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Innovation through Coopetition: An analysis of small- and medium-sized trust companies operating in the Liechtenstein financial centre

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Abstract

Coopetition has received increasing attention in the academic literature. Prior research has examined the benefits and risks of coopetition as well as its potential impact on innovation in many different contexts, including large companies and manufacturing industries. Surprisingly, despite the omnipresence of small- and- medium-sized enterprises (SMEs) and the growing relevance of service industries, coopetition in these contexts has not yet been widely explored. This study seeks to broaden the present understanding of coopetition by finding an answer to the research question "How do small- and medium-sized trust companies apply coopetition in the Liechtenstein trust industry and how can this strategy facilitate innovation?" As such, the presented work investigates the application of coopetition by small- and medium-sized trust companies operating in the Liechtenstein financial centre. The qualitative expert interviews with major actors in the Liechtenstein trust industry reveal that coopetition is a frequently applied business strategy among Liechtenstein trust companies, members of the Liechtenstein financial centre and international competitors. The trustees' conservative attitude, however, is found to be a typical barrier to coopetition, since it induces trustees to give priority to the protection of their own business. Nevertheless, coopeting partners recognise their ability to derive crucial benefits from their cooperative interactions with rival organisations in terms of possibilities to share resources, costs and know-how. Moreover, coopetition enables coopetitors to innovate their current business models.

Keywords: Coopetition, Service Industry, Financial Industry, Innovation

1 INTRODUCTION

Many companies are under consistent pressure for survival and corporate success, given the ongoing changes in economic environments (Park, Srivastava, & Gnyawali, 2014). External factors of change include globalization, regulation, transition of countries into free market economies, stronger competition through growing markets and constantly changing consumer behaviours (Volberda, Van den Bosch, Flier, & Gedajlovic, 2001). These changes force companies to adapt to new market conditions and to constantly innovate their products, services, and processes to remain competitive in the marketplace (Bouncken & Kraus, 2013). Although adaptation to external changes and innovations are fundamental factors for successful companies in the long term (Engel & del-Palacio, 2011), it should be noted that many companies do not have enough experience or resources to react fast enough to the changing economic landscape or to innovate their products, services, and processes. Facing such difficulties, companies may consider engaging in coopetition, a special type of inter-organisational collaboration (Bouncken, Gast, Kraus, & Bogers, 2015) which implies *"that two firms can be involved in and benefit from both cooperation and competition simultaneously"* (Bengtsson & Kock, 2000, p. 411). Typically, competitors cooperate to increase their access to financial, human, social, or material resources of their partners or to benefit from their partners' knowhow, experiences and skills (Bengtsson & Kock, 2000; Kraus, Meier, Niemand, Bouncken, & Ritala, 2017).

Small- and medium-sized enterprises (SMEs), defined by the European Commission (2003) as companies with less than 250 employees, might particularly benefit from coopetition since these firms face different problems compared to larger firms which potentially motivate them to adopt a coopetition strategy. Such problems include their relatively small size, rising research and development (R&D) costs, risks associated with innovation, their oftentimes limited market presence and constrained access to financial, human, social, and material resources. Stemming from these difficulties, SMEs tend to be particularly vulnerable and exposed to economic fluctuations (Gnyawali & Park, 2009; Morris, Koçak, & Özer, 2007). In this case, coopetition might represent a new strategic option (Bouncken & Kraus, 2013; Levy, Loebbecke, & Powell, 2003) as it provides access to resources and technologies necessary to develop and introduce new products or services (Raza-Ullah, Bengtsson, & Kock, 2014). Not surprisingly, several studies have emphasised the potentially positive link between coopetition and innovation (e.g., Bouncken, Clauß, & Fredrich, 2016; Ritala & Hurmelinna-Laukkanen, 2013).

Although the topic of coopetition has recently received increasing attention in academic literature, existing research is rather limited as it focusses primarily on coopetition as a strategy for large companies (e.g., Bengtsson & Kock, 2000; Gnyawali, He, & Madhavan, 2006) and investigates coopetition mainly in manufacturing industries including engineering sectors (e.g., Salvetat & Géraudel, 2012), technology sectors (e.g., Pereira & Leitão, 2016), or transportation sectors (e.g., Wu, Choi, & Rungtusanatham, 2010). Interestingly, research merely analyses coopetition in resources-constrained SMEs (e.g., Bengtsson & Johansson, 2014; Levy et al., 2003; Morris et al., 2007) and service industries (e.g., Nair, Narasimhan, & Bendoly, 2011; Okura, 2007) including the financial sector (e.g., Czakon, 2009). This is surprising given the omnipresence of SMEs as well as the high importance of service industries in many economies.

This study seeks to fill this void in research by further developing the understanding of coopetition in the financial service industry. Therefore, the application of coopetition, its potential barriers and benefits as well as its implications for innovation are analysed in SMEs operating in the Liechtenstein trust industry. This industry has faced significant structural changes since 2008 when the Liechtenstein government decided to develop stricter regulations to improve their image in the international context and implement a white money policy (Liechtenstein Marketing, 2014). These changes represented fundamental changes in the economic environment of Liechtenstein trust companies as they have been forced to adjust and innovate their business models and the services they offer. In this context, coopetition seems a potential escape route for small- and medium-sized trust companies to join forces as an attempt to increase their power to grow, survive and innovate in this stricter regulated business environment. Therefore, the study aims to answer the following research question:

How do small- and medium-sized trust companies apply coopetition in the Liechtenstein trust industry and how can this strategy facilitate innovation?

Considering the novelty of this research, a qualitative, exploratory research design is employed to understand coopetition of SMEs in the financial service industry. To this end, the insights of expert interviews with actors in the Liechtenstein trust industry are interpreted in an exploratory way to shed light on the coopetitive activities of small- and medium-sized trust companies.

2 THEORETICAL FOUNDATIONS

2.1 Coopetition

2.1.1 Definition, benefits and risks

The term coopetition was coined by the CEO of the American multinational software and services company Novell, Raymond Noorda, who referred to his firm's business relationships with licensees which were, simultaneously, their rivals (Lechner, Soppe, & Dowling, 2016). Until 1996, however, coopetition remained rather unnoticed and it was only in 1996 that scholars and managers have started to recognize this strategy. In the last two decades, coopetition has attained increasing popularity in theory and practice. Accordingly, the number of publications on coopetition mostly in management and business research has been growing steadily (Gast, Filser, Gundolf, & Kraus, 2015). As such, a large range of contexts and industries have been examined including the contexts of MNEs and SMEs as well as manufacturing and service industries while a major focus on MNEs and manufacturing industries can be observed. The analysed service industries include financial (e.g., Czakon, 2009) and insurance services (e.g., Okura, 2007), tourism (e.g., Wang & Krakover, 2008), education (e.g., Nair et al., 2011), and health care (e.g., Peng & Bourne, 2009).

Coopetition can have a number of potential risks and benefits (Bouncken et al., 2015). Starting with the possible risks, the management of coopetition is challenging (Gnyawali & Park, 2009) and sometimes even dangerous (Pellegrin-Boucher, Le Roy, & Gurău, 2013). The potential danger may be the result of tensions which can occur between the cooperating rivals and their employees since their interactions are characterized by both cooperation and competition logics (Bouncken et al., 2015). Coopetitors are thus acting simultaneously as friends who share and rivals who withhold and protect information and knowledge. In this situation, opportunism and knowledge leakage represent major risks. As knowledge and information are exposed to rivals and the exchange of knowledge and resources with competitors is facilitated, partners may develop an opportunistic mindset. As a consequence, they may become eager to use their power to force their partners to act only in their own firm's best interest or they may use and appropriate mutually developed knowledge and expertise for their own firm's advantage (Bouncken & Kraus, 2013; Pellegrin-Boucher et al., 2013). Moreover, significant knowledge may leak unintentionally to a rival (Ritala & Hurmelinna-Laukkanen, 2013). Both opportunism and knowledge leakage can hamper the joint generation of innovations (Cassiman, Di Guardo, & Valentini, 2009) and force coopeting partners to carefully weigh knowledge sharing against knowledge protection (Pellegrin-Boucher et al., 2013).

Coopetition can also bring significant benefits (Ritala & Sainio, 2014). For instance, coopetitors can share their resources and knowledge (Bengtsson & Kock, 2000), costs, as well as risks and uncertainties related to the development of innovations (Bouncken et al., 2015). Further, by combining all partners' experiences and expertise, coopeting firms can create a common knowledge base (Ritala & Hurmelinna-Laukkanen, 2009) which may be used to develop their innovation capacity (e.g., Quintana-Garcia & Benavides-Velasco, 2004; Ritala, 2012). As a result, the involved firms may come up with ideas for products and/or services which they would be unable to create without coopetition. Additionally, such external knowledge could also bring in new perspectives in relation to strategies or business models (Roy & Yami, 2009). In fact, industry knowledge obtained through the cooperation with competitors is a critical success factor and can provide companies with a sharp competitive advantage (Loebecke, Van Fenema, & Powell, 1999). Another important impact of coopetition is that coopetitors can add value to their own products, services or even processes (Golnam, Ritala, & Wegmann, 2014) through coopetition. As Gnyawali and Park (2011), for instance, have argued, increasing value positively influences every organisational function, meaning there is an opportunity for widespread organisational advancement for the participants engaging in coopetition. Hence, the combination of both competition and cooperation can foster the creation of additional value (Bouncken et al., 2015).

2.1.2 Coopetition in SMEs

Prior research has shown that SMEs have to deal with specific problems that may drive them into coopetition. Based on their small size and the associated liability of smallness (Akdoğan & Cingšz, 2012), rising R&D costs, risks associated with innovation, their limited market presence and constrained access to financial, human, social, and material resources, SMEs tend to be especially vulnerable and particularly exposed to fluctuations in their economic environment (Gnyawali & Park, 2009; Morris et al., 2007). Further, they frequently lack both the capacity and resources to exploit knowledge and opportunities without the help of external partners (Levy et al., 2003).

Facing these constraints and seeking to tackle these problems, SMEs may opt for coopetition as a new strategic option (Bouncken & Kraus, 2013; Levy et al., 2003). Through coopetition, competitors typically attempt to combine the advantages of cooperation and competition (Bengtsson & Kock, 2000). While cooperation enables access to resources and technologies necessary to develop and introduce new products/services or to access new markets, competition makes sure that creative tensions between the competitors remain in force (Quintana-Garcia & Benavides-Velasco, 2004, Raza-Ullah et al., 2014).

By sharing resources and capabilities, as well as costs and risks for innovation through coopetition, coopeting resource-constrained SMEs may mitigate uncertainty, improve innovation, gain strength against rivals, and realize economies of scale (Gnyawali & Park, 2009). Moreover, they may be better prepared to react to business disruptions (Gnyawali & Park, 2009; Morris et al., 2007), to improve their position and legitimacy in the current market (Bengtsson & Johansson, 2014) or to enter a completely new market (segment) (Morris et al., 2007). When trust, commitment and strong relationships are managed efficiently in coopetition, SMEs can even increase their survival potential (Tidström, 2009) and outperform bigger competitors by enlarging their market share and improving their financial performance (Gnyawali & Park, 2009; Levy et al., 2003).

2.1.3 Coopetition and innovation

Innovations are a long-term success factor for any type of company, including SMEs or large companies (Filser, Brem, Gast, Kraus, & Calabrò, 2016; Tidd, Bessant, & Pavitt, 2001). This importance stems from the fact that innovations usually allow companies to grow and perform better and to offer a competitive advantage (Ireland & Webb, 2007) which is important in order to remain competitive in rapidly changing and highly technological environments. Given today’s aggressive competitive environment, it is crucial for all types of firms including SMEs to engage in ongoing innovation processes to remain competitive over the long-run (Ritala, Kraus, & Bouncken, 2016).

Coopetition may positively influence the processes of creating and developing innovations (Gnyawali & Park, 2009; Roig-Tierno, Kraus, & Cruz, 2017). As coopetitors interact in the same or closely related industry, they face similar market conditions, customer needs and uncertainty situations which lead to a similar perception of future changes and the creation of innovations (Baumard, 2009). Existing findings emphasise a positive relationship between coopetition and innovation in large firms as well as SMEs, including a positive effect on incremental and radical innovations (Bouncken and Kraus, 2013; Ritala & Hurmelinna-Laukkanen, 2013; Bouncken & Fredrich, 2012), product and process innovations (Pereira & Leitão, 2016) and the number of product lines (Quintana-Garcia & Benavides-Velasco, 2004). Further, coopetition can be of importance in innovation-intensive, dynamic and complex industries with short product life-cycles, high R&D investments, and high technological standards (Gnyawali & Park, 2009). Here, coopetition facilitates access to complementary resources and know-how (Carayannis & Alexander, 1999) and diminishes knowledge asymmetries (Enberg, 2012). As a result, coopetiting firms may benefit from a win–win-situation of stronger innovativeness (Quintana-Garcia & Benavides-Velasco, 2004), lower overall costs, higher resource and knowledge stocks, and improved effectiveness and efficiency (Chin, Chan, & Lam, 2008).

This study focusses on the application of coopetition and its implications for innovation in the financial service industries, in particular in the Liechtenstein trust industry, which represents a collection of service-oriented companies. In the last decade, service industries have become an important part of western economies (Snyder, Witell, Gustafsson, Fombelle, & Kristensson, 2016) as they have been growing faster than manufacturing industries (Lusch & Nambisan, 2015) and still possess huge growth potential (Zulkepli, Hasnan, & Mohtar, 2015). In service industries, innovations and especially service innovations are crucial success factors (Steinicke, Marcus Wallenburg, & Schmoltzi, 2012) and companies focus on innovating their services rather than their products (Parida, Sjödin, Lenka, & Wincent, 2015).

Service innovation includes many different aspects which makes it difficult to develop one universal definition (Martin, Gustafsson, & Choi, 2016). Snyder et al. (2016) define service innovation as a construction or extension of companies’ services and processes. According to Witell, Snyder, Gustafsson, Fombelle, and Kristensson (2016), technologies and new knowledge are the basic drivers of service innovation. Therefore, service innovation is often associated with technology or product innovation. Instead of innovating existing service models, most service companies innovate the required products or processes which come along with their services. Kindström, Kowalkowski, and Sandberg (2013) suggest that the focus should lie on innovating the services, markets, and business models of companies operating in service industries. Business models are collections of services which are offered to the customer as a collective entity. Business model innovation is understood as a type of innovation that *"complements the traditional subjects of process, product, and organisational innovation"* (Zott, Amit, & Massa, 2011, p. 1032).

Despite their relevance, service industries are rarely analysed in coopetition research (e.g., Okura, 2007; Wang & Krakover, 2008; Nair et al., 2011; Peng & Bourne, 2009), and it remains to be studied whether coopetition can influence service innovations positively.

2.2 Liechtenstein and its financial centre and trust industry

2.2.1 Liechtenstein financial centre

Service industries and financial services are becoming increasingly relevant sectors in the Western economy (Snyder et al., 2016). The financial centre of Liechtenstein represents an important financial service centre and includes the traditional banking industry, the trust industry, the asset management industry, the insurance industry and the fund industry.

The financial centre of Liechtenstein is well positioned in the overall marketplace of Liechtenstein as it plays a major role for the economic performance and the strong capital power of Liechtenstein (Liechtenstein Institute of Professional Trustees and Fiduciaries, 2014). In 2015, 5.000 employees worked in the financial industry of Liechtenstein, which represented 16% of the total workforce of Liechtenstein (Official Administration Principality of Liechtenstein, 2015) given its total population of 37.129 (National Statistics Institute Liechtenstein, 2015). After manufacturing and other service industries, financial services provided by the financial centre represent the country's third largest industry with 27% of the gross value added (Liechtenstein Marketing, 2014). Further, the financial centre generates one-third of the total value creation in Liechtenstein.

Liechtenstein has no state debts which reflects the country's immense capital power. Liechtenstein's attractiveness as a financial centre is further evident in its low and straightforward corporate taxation amount of 12.5% (Liechtenstein Institute, 2015) and its representation in two strong and free marketplaces, namely Switzerland and the European Economic Area (EEA).

2.2.2 Trust industry

One of the most important sectors in the financial centre is the trust industry. In fact, in 2010, almost 90% of the gross domestic product (GDP) in the financial centre of Liechtenstein was accumulated by the trust industry, indicating that the trust sector generated a GDP worth about 823 million CHF, equal to 14.5% of the whole country's GDP. The value was reached by a relatively small number of trust companies. In 2015, Liechtenstein was home to 378 trustees representing 251 trust companies, including 76 single trustees and 53 trustees or trust companies with a limited trust license (Financial Market Authority Liechtenstein, 2016). The small number of trustees stems from the strict guidelines of the Liechtenstein government with respect to the qualifications to become a trustee. A trustee is required to obtain the permission of the Financial Market Authority (FMA) to become a trustee, to pass the trust exam, and needs to have three years of work experience in a related occupation.

The success of the Liechtenstein trust industry is also the result of the country's liberal company law which was developed during the economic crisis in 1920. In fact, by means of this law, Liechtenstein's trust industry could reach a competitive advantage compared to other financial industries as its major business model was built on the existence of trust enterprises and foundations and has been specifically developed and adapted to the economic environment (Liechtenstein Institute of Professional Trustees and Fiduciaries, 2014).

2.2.3 Regulatory changes in the Liechtenstein financial centre

Recently, the Liechtenstein government implemented several regulatory and political changes as a reaction to the financial crisis (Financial Market Authority Liechtenstein, 2016) as well as the tax scandals which endangered the image of the Liechtenstein financial centre and influenced its international relations (Liechtenstein Marketing, 2014).

In 2005, Liechtenstein established the FMA, responsible for the operative supervision of the whole financial industry of Liechtenstein. In addition, the FMA verifies that the members of the financial centre operate correctly according to national and international regulations and standards (Liechtenstein Institute of Professional Trustees and Fiduciaries, 2014) and monitors whether money laundering or terror financing takes place (Official Administration Principality of Liechtenstein, 2015). Through the supervision of the whole financial centre and the publication of annual reports, the FMA seeks to guarantee transparency and safety for the customers. Further, the FMA is in charge of superintending the disbursement of trustee licenses which guarantees safety, quality and transparency (Financial Market Authority Liechtenstein, 2016).

Since 2008, Liechtenstein started to sign so-called Tax Information Exchange Agreements[1] and Double Taxation Agreements[2] with a number of countries to improve the country's image. Similarly, in 2013, the government decided to accept the standards of the Organisation for Economic Co-operation and Development. These decisions represented important steps towards more transparency and recognition in international relations.

Liechtenstein also implemented the European Market Infrastructure Regulation and the Capital Requirements Regulation and Directive which regulates that banks need a higher proprietary capital to ensure a higher financial stability of the financial sector (Financial Market Authority Liechtenstein, 2016). Further, the government attempted to bring the legal framework of Liechtenstein more in line with the recommendations of the so-called Financial Action Task Force. Accordingly, Liechtenstein developed a robust institutional framework for combating money laundering and terrorist financing and moving towards greater transparency.

This increased regulation was primarily put into action by the government to develop the consequent white money policy in an attempt to steer away from black-listing, to reach a more sustainable economy with a long-term perspective, and to search for new economic opportunities. Further, the signed agreements and implemented regulations helped to enhance the level of transparency of the financial market in Liechtenstein, to become attractive for national and international investors and to enable the Liechtenstein government to follow a white money policy.

Nevertheless, these regulations may also have harmed Liechtenstein, its financial centre, as well as the actors in this industry, since bureaucracy increased and tax incomes decreased (Liechtenstein Institute, 2015). In fact, due to its admission to the EEA, Liechtenstein was obliged to follow the regulations of the EU which have been accompanied by a great amount of bureaucracy. For the trust industry in particular, these regulations implied that trustees and asset managers faced stricter and more complex regulations and their existing business models were no longer compatible, leading to changes and reorientations within this industry.

Moreover, since the revision of the due diligence law in 2008, sensitive data had to be disclosed to the Liechtenstein Financial Market Supervisory Authority, including the identification and verification of the contracting party's identity, the identification and risk-based verification of the identity of the beneficial owner, the preparation of a business profile, and the risk-adequate monitoring of the business relationship (Financial Market Authority Liechtenstein, 2014). This step has strengthened the trustees' duty of care towards the state and the client in an attempt to combat money laundering, terrorist financing and organised crime (Financial Market Authority Liechtenstein, 2014). But these duties brought a need for higher overall supervision which consequently led to increased costs and less flexibility, while the overall safety of the customers and its assets increased (Heiss, 2013).

3 METHODOLOGY

3.1 Research approach

Given the limited research on coopetition, this study is exploratory in nature to advance the knowledge on coopetition in service industries and the financial sector in particular, two areas which currently lack a well-structured theoretical base (Creswell, 2014). Therefore, this study applies a qualitative research approach which facilitates theory-building within this field (Eisenhardt, 1989). Qualitative research includes a set of different research approaches which aim to develop a holistic, complex, and detailed understanding of a specific issue (Creswell, 2007).

In particular, expert interviews were conducted as they are a useful means to interpret not only the present impacts of a certain phenomenon but also leave space for future outcomes. The application of qualitative analyses in scientific publications shows that individual or group expert interviews are a common method of qualitative research (Frels & Onwuegbuzie, 2013). In this study, individual expert interviews were chosen as they represent the knowledge and opinions of individuals which can then be compared and interpreted. Through such a comparison, conclusions and predictions can be made more effectively than those of group interviews.

[1] The Tax Information Exchange Agreements imply that Liechtenstein acknowledges other tax laws but simultaneously applies and makes use of its own tax law. In addition, other states can obtain information concerning one of their own citizens who is operating in Liechtenstein from Liechtenstein.

[2] The Double Taxation Agreements regulate the taxation between two authorized states in the sense that every state is allowed to tax a specific amount of money.

3.2 Data collection

3.2.1 Individual expert interviews

Qualitative data were collected through expert interviews. Expert interviews are not an independent method of qualitative research as this method is typically included in the group of *"guided interviews"* (Bogner, Littig, & Menz, 2014). The interviews were guided by an interview guideline consisting of semi-open questions that define the research field while small variations of questions were allowed as well as follow-up questions on specific ideas. The interview guideline was developed based on the literature review and the research question. After an introduction focusing on the personal background of the interview participants, questions were being asked on their knowledge and opinions concerning several themes, including (1) upcoming changes in the financial centre of Liechtenstein and their effects, (2) potential future chances or opportunities for the Liechtenstein trust industry, (3) their understanding of the concept of coopetition and possible strategic implications for their firms, (4) the relationship between coopetition and the development of innovations and new business models, (5) the results or advantages that could be developed through coopetition. To prove the functionality and comprehensibility of the interview questions, a pre-test was carried out with a strategic manager of a trust company (Creswell, 2014).

3.2.2 Selection of participants

The participating experts were randomly chosen to avoid a research bias. In this study, we only interviewed experts from the Liechtenstein trust industry because this country has an international trust industry and financial centre. To be selected, it was required that the expert worked in a high management position of the respective firm. In total, nine experts were interviewed. These experts include seven professionals from trust companies in Liechtenstein and two external experts. The external experts are also acting within the trust industry but do not trade directly in the trust industry itself. Assuming they work as a kind of control function in the whole financial area, their opinions and understanding is of great value for the underlying research. In fact, the so-called *"Financial Market Authority"* (FMA) or *"Liechtenstein Institute of Professional Trustees and Fiduciaries"* (THK) are the most important regulatory bodies in the financial centre of Liechtenstein and the insights of their experts are important to establish and represent an objective opinion and knowledge of the topic. Further, these experts bring diverse expertise from the whole financial market. Therefore, the provided data offers an overview not only of the trust industry but also of the broader financial centre in Liechtenstein. Altogether, with this set of nine expert interviews, a saturation level was reached whereby new data no longer yielded new insights (Creswell, 2014). The following table presents an overview of the interview partners.

Table 1: Expert data

Interview partner	Organisation	Function	Number of employees	Years in trust industry
Trustee A	Trust company	Director	7	30
Trustee B	Trust company	Successor of current director (new generation)	7	1
Trustee C	Trust company	Director	15	4
Trustee D	Trust, administration of property, fund management company	Director	40	16
Trustee E	Trust company	IT department manager	100	25
Trustee F	Trust, compliance and law company & bank	Trust advisory & strategic department manager	200	2 ½
Trustee G	Trust company	Strategic department manager	27	2 ½
Regulator H	Regulating authority of the trust industry	Director	10	6
Regulator I	Regulating authority of the trust industry	Head of an other financial intermediaries division	82	½

3.3 Data analysis

As a first step, the collected data were recorded and transcribed. This is necessary to confirm and analyse the transcripts and to achieve usable and highly qualitative results. As a second step, the transcripts were coded, representing the actual evaluation of the findings of the interviews. The main goal here is to find homogeneous statements of the single expert interview to generalize the findings and answer the research question.

Onwuegbuzie and Leech (2007) explain different evaluation methods to generalize qualitative data. In this study, the generalization is facilitated through the analysis of words. The spoken words and experiences represent a specific unit of the collected sample. To generalize the spoken words, a certain type of legitimation and representation is needed. Therefore, it is necessary to develop criteria and codes to scan the spoken data to determine key statements which in turn are then used to generalize (Zachariadis, Scott, & Barrett, 2013). This type of evaluation is called "open coding" (Steger, 2003). Next, the different codes were compared, which enabled the identification and investigation of subject words or headline commonalities of the interviews to generalize a specific statement or subject (Graneheim & Lundman, 2004). Through the collection of different codes, categories were built to organize and present the results. Moreover, systematic connections were developed to answer the research question (Onwuegbuzie & Leech, 2007). Finally, the results were compared with the existing theoretical ideas and prior findings to provide further theoretical impact and to illustrate correlations with the existing understanding of coopetition in this field.

4 RESULTS: COOPETITION WITHIN THE LIECHTENSTEIN TRUST INDUSTRY

4.1 Types of coopetition

To survive as an international financial centre and to secure human and financial resources as well as future profits, all participants agreed that coopetition represents a promising opportunity. As Regulator I stated: *"I am convinced that the concept could help to bundle resources and corporate forces to create new opportunities."* Both groups of interview partners, trustees and regulators, declared that they already employ a certain type of coopetition. The analysis revealed that three different types of coopetition have so far been developed by the actors in the Liechtenstein trust industry.

4.1.1 Coopetition with other Liechtenstein trust companies

Several trustees noted that they work together with one or more Liechtenstein trust company to attain synergy effects and to bundle resources. Both regulators mentioned the example of four trust companies which engaged in coopetition to survive and share resources.

Like trustees A, B, and E reported, they work closely together with competing trust companies, in particular small companies since they tend to be more flexible. Trustees A and B also work in relatively small trust companies, hence coopetition was identified among more or less equally sized partners. These firms emphasised that the working proposition is much more balanced between the small firms and the risk of being acquired by the competitor is minimized as acquisitions are hardly financed.

Trustee F, with 200 employees the largest of the interviewed trust companies, also cooperated with smaller firms to enlarge resource volumes, mandates, or profits. Furthermore, coopetition represented a means to potentially acquire the smaller trust company: *"coopetition with a smaller trust company is […] a great opportunity […] to acquire the smaller company after a certain time."* (Trustee F). For instance, coopetition between a larger and a smaller trust company and a subsequent acquisition of the small firm by the larger one was identified as a solution once the owner of the small trust company was close to retirement. In this case, a win-win situation occurred as the smaller trustee got assisted by the large partner during the final years in business, including the exchange of resources, know how, back office services or information systems. In exchange, the retired trustee transferred or sold the mandates to the large trust company.

4.1.2 Coopetition with members of the Liechtenstein financial centre

Coopetition also appeared with other members of the Liechtenstein financial centre. Every interview participant stated that they were already engaged in this type of coopetition with one or more actors of Liechtenstein's financial center simultaneously. However, different members of the financial centre were chosen as partners for coopetition.

Next to other trust companies, the most common partners include accountants, independent asset managers, banks, lawyers, risk management offices, or back office service providers. This type of coopetition was typically a larger project which was realized over a long period of time with a broad project goal. These projects sought to promote and propose homogenous standards for a specific market or customer segment.

The interviewed regulator explained two examples of this coopetition type. First, several trust companies and other members of the Liechtenstein trust industry worked together to analyse the United Kingdom (UK) market and sought to establish a common service standard tailored to the specific needs of UK customers and authorities (Regulator H). Second, regulator I reported that they *"developed a coopetition project with several experts […]. The main goal is to figure out if the Islamic world would be compatible with several financial services of Liechtenstein including, […] the trust industry. The cooperating parties on this project include experts from the trust, IT and financial industry as well as academic institutions."*

Coopetition with other members of the industry was recognized as a crucial success factor for the future as it facilitates the development of innovations, the diversification of services, or the leveraging of cross-selling opportunities. This means that several services, such as asset management and real estate possibilities, are combined in one business model, increasing the range of services for customers.

4.1.3 Coopetition with international competitors

Coopetition was also observed among Liechtenstein trust companies and competitors from international financial centres. Even though this type of cooperation was identified only by two of the seven interviewed trustees, it was recognised as an essential means to enter international markets. The trustees explained that it is fundamental to have frequent exchanges with local experts of international markets. Given the fast changing and dynamic economy and regulatory environments, international experts know their markets the best and through their help international financial sectors could be investigated more easily and services could be innovated and adapted to fit the needs of those foreign markets and customer segments. Therefore, trust companies in Liechtenstein engaged in coopetition with foreign trust companies and tax companies as well as lawyers to provide optimal services to their customers in these markets. Moreover, Regulator I mentioned that international partnerships need to be developed to reduce costs and increase efficiency in international business processes.

According to some trustees (C, E, G) as well as both interviewed regulators, international coopetition exists to explore specific customer segments or markets, including, for instance, UK customers. This is especially useful for the UK market as mentioned by Regulator I. The UK market is a particularly appealing market for the Liechtenstein trust industry since the UK offers a highly attractive remittance basis tax regime for so-called 'non-domiciled residents'. In a nutshell, this tax regime allows foreign individuals to take residence in the UK without constituting their tax domicile in the UK. Thus, foreign income and gains are not taxed in the UK as long as these income and gains are not remitted to the UK. This tax regime especially attracts foreign High Net Worth Individuals; individuals who are taxed on a remittance basis, mostly make use of offshore wealth structures, such as in Liechtenstein, in order to shield their income and gains from UK income tax liabilities (HM Revenue & Customs, 2016).

4.2 Barriers to coopetition

The interviewees agreed that recognizing potential opportunities and chances that come along with coopetition are fundamental for survival and future success. However, the majority of the interview partners came to the conclusion that trustees' conservatism represents the major barrier for developing coopetition. As a result of their rather conservative attitude, trustees tend to give priority to the protection of their own business, even while losing customers or revenues.

Several interviewees explained that the conservative attitude is directly related to the different generations working in this industry, pointing to differences between younger and older generations. Regulator I said: *"In my opinion, the differences between the generations occur due to the fact that the younger generation has a broader perspective and education, in contrast to a generation which is 80 years old and where the focus was always Liechtenstein, which in turn leads to a tight perspective."* While the younger generation is used to work in environments where concepts such as cooperation and sharing economies are becoming standard, the older generation grew up in a less complex and international business environment in which competition was much more emphasised. Hence, the younger generation was reported to possess a higher awareness of the possible opportunities of coopetition than their older colleagues. The older generation had more difficulties to accept coopetition as for them strategical flexibility was not necessarily a key requirement both personally and organisationally. Moreover, the data revealed that the awareness for coopetition was higher if the trustee was younger and not close to retirement. In fact, when retiring soon some of the older trustees did not truly consider new strategic options like coopetition.

Trustee A stated: *"In Liechtenstein, there is a proverb referring to the two oldest inhabitants of Liechtenstein: The two oldest inhabitants in Liechtenstein are the 'foehn' and the envy."* Thus, a basic requirement for coopetition in the Liechtenstein trust industry is the reduction of envy between trust companies. Respondents suggested making coopetition projects public and communicating the advantages and results in a transparent manner to reveal the creation of win-win situations through coopetition and facilitate the development of a basic coopetition understanding among the actors in the Liechtenstein trust industry.

Furthermore, the interviewed trustees reported that the most important requirements for coopetition include proactiveness and trust. As such, coopetition should be initiated proactively by means of small cooperative projects among the competitors. As soon as trust has been built up, coopetition could become an integral part of corporate strategy.

4.3 Benefits of coopetition

Several positive results were achieved through coopetition including the possibility to share resources, costs and know-how. Given the increasing number of regulations in the Liechtenstein trust industry, trust companies faced resource shortages which constrained their possibilities of innovation, internationalisation or strategy development (Regulator H and I). Through coopetition, required but scarce resources were shared, representing an important and fundamental benefit especially for small- and medium-sized companies as it supported their future survival. Moreover, costs for, e.g., the development of information systems or compliance expenditures were shared and thus reduced for the individual firms. Similarly, knowledge, information, and experiences were exchanged regarding business model innovations and services.

Coopetition benefitted the participating companies not only as an exchange platform but also as a means to successfully plan for the future, as explained by trustee B: *"A growth in capital, profit, economic success and highly qualified employees are definitely results which can be reached."* Moreover, a strong worldwide network could be developed to extend coopetition possibilities and leverage synergistic effects.

4.4 Innovation through coopetition

The interviewees emphasised that coopetition enabled them to innovate their current business models in terms of complexity and service range, as well as diversification and cross-selling of their business models. When cooperating with competitors, the involved companies found themselves in a better position to specialise in one of their core competences and to optimize internal organisational processes. Specialisation took place in compliance-related issues, legal advisory, back office services, real estate services, asset management, or even fund management services. Regulator I said*: "the specialisation should take place at least in one unique selling proposition of the Liechtenstein trust industry which are asset protection, privacy, and tax optimisation through the use of double taxation treaties, succession planning, and family offices."* Through specialisation, a more efficient allocation of services was achieved, allowing every business model to be customised for cost- and time-saving, since the trust companies no longer needed to cover every single step independently. As a result, more services, a higher service quality and more innovative pricing models were offered.

Taking a closer look at the nature of the service innovations facilitated by coopetition, innovations were particularly identified for customer and organisational services. The main reason to innovate customer services was to provide customers with more efficient solutions regarding time and costs as well as asset protection, and to increase customer satisfaction. Trustee F stated: *"Trust company F already developed an innovative app for customers which provides the customer with necessary information […] and a fact sheet of the Liechtenstein legal forms of companies […]. The advantage is that it provides the customer with real-time data and current topics in wealth management in a cost-efficient manner."* Trustee G explained that they were working on an agency service platform to relieve customers of the time-consuming search for the right trust company. The agency service helped to analyse the customer needs and to link the customer to the most suitable trust company.

Organisational service innovations seek to increase the efficiency, standardisation, and centralization of organisational processes, and to reduce the time and costs spent by the organisations on fulfilling compliance requirements. All interviewees expressed that regulations have been becoming increasingly time-consuming. Although the interaction with customers should be the main aspect in the trust industry, most of the processing time of handling customer cases is lost by complying with regulations rather than interacting with customers and serving their needs. Organisational service innovations can improve customer care and service customisation and help to fulfil due diligence requirements more efficiently. Such innovations include digital information systems, IT-solutions, risk software and compliance software. Here, coopetition helped to create new IT systems as trustee G stated: *"At the moment we are cooperating with other Liechtenstein trust companies regarding an IT system, which supports us in the administration of businesses and customers."* Additionally, trustees A, B, C, D, E, F and G already used an IT-solution that was developed on the basis of coopetition.

5 DISCUSSION

5.1 Discussion of the core findings

In recent years, the Liechtenstein government has implemented many regulations to improve the image of the Liechtenstein financial centre in the international context and to integrate a white money policy (Financial Market Authority Liechtenstein, 2016). Generally, these regulations had a positive impact on the Liechtenstein financial centre as they supported the government's efforts to regain a pioneering position and respected reputation in the international environment as well as more financial stability and overall transparency.

However, in this constantly changing economic and regulatory environment, the actors in the entire financial centre and especially in the trust industry struggled with the large amount of additional regulations and bureaucratic changes to be implemented within a short period. Our data revealed that the most common consequences for the actors in the Liechtenstein trust industry were the increasing need for internationalisation, customisation, personal contacts as well as rising compliance, time and cost expenditures. In such dynamic environments, research has argued that coopetition can provide a solution especially for small, resource-constrained firms as it allows them to overcome these consequences and to restore economic values, success, and future growth in terms of profit, employees, performance and resources (Bengtsson & Kock, 2000; Bouncken et al., 2015; Ritala & Hurmelinna-Laukkanen, 2013). This study's exploration of the application of coopetition as well as its barriers, benefits and implications for innovation in service industries, i.e. the Liechtenstein trust industry, revealed that coopetition represents a potentially beneficial strategy for resource-constrained small- and medium-sized trust companies. Three different types of coopetition were identified: (1) coopetition among the trust companies, (2) coopetition with other members of the Liechtenstein financial centre and (3) coopetition with international competitors.

This last case of international cooperation among competitors is particularly interesting as this type of coopetitive link has rarely been identified and analysed in existing coopetition research. This is surprising since cooperation among international partners is said to contribute to firms' innovation performance (e.g., Zhang, Shu, Jiang, & Malter, 2010) by providing access to complementary resources, technologies, and know-how on different geographical locations (Mc Cutchen Jr, Swamidass, & Teng, 2008). Our findings support this view as the respondents pointed out this special value of their international partners' resources and knowledge. As such, coopetition can support international opportunities and the internationalisation for SMEs (e.g., Kock, Nisuls, & Söderqvist, 2010).

Interestingly, the trustees' conservatism was found to be an important factor that impacted the decision to opt for coopetition or not. The findings showed that younger generations were more suitable to engage in coopetition as they were used to working in environments where coopetition-related concepts such as cooperation and sharing economies are important. Older generations, however, were used to work in less complex and international business environments in which competition was much more emphasised than cooperation or coopetition. This finding revealed that a firm's propensity to engage in coopetition does not only depend on organisational factors but certainly also on the personal characteristics, attitudes, and orientations of the managers in charge of strategic decisions (Geraudel & Salvetat, 2014). It can thus also be the managers' age, education, cultural background, personality etc. which can impact the likelihood to opt for coopetition.

Through coopetition, several benefits and opportunities were achieved which increased the coopeting firms' overall performance and built a basis for innovation (Ritala & Sainio, 2014). Our research supported existing findings in the sense that mutual knowledge transfer and creation as well as the sharing of resources, costs, time, and compliance expenditures are the most common benefits of coopetition initiated by the trust companies in the Liechtenstein trust industry. Through these exchanges, resource scarcities and corporate boundaries were reduced (Granata, Géraudel, Gundolf, Gast, & Marques, 2016), synergistic and scale effects were leveraged, new market entry was supported (Bouncken & Fredrich, 2012; Bouncken & Kraus, 2013; Ritala, 2012), and innovation was facilitated (Gnyawali & Park, 2009; Quintana-Garcia & Benavides-Velasco, 2004), in particular business model and service innovations.

As such, coopetition led to new strategic perspectives for the trust companies and they gained access to inputs required for service and business model innovation (Ritala & Sainio, 2014; Tsai, 2002). Several service innovations were developed by Liechtenstein trust companies through coopetition including innovations of customer and organisational services. Customer services were innovated by building on information systems, such as mobile apps or IT solutions to create a more intensive interaction between the customers and the company and to customize the provided services. Organisational services were innovated by implementing information systems and software into organisational processes to increase efficiency, reduce costs, and optimize processes along the value chain. These changes were mainly driven by new technologies (Velu, 2016), additional capital (Witell et al., 2016), and newly gained knowledge (Forés & Camisón, 2016). Further, business models were innovated by integrating diversification and cross-selling practices in previous business models.

5.2 Theoretical implications

From a theoretical point-of-view, this study contributes to several coopetition-related literature streams, such as the general coopetition literature, the specific streams of coopetition in service industries as well as the application of coopetition by SMEs (e.g., Bengtsson & Johansson, 2014; Czakon, 2009; Levy et al., 2003; Mention, 2011; Morris et al., 2007). So far, the SME and service industry contexts and their peculiarities have been rarely investigated in coopetition research (e.g., Gnyawali & Park, 2009; Quintana-Garcia & Benavides-Velasco, 2004).

This is surprising given the importance of SMEs for employment, economic growth, and innovation (Kollmann, Hensellek, & Kensbock, 2016) as well as their simultaneous sensitivity in terms of resource and knowledge shortages. The associated liabilities of smallness of SMEs may hinder their innovation and growth capability and possibly motivate them to cooperate with their rivals. Based on this study's findings, it can be proposed that coopetition represents indeed a potential strategic option for resource-constrained SMEs as it enables sharing mechanisms through which resources, knowledge and capabilities can be accessed and exchanged. Facing regulatory changes in their industry, the interviewed small- and medium-sised trust companies pointed out the relevance of coopetitive interactions as they enable the firms to join their individual forces. Such coopetition is not only limited to national competitors but also extended to partnerships with international rivals (Kock et al., 2010).

5.3 Practical implications

Practically, this study suggests that managers of SMEs in service industries should be aware of the benefits of coopetition to gain access to complementary resources and capabilities, cost and risk sharing opportunities as well as knowledge and information exchange possibilities, and to strengthen their innovation power. Next to typical cooperative partnerships with non-rivals, coopetition can come along with additional advantages since competitors typically share the same contexts, threats, and opportunities while they also possess complementary resources that are relevant to the other party. When coopetition is in place, the partners have possibilities to access the coopeting rival's financial, social, human, technological, marketing, or other managerial resources, to transfer and integrate their knowledge and expertise, and share risks and costs. The presented research shows that coopetition is frequently applied among competitors in the particular case of small- and medium-sized trust companies in the Liechtenstein financial centre and leads to crucial implications in terms of risk, cost, and knowledge benefits as well as business model innovations.

5.4 Limitations and future research directions

This study has some limitations which give rise to future research directions. First, as a qualitative study, the data collection can be criticized for the retrospective design which may lead to recall biases (Hassan, 2005) endangering the study's internal validity. Nevertheless, a retrospective approach seemed necessary since the interviewees had to answer questions about past events. Second, lacking objectivity of the qualitative data analysis and interpretation can be criticized. Seeking to increase validity and reliability of the study, the multiple assessor method was used (Ryan, 1999). Future research should attempt to restrict these potential limitations arising from qualitative research by applying quantitative research methods which can then test and verify the qualitatively gained insights.

Third, our work only represents the opinions of small- and medium-sized trust companies in Liechtenstein. To improve the generalizability of the findings, in future research, the whole financial centre of Liechtenstein should be investigated, including banks, asset management companies, risk management offices or accounting companies. In addition, international financial and trust industries should be investigated to verify whether and how coopetition influences innovation.

Fourth, the geographical restriction should be noted. Due to the single focus on the small country of Liechtenstein, general implications to the worldwide financial industry can hardly be given. Future research should investigate whether or not similar findings can be found in different geographical areas. Additionally, future research should determine if the size of a country influences the impact of coopetition between companies. In other words, it should be examined whether higher social contact in smaller countries influences coopetition willingness.

Apart from this, the impact of entrepreneurial orientation and the results and success of coopetition would be interesting to investigate using a quantitative research method. One interview partner mentioned that the higher the entrepreneurial orientation, the higher is the resulting success and the benefits of coopetition.

6 CONCLUSION

Since 2008, the implementation of many different regulations has challenged most of the actors of Liechtenstein's trust industry. The dynamic and constantly changing economic environment in the financial centre of Liechtenstein has led to changes, improvements and renewals of the overall business activities of trust companies. Nearly every Liechtenstein trust company has faced the problem of increased regulation in the Liechtenstein marketplace over the last 10 years. To exist and survive, coopetition represented a fundamental concept which has helped trust companies to overcome the dynamic changes and to prepare successfully for the future.

The study sought to determine whether and how coopetition was applied by the central actors in the trust industry and how coopetition can support innovation of trust companies. In doing so, nine major actors of the Liechtenstein trust industry were interviewed, including seven resource-constrained and small- and medium-sized trust companies and 2 regulators.

Evaluation of the data supported the assumption that coopetition is already established between Liechtenstein trust companies, members of the Liechtenstein financial centre and international competitors. This study demonstrated how coopetition was implemented in the trust industry and which partners were chosen for coopetition. The main arguments why coopetition agreements have been established include cost and risk sharing opportunities, the exchange of knowledge, experiences, and capabilities, as well as the bundling of complementary resources. The process of developing new ideas, business model or service innovations in particular are positively influenced through the access to additional resources, knowledge and capabilities associated with coopetition. Furthermore, the conducted research clarified which service and business model innovations were developed through coopetition.

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