coopetitors knowingly defers active competition, and limit interactions to passive forms (Figure 3).

Mixed coopetition has been identified in models dominated by

1. collaborative and passive
2. competitive and passive interactions,

where we distinguish the dominance of one form of behaviours.

Coopetition dominated by collaborative and passive interactions results from a fact, that this kind of coopetition is initiated by outsourcers, which possess their own small industrial distribution grids. Outsourcers are selling energy to business/residential consumers connected directly to their grid. It is therefore important to protect this customer base. Collaboration takes both passive and active forms of collaboration.

**Figure 4** Mixed coopetition – collaborative and passive interactions-dominated
Mixed coopetition competitive and passive interactions dominated is poles apart from the previous one, because it reflects passive collaboration in a configuration with a passive and an active competition. This model occurs for companies, which form a partnership with the outsourcer only on regulations grounds, and because of resource dependencies. Beyond the collaboration for purchases, those firms actively and passively compete for customers (Figure 5).

Figure 5 Mixed coopetition – competitive and passive interactions-dominated

We have also identified a flexible coopetition model, where both competition and collaboration is passive and active. Similarly to coopetition dominated by collaborative and passive forms of interactions, outsourcées try to protect their clients by active collaboration with outsourcer, but simultaneously they do not resign from active competition for current and potential clients, in order to better protect and develop their clients portfolio (Figure 6).

Different attitudes of the companies to the sales activity and to competitive and collaborative behaviours, determine some models of coopetitive behaviours which have been identified on the Polish retail energy market.
Our serial case study has been conducted with a primary empirical focus on testing intensity-based coopetition typologies. Our respondents clearly indicate that firms deliberately use different combinations of collaborative and competitive behaviours. The variety of combinations supports our initial view that coopetition is a heterogeneous phenomenon and confirms our approach to studying coopetition by focusing on the intensity of its components. Extant literature suggested that coopetition should be viewed as paradoxical concept, which translates into an orthogonal bi-dimensional space set by collaborative and competitive actions. Our study confirms that while entering into coopetitive relationships firms consider at the same time their competitive and collaborative behaviours.

Our study findings supports the typology coopetition based on a four modes matrix strong-weak/competition-collaboration (Lado et al., 1997; Luo, 2004; Chin et al., 2008). We have identified four models of coopetitive relations on the Polish electricity market between incumbent electricity seller and other retail firms selling electricity:

1. passive coopetition
2. mixed coopetition – collaborative and passive interactions-dominated
Coopetition typology revisited

3. mixed coopetition – competitive and passive interactions-dominated

4. flexible coopetition.

They differ each other in terms of the forms of the mutual interactions of the coopetitors, which are determined by their business behaviours (Table 1).

Table 1 Characteristics of coopetition strategy models on the Polish energy sector – summary

<table>
<thead>
<tr>
<th>Model</th>
<th>Passive coopetitive</th>
<th>Mixed coopetition – collaborative and passive interactions-dominated</th>
<th>Mixed coopetition – competitive and passive interactions-dominated</th>
<th>Flexible coopetition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passive collaboration</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Active collaboration</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Passive competition</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Active competition</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Competition and collaboration</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>changes with time</td>
<td></td>
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</table>

Figure 7 Models of coopetitive relationships based on passive/active behaviours – theoretical and identified on the Polish electricity market

<table>
<thead>
<tr>
<th>Coopetitors’ mutual interactions</th>
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</tr>
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</table>

However, our evidence shows that nine types of coopetition should be expected, instead of four (Figure 7). In the intensity-based typology, where coopetition types arise from combining low and high degrees of juxtaposed relationships, the delineation between them is rather arbitrary. While we have anticipated four types based on a logical variable active/passive, empirical evidence reveals a substantial area for mixed relationships. Indeed, both collaboration and competition can take three forms: passive, active and both
Proposition 1 Coopetition models can be identified by analysing competitive and cooperative behaviors, which can be active, passive and both active and passive.

Interestingly, we were not able to identify coopetition relationships using exclusively active collaboration or active competition. This peculiarity might be explained for theoretical models displaying active competition, i.e., 7, 8, and 9, because on the electricity market at least one of the relationship parties (outsourcer) always conduct passive competition. Similarly, for theoretical models displaying active collaboration, i.e. 3, 6 and 9, where passive collaboration, mandated by law always occur between small firms and the incumbent seller. Beyond passive collaboration, these firms actively collaborate in order to protect their own customer portfolio. In the absence of regulations, these firms would probably start to function in theoretical model like no. 3 or 6.

Moreover, our data allow to integrate theoretical typologies proposed in the literature. Prior research has used either structural variables (Luo, 2004; Chin et al., 2008) in order to identify a coopetitive relationship depending on the intensity of its components, or behavioural variables (Lado et al., 1997) to identify a relationship with regard to firm’s behavioural pattern. In both cases researchers adopted a double dichotomy: low-high. While it is possible to measure the intensity of a relationship with structural variables, the delineation between low and high raises becomes an issue. Also, it is difficult to identify a behaviour along a low-high orientation. Hence, researchers opt for the study of coopetitive relationships within a single matrix quadrant (Osarenkhoe, 2010), or even purposefully select their empirical sample so as coopetition is easily observable, i.e., intensive (Ritala, 2011).

We have developed the coopetition typology by adopting descriptive variables of active, or passive behaviour. Different degrees of commitment to coopetition strategy have been identified among respondents. Some follow regulatory provisions in order to engage in a moderate coopetitive interplay. The moderate intensity means that either competition or collaboration preference is active, while the other component is passive. According to our data, we are also able to confirm previous research on balanced or dominated coopetitive relationships (Bengtsson and Kock, 2000). We develop prior literature by showing that balanced coopetition can be either passive or active. Active coopetition appears when firms opt for simultaneously intensive information sharing and fierce competition for customers. Passive coopetition in turn appears when firms collaborate just to the extent mandated by market specific regulations, and restrain from competing actively on the market.

Interestingly, our informants identify passive collaboration with regulatory provisions, while the active collaboration is a step further into crafting a resource-driven strategy. These findings confirm prior research that coopetition can be mandated by forcing access to critical assets (Mariani, 2007). Mandated collaboration between competitors takes place beyond or without their will. Our findings suggest that coopetition would not appear in the moderate form or passive form without the intervention of a market regulator. Within this mandated collaboration firms opt for passive competitive behaviours, which identifies passive coopetition, or for active competitive behaviours in a quest for mandated partner’s customers, which identifies moderate coopetition. Thus, coopetition appears not only as the best strategy or a market
interactions result, but as an imposed behaviour. Therefore, we can propose a linkage between regulatory frameworks and coopetition:

**Proposition 2** Regulations induce coopetition by forcing competitors into collaborative activities, however mandated coopetition reveals to be passive or mixed.

In the same time, our findings suggest that collaboration within coopetitive strategies is clearly connected with resource interdependencies. For many firms coopetition results from a deliberate decision to outsource some competencies or valuable assets. The term outsourcing has been often used by our informants when explaining the nature of their relationships. This confirms the role of complementors (Brandenburger and Nalebuff, 1996) in creating value networks. Beyond confirming that theoretical proposition we have found that assets complementarity is a motive to engage into coopetitive relationships. Further, our data show that resource motives induce active collaboration. Yet, within this active collaboration partners may adopt different competitive behaviours. Some firms adopt a passive competitive behaviour restraining from direct actions aimed at prospective customers, with a clear expectation of reciprocity. Beyond resource-based collaboration, those firms display a tacitly coordination of market actions. We believe this moderate form of coopetition is collaboration-dominated. Yet, some other firms do not restrain from active actions aimed at prospective customers, a pattern we call active coopetition. We can infer a proposition from prior literature and our study:

**Proposition 3** Resource interdependency is a driver of active or mixed coopetition strategy.

In other words firms which seek to provide customers with a sound value proposition need to collaborate with competitors. More than that, coopetition arising from this motive is perceived as mutually beneficial, the informants being able to clearly name the types of benefits expected and risk connected to them. Thus, engaging into coopetition refers to a decision process, which confirms coopetition to be a deliberate strategy. It is worthwhile noting, that nor resource interdependency neither regulations explain why firms have opted for passive or active competition.

6 Conclusions and limitations

Coopetition as a phenomenon can be observed on many markets, yet prior empirical studies have so far been predominantly focusing on high-technology firms. The aim of our study was to fill this gap by addressing coopetition in a traditional industry. Within this setting our objective has been to test the typology of coopetition based on collaboration and competition degrees. We believe that our study contributes to the literature fourfold.

Firstly, our study provides evidence of wide-spread coopetition in traditional industries, expanding previous scope of empirical studies. This suggests that coopetition is not a phenomenon derived from complex products or innovative industries, where collaboration is simply a must for firms. Inversely, coopetition is more connected with the care to provide a value proposition to the customer, regardless of the product nature. Also, this encourages to develop coopetition studies in more traditional industries, which so far have been clearly under researched from a coopetition stance.
Secondly, our findings confirm the orthogonal nature of coopetition as a concept composed of competition and collaboration, which can therefore take different forms depending on the degree of its components. Our field research confirms that some firms opt for an active adapter model, but others choose moderate partner or contender models, while some firms act on a passive monoplayer model. Thus we introduce in the literature variables relative to active or passive behaviours of firms. Firms often choose to be passive in collaborative or competitive terms. Interestingly, this passiveness can concomitantly appear in coopetition related to legal requirements. If not mandated to, coopetitors would refuse to enter into inter-organisational relationships with competitors. Inversely, the active form of coopetition is a strategy deliberately designed and implemented. Also, the scrutiny of both competitive and collaborative aspects of coopetition reveals major differences in behaviours displayed by actors.

Thirdly, we provide evidence that coopetition on the same market can be a deliberate choice for some firms, while being an emerging strategy for others. Informants clearly explained the rationale of entering into coopetition, but also underlined that there is limited room for decision – coopetition might be a reaction for demand or the result of regulatory inducements.

Fourthly, we have indentified two different reasons for coopetition emergence on the Polish electricity trade market. The first and foremost is regulator’s care on protecting competition, which ironically forces competitors to collaborate with each other. The second is called outsourcing, as this concept captures assets complementarity and the need to make use of other firms’ competencies.

The limitations of our study are mainly connected with the method we have adopted. The sample is not very numerous, while its theoretical selection reduces the generalisability of our findings. Polish electricity market regulations are aligned with the European Union legislation, which offers a promise of replicating our study in the EU, restraining in the same time its findings for countries outside the EU. We are also aware of the limitations arising from qualitative data analysis. Also, we have adopted a simplified, clear-cut approach to identify relationship intensity. In our study coopetitors opt for active or passive behaviours, which are then linked to high and low intensity of relationship. Further studies may adopt a more refined approach either by identifying a moderate level of intensity or applying measures of relationship intensity. Moreover, we have found that one focal firm has different types of coopetition relationships with other, suggesting some kind of portfolio management. We believe our findings set a more refined research agenda, thus contributing to unveil coopetition’s inner heterogeneity.

References
Coopetition typology revisited


Notes

1 Among all 19 researched intra-company relationships within the companies suspected of coopetitive behaviours, in case of 14 we were able to identify coopetition relationships. Coopetition was not identified in the multinational relationships of the companies: A-D; A-G; A-H; A-P; A-U).