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UNPACKING THE RELATIONSHIP BETWEEN A COOPETITION-ORIENTED MIND-SET AND COOPETITION-ORIENTED BEHAVIOURS

Abstract

Purpose – Earlier work has suggested that assumptions, values, and beliefs about the importance of cooperating with competitors (a coopetition-oriented mind-set) should manifest into behavioural forms of coopetition, such as resource and capability-sharing activities. Yet, limited research surrounds the complexities of this link. Thus, guided by resource-based theory and the relational view, this current paper unpacks the relationship between a coopetition-oriented mind-set and coopetition-oriented behaviours under the moderating roles of industry experience and degree of internationalisation.

Design/methodology/approach – The chosen empirical context was the Canadian wine industry, since wine producers are often involved in coopetition strategies and have varying degrees of internationalisation. Preliminary interview data were collected from 18 managers to shape the operationalisations. Then, survey data were collected from 195 Canadian wine producers. After checking the statistical data for all major assessments of reliability and validity (together with common method variance), the hypothesised and control paths were tested through hierarchical regression.

Findings – A coopetition-oriented mind-set had a positive and significant association with coopetition-oriented behaviours. Surprisingly, this link was negatively moderated by industry experience. Additionally, degree of internationalisation yielded a positive moderation effect. These moderators highlight situations where a coopetition-oriented mind-set is (and is not) likely to manifest into coopetition activities.

Practical implications – If firms aim to engage in behavioural forms of coopetition, they should manage assumptions, values, and beliefs associated with the advantages of collaborating with their competitors. Industry experience can limit the extent to which business' coopetition-oriented mind-sets manifest into coopetition-oriented behaviours. This could be explained by decision-makers possessing information that discourages them from working with certain (untrustworthy) rivals because of the potential harmful effects on their performance. Companies should utilise their industry experience to avoid working with rival entities that will create negative outcomes, like tensions (e.g., conflict, power imbalances, and opportunistic behaviours), lost intellectual property, and diluted competitive advantages. Nonetheless, industry experience might signify that there are more risks than rewards linked with these business-to-business marketing strategies. Higher-levels of internationalisation can help firms to recognise that coopetition-oriented behaviours may lead to performance-enhancing opportunities in their overseas markets.

Originality/value – This investigation contributes to the business-to-business marketing literature with new evidence on how organisations can foster a coopetition-oriented mind-set to engage in coopetition strategies. The negative moderation effect from industry experience highlights that knowledge of competitors' activities can limit the extent to which coopetition-oriented behaviours are implemented. Moreover, the positive interaction effect from degree of internationalisation extends the growing body of knowledge pertaining to coopetition in an international arena. Collectively, these results show that while a coopetition-oriented mind-set is a critical driver of coopetition-oriented behaviours, there are certain contingencies that can strengthen or weaken this association. Lastly, by integrating resource-based theory and the relational view, this article could explore the different forms of coopetition, in terms of organisation-wide mind-sets and firm-level behaviours. This paper concludes with some managerial recommendations, alongside a series of limitations and avenues for future research.

Keywords – Coopetition-oriented mind-sets, coopetition-oriented behaviours, industry experience, degree of internationalisation, resource-based theory, relational view.

Classification - Research paper.

Introduction

Over the last twenty years, there has been a growing interest surrounding coopetition-oriented behaviours (also known as coopetition activities or coopetition strategies) throughout the broader business-to-business marketing literature (Bengtsson and Kock, 2000; Rusko, 2011; Park *et al.*, 2014; Bengtsson and Raza-Ullah, 2016; Felzensztein *et al.*, 2018; McGrath *et al.*, 2019; Lascaux, 2020). These activities are described as being the interplay between cooperation and competition, whereby, rival organisations (especially smaller-sized entities) share resources (e.g., equipment and hardware) and capabilities (e.g., knowledge and experience) for mutually-beneficial outcomes (Bengtsson and Kock, 1999; Bouncken and Kraus, 2013; Bengtsson *et al.*, 2016; Geldes *et al.*, 2017; Hannah and Eisenhardt, 2018; Leite *et al.*, 2018; Yan *et al.*, 2020). Behavioural forms of coopetition are defined as “a paradoxical relationship between two or more actors, regardless of whether they are in horizontal or vertical relationships, simultaneously involved in cooperative and competitive interactions” (Bengtsson and Kock, 2014, p. 180). Since coopetition is intended for firms to access new resources, capabilities, and opportunities that would not exist under individualistic business models, it is not surprising that scholars have conducted a considerable amount of research towards understanding the relationship between these strategies (or similar activities, like inter-firm cooperation) and company performance (see Rich, 2003; Rindfleisch and Moorman, 2003; Ritala, 2012; Geldes *et al.*, 2015; Shu *et al.*, 2017; Basterretxea *et al.*, 2019; Estrada and Dong, 2020).

That said, by focusing on the link between coopetition and company performance, many academics have overlooked the antecedents of these business-to-business marketing strategies (as noted by Bouncken *et al.*, 2015; Hoffmann *et al.*, 2018; Czakon *et al.*, 2020). This means that it is unclear how organisations can foster the interplay between cooperation and competition. Within this under-researched area, some work has been conducted on coopetition-oriented mind-sets (assumptions, values, and beliefs associated with the importance of cooperating with competing firms) and their link with behavioural forms of coopetition, like resource and capability-sharing activities (see Brandenburger and Nalebuff, 1996;

Gnyawali and Charleton, 2018; Crick and Crick, 2019). Nonetheless, this association has been evaluated as being straightforward, whereby, it is unaffected by certain contingencies. Indeed, there have been several recent calls for research to explore the complexities of the coopetition construct (see Mattsson and Tidstrom, 2015; Gnyawali *et al.*, 2016; Shu *et al.*, 2017; Cui *et al.*, 2018; Crick, 2019). Thus, it could be that this relationship becomes stronger if firms possess experience within their markets, including knowledge of **their** competitors' strengths and weaknesses (linking with Gnyawali and Park, 2011; Granata *et al.*, 2018; Estrada and Dong, 2020). In other words, industry experience could help companies to manage their coopetition-oriented mind-sets, so that they work with trustworthy rivals for mutually-beneficial outcomes.

Another research gap surrounds whether internationalised firms engage in coopetition (**or comparable business-to-business marketing activities**) differently to those targeting domestic markets (see Kock *et al.*, 2010; Felzensztein *et al.*, 2014; Faroque *et al.*, 2017; Shu *et al.*, 2017; Ryan *et al.*, 2019). That is, most coopetition-based research has focused on businesses collaborating with their competitors to be more successful in domestic (rather than international) arenas (see Bengtsson and Kock, 1999; Ritala and Hurmelinna-Laukkanen, 2013; Czakon and Czernek, 2016; Hannah and Eisenhardt, 2018; Crick, 2020). As such, it could be that the coopetition-oriented mind-set – coopetition-oriented behaviours link is affected by organisations' degree of internationalisation. Collectively, these research gaps signify that work should be undertaken to unpack **this** association to identify how firms can best-manage the interplay between cooperation and competition (**extending** Brandenburger and Nalebuff, 1996; Tidstrom, 2009; Mattsson and Tidstrom, 2015; Leite *et al.*, 2018; McGrath *et al.*, 2019). More formally, under resource-based theory and the relational view (Barney, 1991; Dyer and Singh, 1998; Lavie, 2006; Dyer *et al.*, 2018), the objective of this current study is to evaluate the relationship between a coopetition-oriented mind-set and coopetition-oriented behaviours under the moderating roles of industry experience and degree of internationalisation. By achieving this **research** objective, the following three contributions are made to strengthen the existing body of knowledge:

1. Improved conceptualisations are made into the multiple forms of coopetition, in terms of whether they exist as an organisation-wide mind-set and/or a set of firm-level behaviours (extending Brandenburger and Nalebuff, 1996; Bengtsson and Kock, 2014; Bouncken *et al.*, 2015; Gnyawali and Charleton, 2018; McGrath *et al.*, 2019).
2. Through the moderating roles of industry experience and degree of internationalisation, novel insights are offered surrounding **the** contingencies that can help or hinder organisations from best-managing the interplay between cooperation and competition (building upon Gnyawali and Park, 2011; Bengtsson *et al.*, 2016; **Hoffmann *et al.*, 2018**; Estrada and Dong, 2020).
3. New evidence is presented on how smaller-sized companies can engage in international-level coopetition strategies (following Kock *et al.*, 2010; Felzensztein *et al.*, 2014; Shu *et al.*, 2017; Ryan *et al.*, 2019; **Crick and Crick, 2020**), as opposed to focusing on larger corporations, such as those involved in strategic alliances (as per Luo, 2005; Luo and Tung, 2007; Robson *et al.*, 2012; Liu *et al.*, 2019).

To make these three contributions, this paper is divided as follows. First, the conceptual framework is presented. Second, the adopted methodology is described. Third, the empirical results are outlined. Fourth, these results are discussed in relation to the extant literature. Fifth, the article is concluded, alongside some **managerial recommendations** and a series of limitations and avenues for future research.

Theory and hypotheses

Resource-based theory and the relational view

The resource-based view examines the link between organisations' resources and capabilities and their performance (**Barney *et al.*, 2011**; Wernerfelt, 2014). A key assumption of this theory is that larger businesses, with **more** resources and capabilities, can out-perform smaller rivals, with fewer assets at their disposal (Hunt and Morgan, 1995; Morgan, 2012; Barney, 2014; Cortez and Johnston, 2019).

According to Barney (1991), the resource-based view is underpinned by the value, rarity, inimitability, and

non-substitutability (VRIN) framework, which assesses the performance outcomes of organisational resources and capabilities. The VRIN framework has driven the expansion of resource-based theory to show how companies can utilise their assets to secure sustainable competitive advantages (as noted by Kozlenkova *et al.*, 2014). A sustainable competitive advantage refers to superior business performance over rival entities that withstands the test of time and the volatility of the external market (Vorhies and Morgan, 2005; Kumar and Pansari, 2016; Bel, 2018). While this current paper does not draw exclusively upon the VRIN framework, it has shaped how resource-based theory can be employed to conceptualise the performance outcomes of firms' resources and capabilities. On that note, sustainable competitive advantages are not the only measure of success under resource-based theory, as academics have considered other assessments, such as customer satisfaction, sales, and profitability (see Ray *et al.*, 2004; Morgan *et al.*, 2009; Katsikeas *et al.*, 2016). That is, some managers (especially in smaller-sized companies) do not seek to obtain sustainable competitive advantages and measure performance in different ways (reference withheld; Crick *et al.*, 2018).

Indeed, the resource-based view has been extended in other respects. These developments must be accounted for when applying the holistic nature of this theoretical lens to the different forms of coopetition. Most notably, Barney (2001) and Priem and Butler (2001) engaged in a debate concerning the future directions and applications of this perspective. Although they disagreed over some issues, these authors reached a consensus that resource-based theory should be adapted. For example, they discussed that scholars should differentiate resources and capabilities, since tangible and intangible assets have different purposes within competitive strategies (following Morgan *et al.*, 2009; O'Cass *et al.*, 2015). In addition, Barney (2001) and Priem and Butler (2001) evaluated how aspects of the competitive business environment (e.g., competitive intensity) could serve as a contingency that can affect the performance outcomes of organisational resources and capabilities (evaluated by Cadogan *et al.*, 2009; Crick and Crick, 2020). In this current paper, these developments to the resource-based view are considered when using this lens in the subsequent conceptualisations. Resource-based theory has been related to the

coopetition literature to suggest that some entities cooperate with their competitors to be more successful than if they operated using their own resources and capabilities (O'Dwyer *et al.*, 2011; Hannah and Eisenhardt, 2018; Crick, 2019). As an illustration, Felzensztein *et al.* (2014) found that if companies collaborate with their rivals, they can learn new ways to deliver value to their customers (domestically and internationally) and lower their operating costs – resulting in higher-levels of financial performance.

In fact, traditionally, resource-based theory focused on internal resources and capabilities (see Wernerfelt, 1984; Peteraf, 1993; Conner and Prahalad, 1996). Over time, academics have investigated how firms might acquire tangible and intangible assets from outside of their organisations, such as working with external partners (e.g., competitors) for mutual-advantages (see Acquah, 2007; Sraha *et al.*, 2020). This includes how decision-makers can be market-led, in which they assess the competitive dynamics within their sectors to formulate performance-enhancing strategies (Mu *et al.*, 2018). Yet, instead of attempting to derail competitors (as per Day, 2014), coopetition provides a collaborative perspective to the external focus of the resource-based view (following Gnyawali and Charleton, 2018; reference withheld). Hence, these extensions help to justify why this theoretical perspective was suitable for studying the different forms of coopetition. That said, the resource-based view does not fully-account for the collaborative aspects of coopetition-oriented behaviours (Hunt and Derozier, 2004; Crick and Crick, 2020). The relational view covers how high-quality inter-firm relationships can be used to yield mutually-beneficial performance outcomes (Dyer and Singh, 1998; Coviello and Brodie, 2001). By integrating resource-based theory with the relational view, this current study explored the cooperative and competitive aspects of coopetition activities and their link with a coopetition-oriented mind-set (Lavie, 2006; Dyer *et al.*, 2018; Crick, 2020). In doing so, this investigation builds upon Barney's (2018) article that discussed how the resource-based view should be used to explain that certain firms collaborate with key stakeholders (e.g., rivals) to survive and grow within their markets.

For clarity, Barney (2018) focused on wider stakeholders, noting that although organisational resources and capabilities might influence performance, firms must also have strong connections with internal and

external partners. A vital feature of Barney's (2018) paper was that management teams (including within smaller-sized firms) should possess the social capital to complement their tangible and intangible assets (building upon Acquaah, 2007; Kor and Mesko, 2013). In this current investigation, one stakeholder group is examined (namely, competitors) and is infused with resource-based theory and the relational view to unpack the relationship between a coopetition-oriented mind-set and coopetition-oriented behaviours. It is appreciated that using an integration of resource-based theory and the relational view is just one conceptual tool of making this contribution to knowledge. For example, business-to-business marketing scholars have developed the interaction and network approach within the Industrial Marketing and Purchasing (IMP) Group (see Tikkanen, 1998; Finch *et al.*, 2012). This framework shows how actors develop networks (in positive and negative capacities) over time (see Wheeler *et al.*, 1996). The interaction and network approach is presented as a model, rather than a broader management or marketing theory that can be evaluated (depicted by Brennan *et al.*, 2017), as per resource-based theory and the relational view.

Instead of concentrating on individual companies, or their goods and services, the interaction and network approach has shown the value of inter-firm networks, such as through trust, temporal issues (e.g., the length of partnerships), and the closeness of the businesses involved (Holmlund, 2004). Furthermore, it accounts for external factors, such as the volatility within the competitive business environment and its effect on business-to-business marketing relationships (Kot and Leszczynski, 2020). This means that the interaction and network approach does not exist in one form, but rather, is a collection of assumptions and applications. This includes being applied to various inter-firm partnerships, not just coopetition activities (Moller, 2013). The relational aspects of the interaction and network approach might cover some critical issues within the business-to-business marketing literature. However, an integration of resource-based theory and the relational view was deemed to be a more appropriate (established) lens to evaluate

the multiple-levels of the coopetition construct¹ (following Lavie, 2006; Dyer *et al.*, 2018; Crick, 2019). Key reasons pertained to them encapsulating that coopetition is comprised of collaborative and rivalrous dimensions (shown by Gnyawali and Charleton, 2018; Crick and Crick, 2020). The interaction and network approach was seemingly generic, in which it is positioned at an aggregate-level and not directly related to coopetition (Brennan *et al.*, 2017).

Conceptual framework

Guided by resource-based theory and the relational view (Barney, 1991; Dyer and Singh, 1998; Lavie, 2006; Dyer *et al.*, 2018), this paper's conceptual framework (Figure 1) contained three research hypotheses and two control paths. First, it was expected that a coopetition-oriented mind-set positively impacts coopetition-oriented behaviours (see Brandenburger and Nalebuff, 1996; Gnyawali and Charleton, 2018; Crick and Crick, 2019). Second, following on, this link was anticipated to be positively moderated by industry experience and degree of internationalisation (building upon Kock *et al.*, 2010; Kor and Mesko, 2013; Felzensztein *et al.*, 2014; Shu *et al.*, 2017; Estrada and Dong, 2020). Third, the outcome variable (namely, coopetition-oriented behaviours) was controlled by firm size and firm age, as additional factors that might explain its variance (following Rusko, 2011; Bengtsson *et al.*, 2016; Barney, 2018; Czakon *et al.*, 2020).

[Insert Figure 1 about here]

Coopetition-oriented mind-sets and coopetition-oriented behaviours

Linking with resource-based theory and the relational view (see Lavie, 2006; Dyer *et al.*, 2018; Crick, 2019), a coopetition-oriented mind-set is the extent to which organisations possess assumptions, values, and beliefs about cooperating with competitors (Brandenburger and Nalebuff, 1996; Gnyawali and Park,

¹ The author would like to thank an anonymous reviewer for requesting that the interaction and network approach should be conceptualised. Nonetheless, resource-based theory and the relational view were deemed to be more suitable theoretical lenses within this current study.

2011; Bouncken *et al.*, 2015). Mind-sets are a vital aspect of corporate cultures, as they surround the issue(s) that managers and functional-level employees perceive to be critical drivers of their performance (Prahalad and Bettis, 1986; Kor and Mesko, 2013). For example, Homburg and Pflesser (2000) examined market-oriented corporate cultures. They argued that when every member of a firm (across all departments and hierarchies) believes that creating value for customers is an important activity, their market-oriented mind-set will infuse into market-oriented behaviours, namely, the generation of, dissemination of, and responsiveness to market intelligence (Jaworski and Kohli, 1993; Cadogan *et al.*, 2009; Carbonell and Escudero, 2010; Ozturan *et al.*, 2014; Hamzah *et al.*, 2020). Returning to the interplay between cooperation and competition, with lower-degrees of a coopetition-oriented mind-set, firms are likely to believe that collaborating with **their** competitors is not a performance-driving activity (Bouncken *et al.*, 2015; Gnyawali and Charleton, 2018; McGrath *et al.*, 2019).

This might be influenced by firms being aware of the risks of engaging in coopetition, such as tensions (e.g., conflict, power imbalances, and opportunistic behaviours), lost intellectual property, and diluted competitive advantages (Luo *et al.*, 2007; Tidstrom, 2009; Raza-Ullah *et al.*, 2014; Bouncken *et al.*, 2018; Tidstrom *et al.*, 2018; Crick *et al.*, 2021). Also, some organisations choose not to engage in coopetition because they are equipped with certain assets that allow them to create value for their customers – without a need to work with industry rivals (Felzensztein *et al.*, 2012; Bengtsson and Raza-Ullah, 2016; Geldes *et al.*, 2017; Granata *et al.*, 2018). In these instances, a low coopetition-oriented mind-set would be reflected in a view that company performance is driven by other strategies than coopetition (Gnyawali and Park, 2011; Bouncken and Kraus, 2013; Leite *et al.*, 2018). With higher-degrees of a coopetition-oriented mind-set, organisations are likely to become aware of the potential benefits of working with industry rivals, including improved performance (e.g., sales), new assets, reduced operating costs, and increased customer satisfaction (Rich, 2003; Rindfleisch and Moorman, 2003; Hannah and Eisenhardt, 2018; Yan *et al.*, 2020). Put another way, if companies are **conscious** of how coopetition can help them to be more successful in their markets, managers and functional-level employees might be more inclined

to engage in behavioural forms of coopetition (Gnyawali and Park, 2011; Bouncken *et al.*, 2015; Crick, 2018; McGrath *et al.*, 2019). Therefore, it follows that:

H1. A coopetition-oriented mind-set has a positive relationship with coopetition-oriented behaviours.

Moderating role of industry experience

Under resource-based theory and the relational view (Dyer and Singh, 1998; Lavie, 2006), while a coopetition-oriented mind-set should positively impact coopetition-oriented behaviours (Brandenburger and Nalebuff, 1996; Gnyawali and Park, 2011; Gnyawali and Charleton, 2018; Crick and Crick, 2019; McGrath *et al.*, 2019), there could be certain contingencies affecting this association. Specifically, if companies possess valuable knowledge about their sectors, they might be aware of their competitors' activities, as well as their strengths and weaknesses (Narver and Slater, 1990; Slater and Narver, 2000; Johnson *et al.*, 2012; Russo *et al.*, 2017). Consequently, businesses might be able to harness their industry experience to decide to work with similar (complementary) rivals that they can trust to obtain mutually-beneficial outcomes (following Felzensztein and Deans, 2013; Geldes *et al.*, 2015; Granata *et al.*, 2018; Lascaux, 2020). As noted earlier, coopetition can be a risky business-to-business marketing strategy, since it does not always lead to higher-levels of company performance (see Luo *et al.*, 2007; Ritala and Hurmelinna-Laukkanen, 2013; Park *et al.*, 2014; Tidstrom *et al.*, 2018; Crick, 2019). In fact, if firms collaborate with untrustworthy competitors, they can experience a range of negative outcomes that can hurt their brand, lose sales, increase costs, and decrease productivity (Tidstrom, 2014; Mattsson and Tidstrom, 2015; Czakon and Czernek, 2016; Bouncken *et al.*, 2018).

With lower-levels of industry experience, organisations might be hesitant to engage in coopetition activities due to these perceived risks (Gnyawali and Park, 2011; Estrada and Dong, 2020). For example, companies might be concerned with the prospect of sharing vital resources and capabilities with competitors that will exploit them for their own gains (Tidstrom, 2014; Crick, 2020). In fact, Luo *et al.*

(2007) found that if decision-makers work with untrustworthy competitors, there will be a diminishing-returns effect on their financial performance. If this occurs, limited industry experience could prevent firms from harnessing their coopetition-oriented mind-sets to engage in behavioural forms of coopetition (since they are unsure of which rivals that they can trust). However, as industry experience increases, decision-makers are likely to become more confident about which competitors they can trust, as well as the ones that are targeting similar product-markets to help them to survive and grow within their competitive business environments (Kock *et al.*, 2010; Felzensztein and Deans, 2013; Yan *et al.*, 2020). In other words, businesses might become well-informed (through their social networks) about which competitors can help them to create value for customers, enter new markets (e.g., through exporting), lower overheads, boost productivity, and various other benefits (Kor and Mesko, 2013; Bengtsson *et al.*, 2016; Geldes *et al.*, 2017; Ryan *et al.*, 2019). Nonetheless, this involves the “correct” industry experience, so that firms can pinpoint trustworthy and complementary rivals within their markets (Crick *et al.*, 2021). Otherwise, managers and functional-level employees might make the wrong decision to work with competitors that behave opportunistically (Luo *et al.*, 2007; Tidstrom, 2009).

For clarity, industry experience is conceptualised as an organisational capability that can help companies to select complementary coopetition partners, namely, rival entities that they trust, so that they mitigate some of the dark-sides of these business-to-business marketing strategies (Czakoń and Czernek, 2016; Lascaux, 2020). Such market-level knowledge should develop with time, as management teams learn about the dynamics of their sectors and ways to create value for their customers (Narver and Slater, 1990; Slater and Narver, 2000). Moreover, there may be little value in collaborating with competitors that are targeting different product-markets because pooling resources and capabilities may only benefit a limited proportion of the firms involved (Felzensztein *et al.*, 2018; Crick and Crick, 2020). Thus, industry experience could assist decision-makers to cooperate with rivals that can help them to secure mutually-beneficial outcomes, most notably, higher-levels of performance (Estrada and Dong, 2020). This is especially important for smaller-sized entities that may not have the freedom to waste their resources and

capabilities in coopetition strategies that have no visible advantages (Bouncken and Kraus, 2013; Crick and Crick, 2016; McGrath *et al.*, 2019). Consequently, industry experience (as a mechanism that can help firms to identify trustworthy and complementary partners) could serve as an underlying factor that assists organisations to foster their coopetition-oriented mind-sets, so that they implement coopetition-oriented behaviours. Hence, it is anticipated that:

H2. The relationship between a coopetition-oriented mind-set and coopetition-oriented behaviours is positively moderated by industry experience.

Moderating role of degree of internationalisation

Driven by resource-based theory and the relational view (Barney, 1991; Hunt and Derozier, 2004; Crick, 2019), while coopetition has received a lot of interest from business-to-business marketing scholars, most of this work has concentrated on such activities in domestic arenas (see Bengtsson and Kock, 1999; Rich, 2003; Luo *et al.*, 2007; Tidstrom, 2009; Ritala, 2012; Raza-Ullah *et al.*, 2014; Czakon and Czernek, 2016; Hannah and Eisenhardt, 2018; Basterretxea *et al.*, 2019; Estrada and Dong, 2020). In comparison, very little research surrounds how firms engage in international forms of coopetition (e.g., Kock *et al.*, 2010; Felzensztein *et al.*, 2014; Shu *et al.*, 2017; Ryan *et al.*, 2019). In fact, the literature pertaining to coopetition in international markets has focused on larger corporations, such as those involved in strategic alliances (Luo, 2005; Luo and Tung, 2007; Robson *et al.*, 2012; Liu *et al.*, 2019). Hence, there is an opportunity to examine the coopetition-oriented mind-set – coopetition-oriented behaviours relationship under different degrees of internationalisation (organisations' involvement in international markets). In other words, it is of interest to evaluate whether firms can combine the benefits of an internationalised business model (e.g., more customers, superior brand equity, and efficient supply chains) (see Smith *et al.*, 2003; Crick, 2007; Cadogan *et al.*, 2009; reference withheld; Nordin and Lindbergh, 2019) with those from a coopetition-oriented mind-set (building upon Felzensztein *et al.*, 2014; Ryan *et al.*, 2019; Crick and Crick, 2020).

With lower-degrees of internationalisation, firms might have a steady stream of sales revenues from existing (domestic) customers, which influences their decision to not target overseas markets (Leonidou, 1995; Leckie *et al.*, 2017; Crick *et al.*, 2020; Safari and Saleh, 2020). Thus, entities that have a small international presence might choose not to collaborate with their competitors, as such strategies might distract them from their core operations (Crick, 2018; Granata *et al.*, 2018). Further, these organisations might be conscious of the risks of engaging in coopetition, like tensions (e.g., conflict, power imbalances, and opportunistic behaviours), lost intellectual property, and diluted competitive advantages (Luo *et al.*, 2007; Ritala and Hurmelinna-Laukkanen, 2013; Tidstrom, 2014; Mattsson and Tidstrom, 2015; Czakon and Czernek, 2016; Bouncken *et al.*, 2018; Tidstrom *et al.*, 2018). Consequently, they might decide that their time is better-spent not working with rivals, but rather, positioning their resources and capabilities towards their domestic markets. That said, it is recognised that some businesses cooperate with other organisations (non-competitors) to enter export markets, including agents and distributors, as well as investors (see Lai *et al.*, 2015; reference withheld; Dobrucali, 2020; Sraha *et al.*, 2020). This means that firms might be internationalised and cooperative, but choose not to work with industry rivals within their product-markets. Nonetheless, this current study focuses on the interaction between a coopetition-oriented mind-set and an internationalised business model on behavioural forms of coopetition.

Put another way, it is proposed that internationalised firms might have a greater chance of fostering a coopetition-oriented mind-set than domestically-focused organisations, since they may be seeking the support of industry rivals to enhance their success outside of their home country (Felzensztein *et al.*, 2014; Shu *et al.*, 2017). Hence, with higher-degrees of internationalisation, businesses are anticipated to acknowledge that collaborating with their competitors might help them to be more successful in an international arena (Kock *et al.*, 2010; Ryan *et al.*, 2019). This includes pooling assets to run joint marketing events (e.g., trade shows), lowering market entry costs, and accessing more customers (Bengtsson and Kock, 2000; Frisollo, 2007; Rusko, 2011; Felzenstein *et al.*, 2012; Crick, 2019). That is, internationalisation could be a facet of a business model that drives firms to manage their coopetition-

oriented mind-sets to engage in behavioural forms of coopetition that benefit them in their overseas markets. To stress this matter, for under-resourced entities, internationalisation could be a performance-driving strategy (reference withheld; Cadogan *et al.*, 2005; Felzensztein *et al.*, 2014; Faroque *et al.*, 2017). From a corporate cultural perspective, there could be certain triggers that help or hinder organisation-wide mind-sets from manifesting into firm-level behaviours (Prahalad and Bettis, 1986; Homburg and Pflesser, 2000; Kor and Mesko, 2013). Degree of internationalisation could serve as such a trigger that encourages managers and functional-level employees to implement coopetition strategies (building upon Luo, 2005; Luo and Tung, 2007; Shu *et al.*, 2017; Crick and Crick, 2020). Consequently, it is expected that:

H3. The relationship between a coopetition-oriented mind-set and coopetition-oriented behaviours is positively moderated by degree of internationalisation.

Control paths

In addition to the hypothesised paths, the outcome variable (namely, coopetition-oriented behaviours) was controlled by firm size and firm age. Specifically, under resource-based theory and the relational view, larger businesses have increased scope to engage in coopetition activities due to possessing a greater volume of resources and capabilities to share with industry rivals (Lavie, 2006; Gnyawali and Park, 2011; Rusko, 2011; Gnyawali and Charleton, 2018). Thus, firm size featured as a control path. Also, resource-based theory and the relational view have been adapted to consider various tools that companies use in their strategies than just size-based factors (Coviello and Brodie, 2001; Hunt and Derozier, 2004; Lavie, 2006; Barney, 2018). For example, older entities can harness their heritage to outperform younger rivals, with less experience in their markets (Vorhies *et al.*, 2011). Regarding coopetition, older firms might have stronger insights into which competitors that they should collaborate with (Bouncken and Kraus, 2013; Bengtsson *et al.*, 2016; Crick, 2018; Estrada and Dong, 2020; Lascaux,

2020). As such, firm age controlled the outcome variable. The adopted methodology follows in the next section.

Methodology

Empirical context

An ideal context for coopetition-based research is a sector that hosts high-degrees of cooperativeness and competitiveness (following Bengtsson and Kock, 2000; Rusko, 2011; Geldes *et al.*, 2015; Leite *et al.*, 2018). In this current investigation, the Canadian wine industry was utilised to test the research hypotheses and control paths. The reason being is that wine producers (including those located in Canada) are active in implementing coopetition strategies, in terms of small-scale resource and capability-sharing activities, as well as more formal strategic alliances (Telfer, 2001; Felzensztein and Deans, 2013; Granata *et al.*, 2018; Crick, 2020). Additionally, wine producers engage in varying degrees of outwards and inwards internationalisation. This includes exporting, sourcing equipment from abroad, and selling their offerings to foreign customers through wine tourism services (Felzensztein *et al.*, 2014; reference withheld; Crick and Crick, 2015). As such, the Canadian wine sector was an appropriate population of interest.

Key informants

Managers were chosen as the key informants, since these individuals normally possess the authority to determine how their organisation cooperates with industry rivals (Felzensztein *et al.*, 2012; Geldes *et al.*, 2017; McGrath *et al.*, 2019). More importantly, they were anticipated to be qualified to answer questions relating to the constructs within the conceptual framework. This included questions that had an organisation-wide focus, such as the operationalisation of a coopetition-oriented mind-set (as described later). Managers were deemed to be able to comment on the practices of their businesses, in terms of knowing about the day-to-day and long-term activities of the different hierarchies and functional areas (see Prahalad and Bettis, 1986; Homburg and Pflesser, 2000; Cadogan *et al.*, 2005; Kor and Mesko,

2013). Indeed, the wine producers within the population of interest were relatively small, meaning that managers were likely to be aware of these firm-level variables.

Sampling frame

A database was accessed that contained the names and contact details (email addresses) of 687 Canadian wine producers (located throughout the country). These organisations were checked against industry data (Canadian Vintners Association, 2019), revealing that they were all trading entities (highlighting no concerns). Hence, this database was employed as the sampling frame. Please note that while this current investigation makes a unique contribution to the business-to-business marketing literature (via the constructs being tested), this dataset has been utilised in other papers for different purposes.

Field interviews

To shape the measurement scales used to test the hypothesised and control paths (outlined in a later component of the study), 18 semi-structured interviews were undertaken with owner-managers in several Canadian wine regions (following Katsikeas *et al.*, 2006). These organisations were carefully selected, so that they represented wine producers with different price points, employees (full-time, part-time, and seasonal), degrees of internationalisation, and were located in various clusters² (Charters *et al.*, 2009; Felzensztein and Deans, 2013; Crick and Crick, 2015). These field interviews lasted approximately one hour and explored the multiple forms of coopetition, in terms of whether it exists as an organisation-wide mind-set, or as a set of firm-level behaviours (extending Brandenburger and Nalebuff, 1996; Gnyawali and Park, 2011; McGrath *et al.*, 2019). Context is vital in qualitative research (Granot *et al.*, 2012; reference withheld). Thus, in this current paper, the semi-structured interviews helped to explain the

² Throughout the extant literature, clusters have been investigated in various respects, such as ethnic enclaves (Crick *et al.*, 2016), agricultural regions (Felzensztein *et al.*, 2012), and tourism hotspots (Crick *et al.*, 2018). In this current study, clusters are referred to as geographic regions that contain a group of wine producers – vineyards and wineries (following Felzensztein and Deans, 2013; Felzensztein *et al.*, 2014). In a Canadian context, this included wine clusters, like the Niagara Peninsula in Ontario.

magnitude of coopetition within the Canadian wine sector. For example, in Ontario and Nova Scotia, wine producers actively collaborated with their competitors for mutually-beneficial outcomes. This included informal forms of coopetition, such as sharing equipment and knowledge, as well as more formal strategies, such as engaging in strategic alliances to enter export markets (reinforcing Bengtsson and Kock, 2000; Bouncken *et al.*, 2015; Czakon *et al.*, 2020). However, in British Columbia, these activities were highly-regulated by provincial law.

In other words, wine producers in British Columbia were not allowed to cooperate with their competitors to the same extent as those located in other regions because the provincial government were concerned about potential illicit behaviours, like the formation of monopolies. Interestingly, these firms found it easier to collaborate with their competitors in the United States (e.g., wine producers based in Washington or Oregon), rather than within their own province, or other parts of Canada. This preliminary qualitative data helped to delve deeper into the different forms of coopetition in the Canadian wine industry. Moreover, the 18 field interviews were utilised to explore the relationship between a coopetition-oriented mind-set and coopetition-oriented behaviours under the moderating roles of industry experience and degree of internationalisation. For clarity, these issues were not used to explain the underlying mechanisms behind the statistical results (as per Crick and Crick, 2020; Sraha *et al.*, 2020). Instead, they were used for measurement development purposes (in advance of the quantitative data collection stage) to supplement the review of the pertinent literature (following Katsikeas *et al.*, 2006). The qualitative data were manually-coded for pre-determined themes – representing the three hypothesised paths (Miles and Huberman, 1994). Then, the constant comparison technique took place, whereby, the interview data (alongside triangulated material, like secondary sources) were analysed for the key similarities and differences between the sampled companies (Suddaby, 2006). In turn, the constant comparison technique identified when a point of theoretical saturation had been reached (guided by Goulding, 2005). This meant that enough qualitative data had been collected, allowing the statistical aspects of the methodology to commence.

Data collection

After the 18 field interviews, an electronic survey (designed via Qualtrics) was utilised to test the research hypotheses and control paths. This survey was pre-tested with a sample of knowledgeable academics ($n = 10$) and practitioners ($n = 15$) to ensure that it was correctly formatted (Reynolds and Diamantopoulos, 1998). The pre-testing stage suggested that there were no problems with the survey. For example, one issue explored the appropriateness of using terms, such as “equipment, etc.” in the measurement items for the different forms of coopetition. It was clear that this terminology was understandable to the participants, in which it referred to tangible and intangible assets (similar to Bouncken and Kraus, 2013; Geldes *et al.*, 2015). Then, a pilot study was conducted ($n = 30$), so that the measurement scales could be checked for their descriptive statistics and distributions (Hunt *et al.*, 1982). The pilot study revealed no concerns. Next, the core study was implemented ($n = 165$). Since the operationalisations that were used in the pilot study were identical to those employed within the core study, the two datasets were merged to yield a larger sample size (following Morgan and Hunt, 1994). The final sample ($n = 195$) accounted for a 28.38% response rate (from a population of 687 businesses), which was deemed to be satisfactory to evaluate the hypothesised and control paths (Keinanen and Kuivalainen, 2015). Moreover, the statistical data were checked for early, vis-à-vis, late response bias by conducting *t*-tests for each construct – showing non-significant differences (Armstrong and Overton, 1977).

Operationalisations

The constructs within the conceptual framework were operationalised as follows³ (Appendix 1 displays the full-list of the multi-item measurement scales). First, a coopetition-oriented mind-set was measured

³ The following construct abbreviations were used – coopetition-oriented mind-set (CM), local-level coopetition (LLC), national-level coopetition (NLC), organisation-level coopetition (OLC), industry experience (INDS), degree of internationalisation (INTL), firm size (SIZE), and firm age (AGE). For statistical purposes, the composite of the three behavioural forms of coopetition was denoted as COOP. In addition, the informant quality scale (INQ) was abbreviated to MARKER because it was employed to test for common method variance under the marker variable technique. That is, despite being

on a seven-point Likert scale, with six items, ranging from: 1 = very strongly disagree to 7 = very strongly agree (adapted from Crick and Crick, 2019). Second, coopetition-oriented behaviours were operationalised through an adapted version of Crick and Crick's (2019) three-component COOP scale. Specifically, local-level coopetition (six items), national-level coopetition (six items), and organisation-level coopetition (six items) were captured on seven-point Likert scales, ranging from: 1 = very strongly disagree to 7 = very strongly agree. Local-level coopetition concerns cooperation with rivals within a close geographic proximity (Felzensztein and Deans, 2013; Felzensztein *et al.*, 2018), national-level coopetition involves working with industry rivals in different parts of a country (Gnyawali and Park, 2011; Gnyawali and Charleton, 2018), and organisation-level coopetition is collaboration with competitors across different product-markets, regardless of their location (Kock *et al.*, 2010; Crick and Crick, 2016). In this current paper, the COOP scale was adapted from its original form, which used sporting clubs in New Zealand (see Crick and Crick, 2019) to the Canadian wine sector context. The 18 field interviews was one tool to ensure that the measures were appropriate (following Katsikeas *et al.*, 2006).

In this current study, the survey (guided by the field interviews and the pre-testing stage) illustrated that organisation-level coopetition includes business-to-business marketing relationships with non-wine competitors, such as breweries. This was reflected in the instructions for this operationalisation. While coopetition-oriented behaviours have been measured differently throughout the broader business-to-business marketing literature (e.g., Luo *et al.*, 2007; Ritala, 2012; Bouncken and Kraus, 2013; Shu *et al.*, 2017; Bouncken *et al.*, 2018; Cui *et al.*, 2018; Estrada and Dong, 2020), the adopted measure could evaluate the propensity of coopetition activities. Third, industry experience was measured using a sliding ratio scale, which asked the respondents for the number of years that they have worked in the global wine sector, ranging from: 0 to 60 years (adapted from Crick and Crick, 2020). Fourth, degree of internationalisation was captured by using the organisations' export ratios, ranging from: 0 to 100%

operationalised as a multi-item variable, the informant quality scale was transformed into a single-indicator because it was only used as a robustness check.

(following Cadogan *et al.*, 2009). Fifth, firm size was operationalised by the total number of employees - seasonal, part-time, and full-time (Peng and Luo, 2000). Sixth, firm age was measured by the number of years that the sampled firms have been trading (Vorhies *et al.*, 2011). Seventh, to measure informant quality, the survey ended with a seven-point Likert scale, with four items, ranging from: 1 = very strongly disagree to 7 = very strongly agree (adapted from Hultman *et al.*, 2009).

Data analysis

The following tools were employed to analyse the statistical data. First, via SPSS 25, the characteristics of the final sample were examined (Churchill Jr., 1979). This showed that a decent mixture of wine producers participated in this investigation, with a varied number of employees (seasonal, part-time, and full-time), years trading, export activity, and the respondents having different degrees of experience in their organisations and the sector (Table 1). These businesses were located throughout Canada, including larger wine-producing provinces, like Ontario and British Columbia, as well as other regions, such as Alberta and Manitoba. Additionally, these wine producers were all smaller-sized entities, based on their number of full-time employees (Jobber and Shipley, 2012).

[Insert Table 1 about here]

Second, through SPSS 25, an exploratory factor analysis model was produced using a principal components analysis extraction and a varimax rotation (Peterson, 2000; Hsu, 2011). Initially, there were several cross-factor loadings, but after certain problematic indicators were deleted, the items for a coopetition-oriented mind-set, local-level coopetition, national-level coopetition, and organisation-level coopetition loaded onto four factors, with no concerns (Table 2). The Kaiser-Meyer-Olkin (KMO) test of sampling adequacy was satisfactory (0.94), as was the result from Bartlett's test of sphericity ($\chi^2 = 3,851.29$; $df = 78$; Sig. = 0.00). Also, 92.34% of the overall variance was explained by the exploratory factor analysis model. Critically, the item deletion did not negatively impact the structure of the multi-item measures, but rather, helped to develop strong operationalisations (Jamal and Anastasiadou, 2009).

[Insert Table 2 about here]

Third, a confirmatory factor analysis **model** was run via LISREL 9.30 to purify the measurement scales (Cadogan *et al.*, 2005; Jayawardhena, 2010). During this process, the single-item operationalisations for firm size, firm age, industry experience, and degree of internationalisation were transformed through natural logarithms to reduce their variances (Henseler *et al.*, 2016; Xie and Zheng, 2019). **The single-item (composite) measure for the informant quality scale was not transformed in this way because the seven-point Likert scale (adapted from Hultman *et al.*, 2009) restricted its potential variance.** Items were deleted if they had low factor loadings, high error variances, non-significant *t*-values, and issues relating to the modification indices (Gerbing and Anderson, 1988; Steenkamp and Baumgartner, 2000). The final (purified) measures were satisfactory (Table 3). Additionally, the model fit indices of the confirmatory factor analysis were within the minimum thresholds ($\chi^2 = 116.57$; $df = 88$; $\chi^2/df = 1.32$; Sig. = 0.02; RMSEA = 0.04; CFI = 0.99; IFI = 0.99; NNFI = 0.99; GFI = 0.94; SRMR = 0.02).

[Insert Table 3 about here]

Fourth, **using SPSS 25**, the research hypotheses and control paths were tested through a six-step hierarchical regression model (Olson *et al.*, 2005). The moderation effects were transformed via residual-centering to alleviate multi-collinearity errors (Echambadi and Hess, 2007). This involved creating composites of the multi-item (and multi-dimensional) measures (following Ping Jr., 1995). **Following an earlier point, the single-item measures for the moderators (namely, industry experience and degree of internationalisation) were tested after they were transformed by natural logarithms (as per Henseler *et al.*, 2016; Xie and Zheng, 2019). To present the moderating effects, the results were inputted into a software package which presented the relationships between a coopetition-oriented mind-set and coopetition-oriented behaviours under differing degrees of the interaction variables (following Dawson and Richter, 2006). For clarity, the moderators were not classified as a categorisation of low vs. high (with respective cut-off values), but rather, were examined as impacting the association between the**

independent variable (a coopetition-oriented mind-set) and the outcome variable (coopetition-oriented behaviours) (similar to Cadogan *et al.*, 2009; Shu *et al.*, 2017; Crick and Crick, 2020). The hypothesised and control paths were evaluated during the final stage of the hierarchical regression analysis, since all independent variables were nested within the model (following Cadogan *et al.*, 2012). The change statistics were recorded, alongside the unstandardised regression coefficients (β) and *t*-values⁴ (Morgan *et al.*, 2009).

Reliability and validity

Reliability was assessed by examining the Cronbach's alpha coefficients (α) of the multi-item scales before and after they were purified (all were greater than 0.70) (Churchill Jr., 1979). Face validity was assured by pre-testing the survey with a sample of knowledgeable academics and practitioners (Reynolds and Diamantopoulos, 1998), as well as using an informant quality scale (adapted from Hultman *et al.*, 2009). Content validity was monitored by using operationalisations that were adapted from the extant literature (Peter, 1981; Lapierre, 2000). Convergent validity was evaluated by the final measures having composite reliabilities (CRs) that were well-above 0.60 and average variance extracted values (AVEs) that were in excess of 0.50 (Lin and Huang, 2013; Bottger *et al.*, 2017). To test for discriminant validity, the squared phi matrix correlations (accessed through LISREL 9.30) were compared against the AVEs for each latent variable. Since the largest squared phi matrix correlation (0.76) was less than the lowest

⁴ Following the recommendation of an anonymous reviewer, to assess the moderating effects in greater depth, the PROCESS macro was used as an extension to SPSS 25 (Hayes, 2018). This involved employing the Johnson-Neyman technique (developed by Johnson and Neyman, 1936) to identify the points on the moderation scales (industry experience and degree of internationalisation) that determine the regions of significance (Spiller *et al.*, 2013). That is, it determined the zones where the respective moderators affect the relationship between the independent variable (a coopetition-oriented mind-set) and the outcome variable (coopetition-oriented behaviours) (Davvetas *et al.*, 2020). Nonetheless, as already noted, the moderating variables were transformed through natural logarithms to reduce their variances (following Henseler *et al.*, 2016; Xie and Zheng, 2019). Henceforth, when using the Johnson-Neyman technique, there is a limited application of the results, since the critical zones will pinpoint to datapoints that are somewhat arbitrary. Consequently, in this current paper, more emphasis was placed on the hierarchical regression analysis to test the moderating effects (see Olson *et al.*, 2005; Morgan *et al.*, 2009).

AVE (0.83), discriminant validity is highly-likely to exist (Fornell and Larcker, 1981). Table 4 displays the final scale reliabilities and the discriminant validity test.

[Insert Table 4 about here]

Common method variance

Common method variance was evaluated by designing the survey in a way that made it as short and interactive as possible for the respondents – to maximise their engagement with the questions and to minimise their fatigue (Podsakoff *et al.*, 2003; Pehrsson, 2014). Then, using SPSS 25, the marker variable technique was employed as follows. First, a construct that was theoretically-unrelated to any other latent variable within the conceptual framework was selected, namely, the informant quality scale (adapted from Hultman *et al.*, 2009). Second, a bivariate correlation matrix was produced, containing all constructs that were used to test the hypothesised and control paths. Third, a partial correlation matrix was created, with the same latent variables, but controlling for the marker variable. Fourth, the differences between the two correlation matrices were averaged. Since the average difference was very small ($r = 0.00$), it is anticipated that the statistical data were not biased by a common method factor (Lindell and Whitney, 2001). In addition, the informant quality scale had a reasonably large variance (0.62), allowing it to be utilised as the marker variable. The statistical results follow in the next section.

Results

Before the research hypotheses and control paths were tested, the bivariate correlations (and their descriptive statistics) showed the underlying relationships between the constructs within the conceptual framework (Table 5).

[Insert Table 5 about here]

Turning to the hierarchical regression analysis, a coopetition-oriented mind-set had a positive and significant relationship with coopetition-oriented behaviours ($\beta = 0.57$; $t = 11.16$). As such, H1 was

supported⁵. Surprisingly, industry experience negatively moderated the link between a coopetition-oriented mind-set and coopetition-oriented behaviours ($\beta = -0.06$; $t = -1.82$). Hence, a counter-intuitive result was found for H2. Alternatively, degree of internationalisation yielded a positive moderating effect ($\beta = 0.05$; $t = 2.14$). Thus, support existed for H3. Furthermore, the Johnson-Neyman technique showed that when industry experience exceeds 2.89, the moderating effect becomes negative and significant ($p < 0.01$). When degree of internationalisation surpasses 1.35, the interaction effect becomes positive and significant ($p < 0.01$). Regarding the control paths, firm size was positively and significantly related to coopetition-oriented behaviours ($\beta = 0.21$; $t = 4.27$), whereas, firm age produced a negative, but non-significant path ($\beta = -0.12$; $t = -1.17$). Moreover, during the final (nested) stage of the hierarchical regression analysis, the ΔR^2 (0.01), relative to the ΔF (4.58), was significant ($p < 0.05$) – providing additional statistical reinforcement for the hypothesised and control paths (Table 6). Likewise, the adjusted R^2 indicated that the independent variables explained 81% of the variance of coopetition-oriented behaviours (the outcome variable). These results are discussed in the next section.

[Insert Table 6 about here]

Discussion

Prior to this investigation, coopetition-oriented behaviours had been relatively well-studied throughout the broader business-to-business marketing literature (Bengtsson and Kock, 2000; Luo *et al.*, 2007; Rusko, 2011; Felzensztein *et al.*, 2012; Bouncken and Kraus, 2013; Park *et al.*, 2014; Bengtsson and Raza-Ullah, 2016; Granata *et al.*, 2018; Crick, 2020; Yan *et al.*, 2020). Scholars had found that by engaging in

⁵ To emphasise an important point, the positive and significant path between a coopetition-oriented mind-set and coopetition-oriented behaviours was tested at an aggregate-level. That is, the coopetition-oriented behaviours construct (COOP) was comprised of three behavioural forms. Nonetheless, at an aggregate-level, there was a positive and significant correlation between a coopetition-oriented mind-set and coopetition-oriented behaviours ($r = 0.82$; $p < 0.01$). Likewise, the facets of the three-component COOP scale showed positive and significant correlations. That is, local-level coopetition ($r = 0.79$; $p < 0.01$), national-level coopetition ($r = 0.64$; $p < 0.01$), and organisation-level coopetition ($r = 0.83$; $p < 0.01$). The author expresses gratitude to an anonymous reviewer for requesting extra clarity on this point.

behavioural forms of coopetition (e.g., resource and capability-sharing activities), organisations can learn new ways to survive and grow within their competitive business environments (Bengtsson and Kock, 2014; Geldes *et al.*, 2015; Bengtsson *et al.*, 2016; Hannah and Eisenhardt, 2018; Leite *et al.*, 2018; Basterretxea *et al.*, 2019; Czakon *et al.*, 2020). Hence, there is a considerable body of knowledge pertaining to the coopetition – company performance relationship (e.g., Rich, 2003; Rindfleisch and Moorman, 2003; Ritala, 2012; Shu *et al.*, 2017; Bouncken *et al.*, 2018; Crick, 2019; Estrada and Dong, 2020). That said, there are some pertinent research gaps surrounding the drivers of **coopetition activities**. Specifically, although a coopetition-oriented mind-set is likely to manifest into coopetition-oriented behaviours (Brandenburger and Nalebuff, 1996; Gnyawali and Park, 2011; Bouncken *et al.*, 2018; Crick and Crick, 2019), the nature of this association remains under-researched. That is, it is unclear whether industry experience and degree of internationalisation are mechanisms that help decision-makers to harness their assumptions, values, and beliefs about cooperating with rival entities (to engage in coopetition strategies).

Henceforth, guided by resource-based theory and the relational view (Barney, 1991; Dyer and Singh, 1998; Coviello and Brodie, 2001; Lavie, 2006; Dyer *et al.*, 2018), this current paper unpacked the relationship between a coopetition-oriented mind-set and coopetition-oriented behaviours under the moderating roles of industry experience and degree of internationalisation. From an empirical study, the following key findings contribute to the business-to-business marketing literature. First, a coopetition-oriented mind-set was found to serve as an antecedent of coopetition-oriented behaviours (supporting Gnyawali and Park, 2011; Crick, 2018; Crick and Crick, 2019). Mind-sets have been studied as a vital component of corporate cultures, since they determine the issue(s) that managers and functional-level employees believe to be important (Prahalad and Bettis, 1986; Kor and Mesko, 2013). In fact, organisation-wide mind-sets are likely to manifest into firm-level behaviours that match the issue that is assumed, valued, and believed to be a critical driver of company performance - as per the earlier example of market-oriented mind-sets having a positive association with market-oriented behaviours (see

Homburg and Pflesser, 2000). Since limited research surrounds the antecedents of coopetition-oriented behaviours (Bengtsson and Raza-Ullah, 2016; Gnyawali and Charleton, 2018; Hoffmann *et al.*, 2018; Czakon *et al.*, 2020), new evidence has emerged on how a coopetition-oriented mind-set should lead to firms implementing coopetition strategies (as per Brandenburger and Nalebuff, 1996; Bouncken *et al.*, 2015; McGrath *et al.*, 2019).

Second, a more novel contribution relates to the moderating factors. Put another way, the link between a coopetition-oriented mind-set and coopetition-oriented behaviours has been examined in earlier research (Gnyawali and Park, 2011; Bouncken *et al.*, 2015; McGrath *et al.*, 2019). Yet, to explore the moderating effects on this relationship, the main (direct) path needed to be conceptualised and tested. The extant literature suggests that if firms possess sector-level knowledge of their competitors' activities (as well as their strengths and weaknesses), they can utilise this industry experience to engage in effective forms of coopetition - to obtain mutually-beneficial outcomes (Felzensztein and Deans, 2013; Geldes *et al.*, 2017). That is, coopetition can lead to various negative consequences, such as tensions (e.g., conflict, power imbalances, and opportunistic behaviours), lost intellectual property, and diluted competitive advantages (Luo *et al.*, 2007; Ritala and Hurmelinna-Laukkanen, 2013; Raza-Ullah *et al.*, 2014; Bouncken *et al.*, 2018; Crick *et al.*, 2021). Thus, it was anticipated that industry experience could help organisations to be more selective of which rivals that they collaborate with, in terms of working with competing entities that they can trust and will not harm their performance (Tidstrom, 2014; Czakon and Czernek, 2016; Ryan *et al.*, 2019; Lascaux, 2020). Yet, industry experience negatively moderated the link between a coopetition-oriented mind-set and coopetition-oriented behaviours (Figure 2). This surprising result could be explained by industry experience discouraging companies from collaborating with their competitors, in terms of making them aware of the risks of coopetition strategies (Tidstrom, 2009; Bouncken and Kraus, 2013; Mattsson and Tidstrom, 2015; Tidstrom *et al.*, 2018; Crick, 2020).

[Insert Figure 2 about here]

Following on, it could be that more experienced companies (that know the dynamics of their sector) decide that there are more risks than rewards of engaging in coopetition-oriented behaviours – meaning that they choose to compete under an individualistic business model to avoid some of the dark-sides that coopetition activities might yield (building upon Luo *et al.*, 2007; Cui *et al.*, 2018; Czakon *et al.*, 2020). Indeed, more experienced organisations may not need to engage in coopetition, since they might have the resources and capabilities that are required to survive and grow within their competitive business environments (Bengtsson *et al.*, 2016; Granata *et al.*, 2018; McGrath *et al.*, 2019). That is, experienced firms could be familiar with ways to create value for customers and operate efficiently that means that they do not depend on borrowing assets from industry rivals⁶ (Rindfleisch and Moorman, 2003; Crick, 2018). Third, degree of internationalisation positively moderated the relationship between a coopetition-oriented mind-set and coopetition-oriented behaviours (supporting Kock *et al.*, 2010; Felzensztein *et al.*, 2014; Shu *et al.*, 2017; Ryan *et al.*, 2019). This result indicates that internationalised firms have an incentive to collaborate with competing entities due to potential benefits, like increased sales, superior brand equity, and efficient supply chains (see Smith *et al.*, 2003; Cadogan *et al.*, 2009; Faroque *et al.*, 2017; Nordin and Lindbergh, 2019). The positive moderation effect (Figure 3) suggests that if firms are targeting overseas markets, they are likely to recognise that coopetition could help them to be more successful in such arenas (complementing their coopetition-oriented mind-sets).

[Insert Figure 3 about here]

In turn, a coopetition-oriented mind-set, combined with higher-degrees of internationalisation, should positively impact coopetition-oriented behaviours. This finding contributes to the limited volume of

⁶ An anonymous reviewer raised the issue of assessing whether a manager's age has a moderating role in the link between a coopetition-oriented mind-set and coopetition-oriented behaviours. For instance, younger managers, with lower-levels of industry experience, might be more proactive to engage in coopetition as a potentially performance-enhancing business-to-business marketing strategy. This is through younger managers being eager to experiment with new approaches to be more successful within their markets. Unfortunately, data were not collected on the respondents' ages (just the firm age variable), meaning that issue (albeit interesting) could not be evaluated. Yet, this anonymous reviewer's comment was appreciated and could be tested in future research.

research surrounding coopetition in an international arena. Instead of focusing on large corporations involved in strategies alliances (e.g., Luo, 2005; Luo and Tung, 2007; Robson *et al.*, 2012; Liu *et al.*, 2019), stronger insights have emerged on how smaller-sized businesses engage in international forms of coopetition (extending Kock *et al.*, 2010; Faroque *et al.*, 2017; Shu *et al.*, 2017; Ryan *et al.*, 2019). For example, it suggests that internationalised organisations should foster a coopetition-oriented mind-set because it may assist them to collaborate with their competitors (extending Bouncken *et al.*, 2015; McGrath *et al.*, 2019). In fact, it signifies that firms with an internationalised business model are more likely to implement coopetition strategies than those focused on domestic markets (building upon Luo, 2005; Felzensztein *et al.*, 2014; Crick and Crick, 2020). Fourth, by investigating the nature of the link between a coopetition-oriented mind-set and coopetition-oriented behaviours, stronger evidence has emerged on the different forms of coopetition activities. That is, when coopetition was incorporated into the business-to-business marketing literature, there were two schools-of-thought. On the one hand, Brandenburger and Nalebuff (1996) argued that coopetition exists as an organisation-wide mind-set pertaining to managers and functional-level employees believing in the importance of cooperating with industry rivals. On the other hand, Bengtsson and Kock (1999) found that coopetition is a business-to-business marketing strategy (or set of firm-level behaviours) surrounding the interplay between cooperation and competition.

The latter viewpoint has been more commonly-studied throughout the broader business-to-business marketing literature (see Bengtsson and Kock, 2000; Rusko, 2011; Felzensztein *et al.*, 2012; Park *et al.*, 2014; Bengtsson and Raza-Ullah, 2016; Gnyawali *et al.*, 2016; Leite *et al.*, 2018; Czakon *et al.*, 2020). By finding that there is a positive link between a coopetition-oriented mind-set and coopetition-oriented behaviours (moderated in varied capacities by industry experience and degree of internationalisation), new evidence has emerged on the different ways that coopetition can be implemented (bridging the gap between Brandenburger and Nalebuff, 1996; Bengtsson and Kock, 1999). This was achieved by connecting coopetition-oriented behaviours to the lesser-known form of coopetition surrounding

organisation-wide mind-sets (extending Gnyawali and Park, 2011; Bouncken *et al.*, 2015; Crick, 2018; Gnyawali and Charleton, 2018). On that note, a growing body of knowledge surrounds coopetition being a multi-level construct, in which firms can collaborate with their competitors across different geographic proximities and between product-markets (Kock *et al.*, 2010; Raza-Ullah *et al.*, 2014; Bengtsson and Raza-Ullah, 2016; Felzensztein *et al.*, 2018; Crick and Crick, 2019). This current investigation expands upon these conceptualisations to evaluate how coopetition-oriented mind-sets and coopetition-oriented behaviours (specifically, local-level coopetition, national-level coopetition, and organisation-level coopetition) serve as different forms/levels of this multi-faceted variable.

Fifth, turning to the control variables, firm size had a positive and significant relationship with coopetition-oriented behaviours. This result reinforces earlier papers, which have found that larger businesses, with a greater volume of resources and capabilities, have increased scope to engage in coopetition strategies (e.g., Rusko, 2011; Park *et al.*, 2014; Czakon and Czernek, 2016). Interestingly, firm age had a negative, but non-significant path. This finding suggests that older organisations do not have any advantage over younger entities at engaging in coopetition (challenging Bengtsson *et al.*, 2016; Crick, 2018; Lascaux, 2020). Hence, it is important that organisations (especially those with an internationalised business model) possess a coopetition-oriented mind-set to engage in coopetition strategies. Sixth, a final discussion point is that by integrating resource-based theory and the relational view, this paper was able to evaluate the cooperative and competitive aspects of coopetition-oriented mind-sets and coopetition-oriented behaviours (Lavie, 2006; Dyer *et al.*, 2018; Crick, 2019). While the resource-based view could explain the ways that firms share resources and capabilities with their rivals (O'Dwyer *et al.*, 2011; Bouncken *et al.*, 2015; Hannah and Eisenhardt, 2018), the relational view was incorporated to explore the collaborative aspects of these business-to-business marketing strategies (Hunt and Derozier, 2004; Barney, 2018; Crick, 2020). It shows that although the resource-based view explains how businesses share tangible and intangible assets with their competitors in coopetition strategies (Hannah and

Eisenhardt, 2018; Gnyawali and Charleton, 2018), the relational view accounts for the importance of high-quality inter-firm relationships (Dyer and Singh, 1998; Crick, 2019). This article is concluded as follows.

Conclusions

Summary

Guided by resource-based theory and the relational view, the objective of this current study was to evaluate the relationship between a coopetition-oriented mind-set and coopetition-oriented behaviours under the moderating roles industry experience and degree of internationalisation. To achieve this research objective, after undertaking 18 field interviews, survey data were collected from a nation-wide sample of 195 Canadian wine producers. After checking the statistical data for all major assessments of reliability and validity (together with common method variance), the following four conclusions are made. First, it is concluded that a coopetition-oriented mind-set has a positive relationship with coopetition-oriented behaviours. Second, another conclusion is that industry experience negatively moderates the link between a coopetition-oriented mind-set and coopetition-oriented behaviours, whereas, degree of internationalisation yields a positive moderation effect. Third, following on, a related conclusion is that coopetition is a multi-faceted variable. That is, there are various ways that companies can be involved with this business-to-business marketing construct, namely, as an organisation-wide mind-set and/or a set of firm-level behaviours. Fourth, it finally concluded that by integrating resource-based theory with the relational view, the cooperative and competitive aspects of coopetition activities (in these different forms) can be better-understood.

Managerial recommendations

In addition to its theoretical contribution, this article offers the following managerial recommendations. First, there are certain advantages of fostering a coopetition-oriented mind-set – not least of which how they help companies to engage in coopetition strategies. Specifically:

- If decision-makers possess assumptions, values, and beliefs about the importance of cooperating with their competitors, they should harness them to engage in behavioural forms of coopetition (e.g., resource and capability-sharing activities).
- To do this, managers and functional-level employees should trust their instincts about the value of coopetition strategies and attempt to collaborate with certain industry rivals (namely, those that are trustworthy and target similar product-markets) for mutually-beneficial outcomes.

Second, while a coopetition-oriented mind-set can help businesses to implement coopetition activities, there are some factors (focusing on industry experience and degree of internationalisation) that might help or hinder these strategies. Consequently:

- If companies have accumulated knowledge of their rivals' strengths and weaknesses (and their key strategies), this industry experience could save them from working with untrustworthy competitors that might harm their performance.
- Internationalised firms should recognise that coopetition activities can help them to be more successful in their overseas markets. Thus, they should foster their coopetition-oriented mind-sets to share resources and capabilities with complementary rival entities.

Third, organisations must acknowledge that coopetition-oriented behaviours are comprised of collaborative and rivalrous dimensions. This means that in coopetition strategies, there will always be some degree of competitive rivalry, regardless of the magnitude of resource and capability-sharing activities. Henceforth:

- If companies share resources and capabilities with their coopetition partners, they should never forget that these entities are their competitors, for which caution must be exercised to avoid negative outcomes, like tensions (e.g., conflict, power imbalances, and opportunistic behaviours), lost intellectual property, and diluted competitive advantages.

- If businesses do not engage in coopetition partnerships (discouraged by their industry experience), they might be disadvantaged by missing out on certain resources, capabilities, and opportunities that might improve their performance.

In short, decision-makers should utilise these managerial recommendations to effectively foster their coopetition-oriented mind-sets into behavioural forms of coopetition. This involves managing the correct forms of industry experience and degrees of internationalisation.

Limitations and avenues for future research

While this current study has contributed to the business-to-business marketing literature, there are certain limitations that can be addressed in future research. First, the empirical context was the Canadian wine industry. Although this sector hosted high-degrees of cooperativeness and competitiveness (ideal for studying coopetition), **as well as internationalised companies**, it was just one setting. Consequently, future research should build upon this paper by sampling multiple industries to yield generalisable results. Second, although a decent response rate was obtained (28.38%), the final sample size was relatively small ($n = 195$). Therefore, if scholars build upon this investigation, they should attempt to collect larger volumes of data to make stronger conclusions. Third, **other than the 18 field interviews**, the statistical data originated from a single-source survey. If possible, future research should utilise a combination of primary and secondary data, such as measuring certain constructs through archival sources (e.g., firm size and firm age). Fourth, despite the data being checked for all major forms of reliability and validity (including common method variance), endogeneity bias was not considered. As such, these tests should be conducted (using appropriate instrumental variables) in future investigations to assess the potential for correlated error terms. In closing, these limitations do not pose serious concerns, but instead, provide several directions for future research.

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Figure 1. Conceptual framework

Figure 2. Moderating effects of industry experience

Figure 3. Moderating effects of degree of internationalisation

Table 1. Characteristics of the final sample

Characteristics	Mean	SD	Min	Max
Number of seasonal employees	48.55	60.32	0.00	200.00
Number of part-time employees	38.67	58.34	0.00	200.00
Number of full-time employees	32.92	54.24	0.00	200.00
Firm age (years)	150.47	39.61	1.00	185.00
Industry experience (years)	20.66	15.03	0.39	60.00
Years in current role	14.33	13.90	0.34	60.00
Years in current organisation	16.80	14.75	0.59	60.00
Export ratio (%)	25.26	31.37	0.00	100.00
Number of export markets	11.89	21.09	0.00	147.00

Note: These wine producers engaged in outwards forms of internationalisation, such as exporting either on an ad-hoc basis or through agents and/or distributors. Further, they were involved with inwards internationalisation activities, including hiring foreign-born members of staff, sourcing equipment from abroad, and serving customers visiting from other countries (e.g., through wine tourism services). In short, the final sample was comprised of internationalised organisations.

Table 2. Exploratory factor analysis model

	Components			
Items	Factor 1	Factor 2	Factor 3	Factor 4
CM_1	0.81	0.24	0.34	0.31
CM_4	0.81	0.29	0.31	0.30
CM_6	0.81	0.30	0.30	0.30
LLC_1	0.18	0.76	0.36	0.16
LLC_2	0.31	0.76	0.23	0.24
LLC_5	0.26	0.75	0.19	0.29
NLC_1	0.37	0.36	0.84	0.35
NLC_4	0.39	0.34	0.85	0.35
NLC_6	0.38	0.34	0.83	0.34
OLC_1	0.42	0.35	0.37	0.71
OLC_2	0.45	0.31	0.41	0.70
OLC_6	0.39	0.35	0.39	0.70
Note: The indicators presented in a bold font were used to measure each latent variable within the four-factor solution.				

Table 3. Confirmatory factor analysis model

	Factor loadings (λx)		Error variances ($\theta \delta$)	
Items	λx	t -values	$\theta \delta$	t -values
CM_1	0.95	Fixed	0.10	6.45
CM_4	0.94	26.71	0.12	6.91
CM_6	0.94	26.37	0.12	7.07
LLC_1	0.99	Fixed	0.02	3.28
LLC_2	0.98	55.12	0.04	5.95
LLC_5	0.94	36.08	0.11	8.91
NLC_1	0.93	Fixed	0.14	6.53
NLC_4	0.91	21.89	0.16	7.11
NLC_6	0.90	20.79	0.20	7.67
OLC_1	0.96	36.19	0.08	6.93
OLC_2	0.98	Fixed	0.04	4.45
OLC_6	0.92	28.89	0.15	8.49
SIZE	1.00	Fixed	0.00	Fixed
AGE	1.00	Fixed	0.00	Fixed
INDS	1.00	Fixed	0.00	Fixed
INTL	1.00	Fixed	0.00	Fixed
MARKER	1.00	Fixed	0.00	Fixed
Note: The critical t -value was 1.65 (5%, one-sided).				

Table 4. Final scale reliabilities and the discriminant validity test

Latent variables	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Coopetition-oriented mind-set	1.00								
2. Local-level coopetition	0.66	1.00							
3. National-level coopetition	0.46	0.55	1.00						
4. Organisation-level coopetition	0.74	0.76	0.53	1.00					
5. Industry experience	0.10	0.23	0.50	0.17	1.00				
6. Firm size	0.07	0.12	0.26	0.10	0.28	1.00			
7. Firm age	0.06	0.12	0.41	0.11	0.53	0.19	1.00		
8. Degree of internationalisation	0.27	0.36	0.42	0.34	0.28	0.14	0.30	1.00	
9. Informant quality (marker variable)	0.00	0.00	0.01	0.00	0.04	0.01	0.04	0.00	1.00
Alpha (α)	0.96	0.98	0.94	0.97	-	-	-	-	-
CR	0.96	0.98	0.94	0.97	-	-	-	-	-
AVE	0.89	0.94	0.83	0.91	-	-	-	-	-
<p>Note: The cells within this table represent the squared phi matrix correlations (accessed from LISREL 9.30). These are the associations between the latent variables after they were processed during the confirmatory factor analysis. The key issue is that for discriminant validity to exist, the highest squared phi matrix correlation should be less than the lowest AVE (Fornell and Larcker, 1981). Consequently, in this current investigation, there were no discriminant validity concerns. Moreover, the AVEs for the single-item constructs could not be calculated. However, since the multi-item scales produced acceptable scale reliabilities, the single-indicators were assumed to be within the minimum reliability benchmarks.</p>									

Table 5. Bivariate correlations and descriptive statistics

Latent variables	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Coopetition-oriented mind-set	1.00								
2. Local-level coopetition	0.79	1.00							
3. National-level coopetition	0.64	0.72	1.00						
4. Organisation-level coopetition	0.83	0.86	0.71	1.00					
5. Coopetition-oriented behaviours	0.82	0.93	0.89	0.93	1.00				
6. Industry experience	0.51	0.59	0.63	0.58	0.66	1.00			
7. Degree of internationalisation	0.24	0.34	0.63	0.33	0.48	0.55	1.00		
8. Firm size	0.32	0.47	0.69	0.42	0.58	0.53	0.73	1.00	
9. Firm age	-0.26	-0.35	-0.50	-0.32	-0.43	-0.37	-0.44	-0.53	1.00
Mean	5.15	4.63	4.07	4.76	4.55	2.71	2.10	3.79	4.93
SD	1.62	1.54	1.65	1.54	1.44	0.89	1.74	1.48	0.57
Min	1.00	1.00	1.00	1.00	1.00	0.10	0.00	0.69	0.00
Max	7.00	7.00	7.00	7.00	7.00	4.09	4.61	6.40	5.22
Note: All correlations were significant at the 1% level (two-tailed tests). Coopetition-oriented behaviours was a composite variable – an average of local-level coopetition, national-level coopetition, and organisation-level coopetition.									

Table 6. Hierarchical regression analysis

	Step 1		Step 2		Step 3		Step 4		Step 5		Step 6	
Paths	β	<i>t</i> -values	β	<i>t</i> -values	β	<i>t</i> -values	β	<i>t</i> -values	β	<i>t</i> -values	β	<i>t</i> -values
SIZE	0.48	7.13***	0.31	7.92***	0.25	6.12***	0.22	4.44***	0.22	4.49***	0.21	4.27***
AGE	-0.42	-2.45**	-0.19	-1.88*	-0.15	-1.61	-0.15	-1.54	-0.17	-1.70*	-0.12	-1.17
CM			0.63	19.97***	0.57	17.12***	0.57	17.10***	0.54	10.87***	0.57	11.16***
INDS					0.28	4.16***	0.26	3.65***	0.35	2.60**	0.52	3.35***
INTL							0.04	1.01	0.04	1.02	-0.23	-1.72*
CMxINDS									-0.02	-0.02	-0.06	-1.82*
CMxINTL											0.05	2.14**
Model fit												
R ²	0.35		0.79		0.80		0.80		0.80		0.81	
Adjusted R ²	0.35		0.79		0.80		0.80		0.80		0.81	
Changes												
ΔR^2	0.35		0.44		0.01		0.00		0.00		0.01	
ΔF	52.48***		398.83***		17.30***		1.03		0.61		4.58**	
Note: * $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$ (two-tailed tests). The critical <i>t</i> -value was 1.65 (5%, one-sided).												

Appendix 1. Full-list of the multi-item measurement scales

Coopetition-oriented mind-set

In our organization...

- CM_1 - ... we believe in the importance of cooperating with competing firms
- CM_2 - ... we perceive that it is effective to collaborate with competitors
- CM_3 - ... we feel that it is vital to collaborate with our rivals
- CM_4 - ... we have a mind-set focused on cooperating with competitors
- CM_5 - ... we believe that firms should share assets (equipment, etc.) with their rivals
- CM_6 - ... cooperating with competitors is likely to improve our performance

Anchors: 1 = very strongly disagree to 7 = very strongly agree (adapted from Crick and Crick, 2019).

Local-level coopetition

In our organization...

- LLC_1 - ... we regularly share assets (equipment, etc.) with our local competitors
- LLC_2 - ... we frequently help local rivals by sharing assets (equipment, etc.)
- LLC_3 - ... we often cooperate with our competitors at a local-level
- LLC_4 - ... we usually collaborate with geographically-close competitors
- LLC_5 - ... we borrow equipment (equipment, etc.) from rivals in our local area
- LLC_6 - ... we have positive networks with competitors in this region

Anchors: 1 = very strongly disagree to 7 = very strongly agree (adapted from Crick and Crick, 2019).

National-level coopetition

In our organization...

- NLC_1 - ... we share assets (equipment, etc.) with our rivals throughout the nation
- NLC_2 - ... we have positive networks with our competitors across the country
- NLC_3 - ... we are highly-cooperative with our competitors in other regions
- NLC_4 - ... we share assets (equipment, etc.) with competitors outside of our region
- NLC_5 - ... we collaborate with our rivals in multiple regions
- NLC_6 - ... we collaborate with our rivals all over the country

Anchors: 1 = very strongly disagree to 7 = very strongly agree (adapted from Crick and Crick, 2019).

Organisation-level coopetition

In our organization...

- OLC_1 - ... we regularly cooperate with non-wine competitors
- OLC_2 - ... we have positive ties with non-wine rival businesses
- OLC_3 - ... we pool assets (equipment, etc.) with rivals outside of the wine sector
- OLC_4 - ... we frequently collaborate with non-wine competing companies
- OLC_5 - ... we borrow and lend assets (equipment, etc.) with non-wine rival firms
- OLC_6 - ... we have positive networks with non-wine competitors

Anchors: 1 = very strongly disagree to 7 = very strongly agree (adapted from Crick and Crick, 2019). The measurement items for organisation-level coopetition featured a reference to indirect rivals being entities, such as breweries (to serve as an example).

Informant quality

In closing to the survey:

- INQ_1 - I am confident about my answers to the questions above
- INQ_2 - This survey deals with issues that I am knowledgeable about
- INQ_3 - I am a qualified person to complete this survey
- INQ_4 - My current role allows me to have answered the questions above

Anchors: 1 = very strongly disagree to 7 = very strongly agree (adapted from Hultman *et al.*, 2009).