

Interorganizational Cooperation through Psychological Safety

A Case Study on Japanese Regional Rice-Wine (*Sake*) Industry

Byeongsik KIM¹⁾ Faculty of Sociology, Asia University

Youngjae KOH School of Cultural and Creative Studies, Aoyama Gakuin
University

I . Introduction

Competition is ubiquitous in the modern economy and market landscapes. It is widely assumed that competition among firms influences their business operations and innovative capabilities. Management scholars have explored how competition impacts firms' profitability and what factors enhance their competitiveness (e.g., Porter, 1991). Recent studies suggest that competition fosters firms' learning capabilities and improves their survival rates (Barnett & Hansen, 1996; Barnett & McKendrick, 2004).

However, an intriguing phenomenon remains that some firms opt to cooperate with rivals within the same industry, rather than engage in direct competition to enhance their capabilities. Strategic management literature has emphasized that these forms of cooperation often manifest as alliances. Such alliances are primarily viewed as mechanisms to enhance competence by complementing resources and generating synergy (Gulati & Singh, 1998; Greve et al., 2013). This perspective suggests that cooperation occurs when it presents clear benefits.

There remain exceptional cases where firms cooperate without apparent merit or even bear the costs associated with cooperation with rivals. These instances are often observed among small-medium enterprises (SMEs) or regional enterprises, which have been less focused in previous literature. This leads to critical research questions: *Why do some firms (or organizations) choose to cooperate with rivals despite lacking obvious benefits or facing risks? What factors drive firms to engage in cooperation with rivals within the same industry?* These questions highlight unresolved gaps in the field of strategy studies.

Therefore, this paper aims to provide insights into the research question through a unique research context: we investigated the Japanese rice-wine (hereafter, *Sake*) industry in Niigata region, which established a regional brewery school (*Niigata Seisyu Gakko*, hereafter Niigata Sake Brewery School) to communicate with other firms within the same brewery industry in the Region. The school was established not only to preserve brewery skills but also to facilitate communication among members of different breweries. To understand this case, we adopted the theoretical lens of psychological safety, which assumes that safety shared among members encourages learning and risk-taking (e.g., Edmondson, 1999). Our findings suggest that psychological safety shared among Niigata Sake

Brewery School members promotes information exchanges, collaborative projects, and the transfer of brewery skills from alumni.

II . Literature Review

1. Strategic Alliance and Cooperations among Firms

An alliance is considered a fundamental form of cooperation among firms (Gulati, 1998). Given the limited internal resources of a firm, a strategic alliance provides complementary resources, access to technologies, and social recognition (Gulati & Singh, 1998; Greve et al., 2013). For example, Stuart et al. (1999) demonstrated that startups endorsed by prominent investors tend to perform better at IPO. In summary, a strategic alliance with other firms confers a competitive advantage to the focal firm.

Additionally, numerous literatures analyze alliances in terms of cooperation and collaboration (Gulati & Singh, 1998; Gulati & Wohlgezeogen, 2012). For example, Gulati & Singh (1998) explored how costs related to cooperation influence governance structure. Other discussions on cooperation are primarily analyzed through the lenses of social network theory (Brass et al., 2004; Maurer & Ebers, 2006) and social capital (Uzzi, 1996).

Despite the extensive literature on strategic alliances, there remains a significant gap in understanding firms' cooperation with rivals in the same industry. Previous studies have predominantly focused on the benefits of alliances with firms possessing complementary resources. Conversely, the phenomenon of voluntary cooperation with rivals has not been fully explored.

2. Interorganizational Trust and Interorganizational Cooperation

Interorganizational trust is a key concept for explaining cooperation among firms that are typically considered rivals. Trust is defined as “a cognitive and emotional attitude that individuals form toward specific others” (Edmondson, 2018/2021, pp. 269-270). In the existing literature, trust has generally been examined at the individual, team, and organizational levels (Fulmer & Gelfand, 2012). While trust at the individual level highlights the interpersonal dimension, organizational-level trust primarily refers to interorganizational trust, which is grounded in communication and collaboration between organizations (Fulmer & Gelfand, 2012).

According to Gulati & Nickerson (2008), interorganizational trust decreases the cost at transaction cost among organizations. Regarding to this, interorganizational trust enhances cooperation with other firms. Other than that, previous literatures revealed that interorganizational trust affects firm performance (Zaheer & Harris, 2005), affected by asset specificity (Zhong et al., 2014).

Despite of the existence of previous researches on interorganizational trust, those studies are lack on how interorganizational trust is developed chronologically. Although previous researches provided rich evidences that how interorganizational trust affects organizations' performance and transaction, those

studies only focus on certain period of the trust among organizations. Generally speaking, trust is formed gradually through exchange among individuals in organizations (Kroegeer, 2012). On the other hand, it is still not clear that how interorganizational trust is developed. An exceptional research by Schilke & Cook (2013) proposed that boundary spanner, who is in charge of interorganizational relationships, is a key individual at the time of start of trust forming (Schilke & Cook, 2013). Still, the concept that is proposed by Schilke & Cook (2013) is still not empirically investigated.

3. The Initial Stage of Extending Trust and Psychological Safety into Interorganizational Cooperation

The establishment of cooperative relationships among organizations is predicated on the execution of contracts, which serve to supplant inadequate resources. However, despite the existence of such contracts, their inherent reliability, predicated on human interactions, remains a critical factor in their efficacy. In order to establish trust in interorganizational cooperation, it is essential for leaders to demonstrate trustworthiness during the initial stages of the cooperative relationship. (Sasaki & Kimura, 2024).

Once it became clear that the leader's trust-building behavior would generate shared economic benefits, even representatives from rival firms chose to take up the challenge. Consequently, participants from each company initiated the leader-led trust-building process.

However, trust is limited to one-on-one relationships between individuals. Consequently, personal trust does not inherently engender cooperation among companies.

The evolution of interpersonal trust into interorganizational trust is contingent upon the leader's ability to present challenges that are relevant to all participating companies and to foster an environment in which participants recognize that they hold similar roles within their respective organizations (Sakai & Kimura, 2024). This awareness fosters a shared perception among participants as they identify similar challenges faced by others. Furthermore, when individuals come to understand through the leader's behavior that acquiring knowledge through interorganizational cooperation will ultimately benefit their own firms, they become more actively engaged in communicating with participants from other companies with consortium or interfirm corporative relationships.

These interactions consequently create psychological safety within the team, which is defined as "a shared belief among team members that the team is safe for interpersonal risk-taking" (Edmondson, 1999). This psychological safety encourages voice behaviors within interfirm cooperative relationships (Burk et al., 2007).

4. Psychological Safety for Risk Taking Action and Cooperation

Establishing trust is essential when taking risks (Deng et al., 2019). Cooperation with rivals can introduce potential risks, as conflicts of interest may arise during the cooperation process. To

understand this phenomenon, psychological safety offers a valuable theoretical lens. Psychological safety is defined as “a common sense regarding personal safety among team members” (Edmondson, 1999; Edmondson & Bransby, 2023). It promotes better performance among team members. Specifically, those who experience psychological safety are more likely to engage in risk-taking behaviors (Deng et al., 2019).

Previous literature predominantly examines psychological safety at the individual level within teams or organizations (Edmondson, 1999; Edmondson et al., 2004). For instance, psychological safety enhances learning behavior within teams and organizations (Edmondson, 1999) and facilitates learning from failure (Carmeli & Citerell, 2009). Other studies have explored the moderation effect of efficiency and the learning effect (Kim et al., 2020), the relationship psychological safety and company performance in organizational level (Baer & Frese, 2003), and the connection between psychological safety and creative ideas (Mukerjee & Metiu, 2022).

5. Position of Our Research

Previous studies have predominantly focused on interpersonal trust established within contract-based interorganizational cooperation (Burke et al., 2007; Sasaki & Kimura, 2024). It has been demonstrated that such interpersonal trust emerges through leaders’ trustworthy behaviors, notably the clear communication of shared objectives. Additionally, when participants engaged in interorganizational cooperation recognize similarities in their organizational roles and common challenges, enhanced information exchange occurs, particularly during the initial stages of a consortium or partnership. This, in turn, fosters psychological safety within the collective and encourages further collaboration (Sasaki & Kimura, 2024).

However, these observations are limited to relationships formed explicitly for resource substitution under contractual agreements, with an emphasis on the early phases of interfirm relationship development. Consequently, existing research has not sufficiently addressed how voluntary cooperation among rival firms evolves longitudinally.

If mechanisms responsible for cultivating psychological safety in contract-based interfirm partnerships are also operative in voluntary cooperative relationships between competitors, a comprehensive framework for effectively managing interorganizational cooperation could be established. Furthermore, identifying factors functionally similar to leaders’ trust-building behaviors in facilitating voluntary collaboration among rival firms would yield novel insights into interfirm relationship management.

III. Methods

To investigate our argument, we shed light on the Japanese Sake industry in Niigata Region, which

is in the northwestern part of Japan. The Niigata region is widely known to produce rice and abundance of natural resources for rice making, including water resources. Based on such an abundant natural environment, Niigata region has been known as a major place of Sake production. Such research context is appropriate to investigate our research question, since traditional industries are characterized by social ties within communities, in terms of business activity.

Our study concentrated on the cooperation among breweries through Niigata Sake Brewery School, which was established by Sake breweries' community in Niigata Region. This school aims to preserve traditional brewing skills and facilitate the exchange of brewing knowledge through cooperation among the Sake Breweries in Niigata region (The committee of the 30th anniversary of the establishment of Niigata Sake Brewery School, 2014). The establishment of a school through the cooperation of breweries (or private firms) represents a unique case, as it lacks obvious incentives for these firms²⁾.

For this study, we conducted flexible semi-structured interviews in face-to-face and via e-mail. Initially, we conducted a face-to-face interview with the board members of a brewery in Niigata region to gain an overview of Sake brewery industry in Niigata region and Niigata Sake Brewery School. Subsequently, we asked detailed questions about Niigata Sake Brewery School via e-mail regarding their activities and status, including curriculum, alumni, and outcomes.

IV. Analysis

1. Japanese Rice-Wine (Sake) Industry in Niigata Region and Establishment of Niigata Sake Brewery School

Due to the characteristics of traditional industry in non-metropolitan region in Japan, many firms have been suffering from the aging of workers and lack of skilled workers. The breweries in Niigata region are no exemption of such problems. To solve this, the school was established in the year of 1984 for preventing skills of breweries due to the aging of workers (The committee of the 30th anniversary of the establishment of Niigata Sake Brewery School, 2014). Until 2011, the number of alumni increased to 451, and the school has become a typical educational institution owned by breweries in the Japanese brewery industry (The committee of the 30th anniversary of the establishment of Niigata Sake Brewery School, 2014, p.106).

2. Cooperation through Psychological Safety: The Function of Niigata Sake Brewery School

The activities of Niigata Sake Brewery School can be categorized into three dimensions, so-called : *sensyu*, which represents acquiring basic knowledge and skills in brewery production, *soumou*, which means networking with not only other students and teacher, but also many people involved in work, and *sisyou*, which represents acting with a broad perspective, like a bird soaring in the sky (The

committee of the 30th anniversary of the establishment of Niigata Sake Brewery School, 2014, p. 114). The primary objective of the school is to impart the skills and techniques necessary for brewery operations, as detailed below:

“The students at the school basically belong to each breweries, and are required to take classes 100 hours in each year for 3 years. The contents of the classes are lectures, practical training at the laboratory, and training at hands-on.”

The school's alumni play a crucial role in facilitating information exchange among breweries. Post-graduation, alumni engage in various activities sponsored by breweries in Niigata region. This alumni involvement promotes communication among breweries:

“Alumni of the school automatically belong to ‘Niigata Brewery Technology-Research Association’, which provides several activities, including seminar and workshop. The alumni support such activities. [. . .] as an indirect effect, the network of alumni beyond the boundary of firms enhances communication and sharing direction of managing actives or events.”

The communication and cooperation among breweries facilitated by the school's alumni extend beyond external activities to include production processes. Breweries accept students from the school into other breweries to assist with solving production challenges.

“Our common understanding, we can't produce the same production with the same method. Therefore, we actively share success and failures cases to construct a win-win relationship. [. . .] Each breweries possesses motivation to enhance the branding of Niigata's Sake. Therefore, we have the workshop and visiting to other firms. It would be quite rare case to accept other firms' members, such as high-tech industries.”

Such cooperative relationships among breweries may be viewed as risk-taking behavior that reveals proprietary knowledge to competitors. However, as previous research on psychological safety has indicated, it encourages risk-taking behavior (Deng et al., 2019). The presence of alumni fosters psychological safety among breweries, facilitating risk-taking actions such as welcoming members from other breweries:

“[. . .] If there are alumni in a brewery, it is obvious that the communication occurs smoothly.”

The interviewees suggest that communication and cooperation among breweries are grounded in

psychological safety fostered through the school's alumni network. This psychological safety is gradually established through alumni activities, rather than through abrupt measures. The process of building psychological safety among organizations is exemplified by the activities of members that transcend the boundaries of individual firms and organizations.

“[. . .] through several activities, ‘Niigata Brewery Technology-Research Association’ has a role to deepen understanding on each other; and source of supporting the brewery skills in Niigata region. [. . .] we please lectures of the school and owners to create atmosphere that enable communication casually beyond the boundary, since the alumni’s problem solving experiences leads their growth as a brewery technician.”

Such an atmosphere inhibits psychological safety, which enhances communication among breweries and fosters risk-taking, exemplified by the acceptance of members from other breweries. In other words, psychological safety functions among breweries through community activities through Niigata Sake Brewery School.

3. Developing Proposition

While previous literature predominantly focuses on the individual level within teams or organization, this paper seeks to explore the effect of psychological safety among firms (breweries) in the same industry through qualitative method. Psychological safety fosters a learning process and encourages risk-taking behavior (Deng et al., 2019). In the case of Niigata Sake Industry, it created Niigata Sake Brewery School to facilitate cooperation among breweries. This phenomenon suggests that psychological safety extends beyond individuals within teams to encompass inter-organizational interactions:

Proposition 1: Psychological safety can be adopted to inter-organizational interaction, not limited to individual level in team or organization

Furthermore, we propose that such psychological safety facilitates opportunities for cooperation with rivals. As previously discussed, arguments on competition and alliances have predominantly focused on competition among rivals and profitability. However, the observed phenomenon suggests cooperation among rivals within the same industry, through Niigata Sake Brewery School. This implies that safety among organizations enhances cooperative activities among members:

Proposition 2: Psychological safety among organization enhances cooperation with rivals in the same industry

V. Discussion

This study explores how firms cooperate and collaborate with their rivals in the same industry, focusing on the case of Sake brewery in Niigata region establishing the school for cooperative efforts. The research addresses the gap in understanding why firms engage in cooperation with their rivals. It offers several theoretical contributions. First, it fills the research gaps in existing literature on competition and cooperation that have not been fully examined. Second, it proposes a model of psychological safety in inter-organizational interaction based on interviews with the Niigata Sake Brewery School. Third, this study has proposed on understating interorganizational cooperation through intergrading micro – macro perspectives. Recent organization studies have shed light microfoundations, which investigates how individuals in teams or organizations affects their behavior and performance (Barney & Felin, 2013). Although the needs for intergrading micro (e.g. organizational behavior) and macro (e.g. organization theory) perspectives to understand organizational phenomenon, little study has shed light on research gaps.

However, this research has several limitations. First, this study was conducted as a single case study, which may weaken the evidence supporting our assumption. Future research should incorporate multiple interviews to strengthen the findings. Second, although we proposed how psychological safety work in contest of inter-organizational interactions, the precise mechanism remains unclear. Therefore, further research may need to employ quantitative methods (e.g., surveys) to investigate who initiates psychological safety and how this mechanism functions within teams or organizations.

Endnote

- 1) Corresponding author. kim_byeongsik@asia-u.ac.jp
- 2) Niigata Syuzou Kumiai. (2022) Niigata Seisyu Gakko [Niigata Sake School] (in Japanese) . Retrieved 2024/07/13 from <https://www.niigata-sake.or.jp/activity/school/>

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Byeongsik KIM

Asia University

kim_byeongsik@asia-u.ac.jp

Youngjae KOH

Aoyama Gakuin University

yjkoh@sccs.aoyama.ac.jp

Abstract: Competition is typically conceptualized as a market mechanism shaping firms' competitiveness and innovation. However, our understanding of competition remains incomplete, particularly regarding a situation where firms opt for cooperation instead of rivalry. This study explores why some firms collaborate with competitors within the same industry and to identify the factors driving this behavior. Aiming to fill gaps in existing management literature, especially in competitive strategy, this paper adopts the theoretical framework of psychological safety. This concept emphasizes protecting members from negative situations to promote enhanced performance. The research context is the Japanese Regional Rice-Wine (*Sake*) industry, characterized by regional cooperative networks among breweries. Utilizing qualitative research methods, the findings elucidate the underlying mechanisms prompting firms to collaborate with competitors in a competitive market environment.

Keywords: Competition, Cooperation, Psychological Safety, Japanese Sake Brewery Industry