

Collaboration between Competitors: Longitudinal Interplay Between Collusive Functions and Interaction Processes

Abstract

Relationships between competitors provide significant opportunities to broaden the scope of IMP research. In this manuscript we examine longitudinal processes that enable competitors to suspend competition via illicit price-fixing relationships. In our analysis, we take a process perspective to evaluate interfirm interaction over time. We identify illicit forbearance, ability to raise prices, and ability to sustain secrecy as the core collusive functions, establishing necessary conditions for price-fixing conspiracy. We contribute to the IMP literature by theorizing the interaction between key collusive functions and underlying interactional processes investigated by the IMP group. This allows us to establish new theoretical linkages between IMP research and the price-fixing literature.

Introduction

Horizontal business relationships between competitors provide significant new lines of inquiry to broaden the scope of IMP research. Much traditional IMP-research has focused on collaborative customer-supplier relationships, while horizontal relationships between competitors have received less attention (Ford, Gadde, Håkansson, & Snehota, 2003; Håkansson, 1982). Recently, B2B marketing research has, however, increasingly recognized the importance of horizontal relationships between competitors, including cooperative relationships (Bengtsson & Kock, 2000; Dahl, 2014; Lundgren-Henriksson & Kock, 2016a, 2016b) and collusive relationships between competitors (Pressey & Vanharanta, 2016; Pressey, Vanharanta, & Gilchrist, 2014). Commonly, collusive relationships relate to price-fixing agreements between competitors, which is also the focus of this manuscript.

In this archival case study, we provide a longitudinal explanation of the core collusive functions and underlying interactional processes that allow competitors to establish and to sustain collusive collaborative relationships. We will focus on the longitudinal interplay between collusive functions and underlying interactional processes.

2. Method

In this research, we use an archival study method (Gupta, Polonsky, Woodside, & Webster, 2010), that has been previously applied to cartel investigations in the field of industrial marketing (Pressey & Vanharanta, 2016; Pressey et al., 2014). We will focus our investigation on the vitamin cartels (Commission, 2001) that were operational 1990-1999 (Figure 1). This includes a complex web of inter-locking cartels activities in the different vitamin industries, including vitamin A, E, B1, B2, B5, B6, C, D3, and H industries. Also, we will include Folic Acid and Beta-Carotene and Carotenoids in this study. All together this complex network of cartels, led by the market leader Roche, included 13 corporations (Commission, 2001).

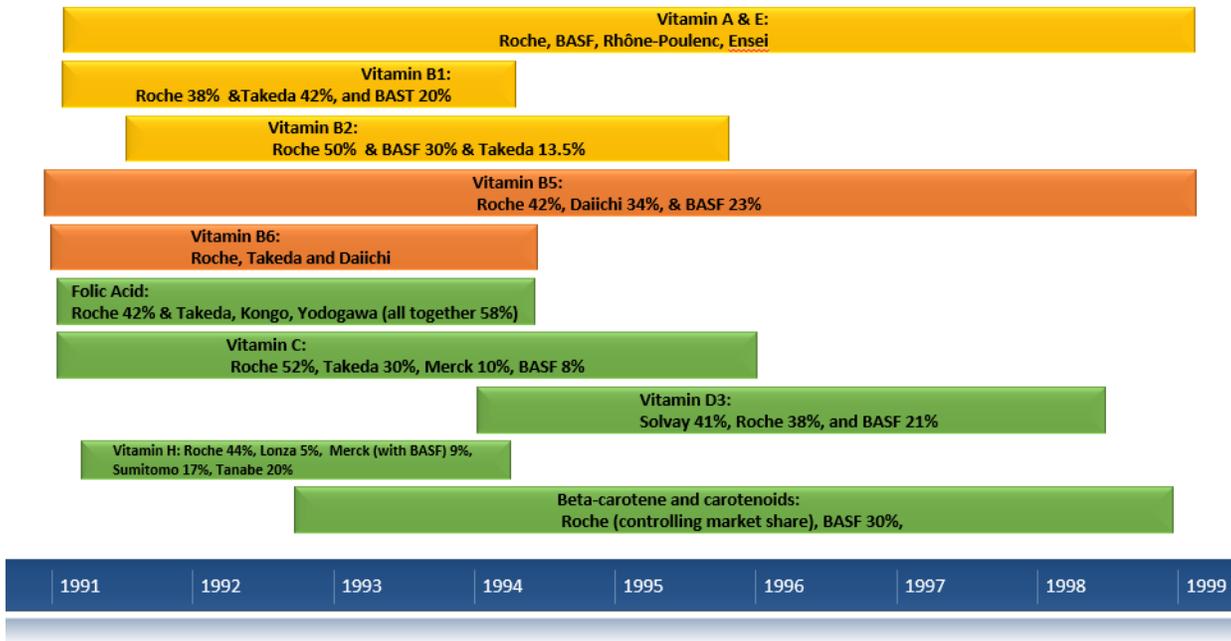


Figure 1. Network of international vitamin cartels.

3. Analytic framework

In our analytic framework, we conceptualize the relationship between collusive functions and the underlying inter-organizational processes. The core collusive functions include but are not limited: 1. Illicit forbearance, 2. Cartel secrecy, and 3. Cartels ability to rise prices (e.g. Levenstein & Suslow, 2006; Lieberman & Asaba, 2006; Pressey & Vanharanta, 2016; Pressey et al., 2014). The presence of these collusive functions is a necessary condition for price-fixing cartels to succeed. However, the collusive relationships also depend upon the underlying interactional processes, investigated by the IMP group (see Figure 2). It is these underlying interactional processes that sustain inter-firm relationships (Pressey & Vanharanta, 2016), including activity links, resources ties, and actor bonds (Ford et al., 2003; Håkansson & Johanson, 1992).

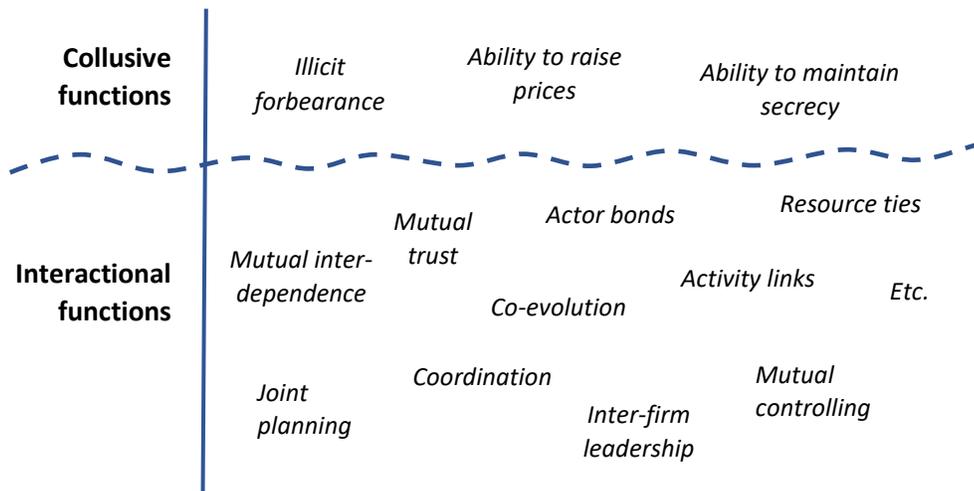


Figure 2. Two ontic levels of collusive relationships: collusive functions and interactional processes

Illicit forbearance. Illicit forbearance addresses the central relationship challenge in managing an illicit price-fixing conspiracy, namely, how to ensure mutual adherence to cartel agreements, while operating outside the law (Pressey & Vanharanta, 2016). Establishing and maintaining illicit forbearance is a key challenge in cartel management, as it is necessary for cartel members to trust each other, without legally binding contracts. In addition, cartel agreements are often against the firms' own short-term self-interest. For example, there is little a cartel can do to stop cartels member from cheating on each other by producing more than the agreed production quotas (Levenstein & Suslow, 2006; Lieberman & Asaba, 2006). Alternatively, at any point in time, a cartel member can become a government witness in exchange for more lenient penalties.

Controlling prices. Ultimately, the success of price-fixing cartels dependent upon the cartel's ability to raise prices (Levenstein & Suslow, 2006). If a cartel cannot achieve its desired price-levels, this failure can rapidly undermine illicit forbearance among cartel members resulting in the unraveling of the cartel conspiracy (Lieberman & Asaba, 2006; Pressey & Vanharanta, 2016). Cartel members may for example suspect each other of exceeding their agreed production quotas. To be more specific, we can divide cartels' ability to raise prices into internal and external challenges. Internally, the basic managerial challenge is to plan, organize, coordinate, and control pricing fixing activities together with other cartel members (Levenstein & Suslow, 2006). Often this requires cartels to track and control overall aggregate output. For example, the Vitamins A & E cartel investigated in this manuscript had regular contact between 4 different managerial levels. These activity links ranged between weekly, monthly, and quarterly contact. Similar activity linkages were also present in the 9 other vitamin cartels, depending on the complexity of the coordinative challenges (Commission, 2001). Externally, the pricing challenge concerned additional output produced by suppliers that were not included in the price-fixing agreement. To manage this additional output some of the vitamin cartels purchased excess supply from the market (Commission, 2001). Also, some outside manufacturers were later on included in the cartel conspiracies.

Maintaining secrecy. As criminal conspiracies, price fixing cartels can only exist as long they remain hidden from outsiders (Levenstein & Suslow, 2006). This means that activity links and resource ties between the organizations need to be concealed to avoid detection. This includes all communication and contact between the cartel parties (Pressey et al., 2014). In addition, a cartel needs to disguise the way it increases prices not to raise suspicion. This includes suspicious historical price patterns. In the end, all of the vitamin cartels included in this investigation were detected by authorities, resulting in criminal persecutions and heavy penalties (Commission, 2001). Also, this may have resulted in many of the vitamin cartels to unravel.

3.2 Linking Collusive Functions and Interaction process

In the extant cartel literature, cartel success has been strongly linked to cartel’s ability to punish cheating cartel members (Levenstein & Suslow, 2006; Lieberman & Asaba, 2006). Also, credible threat of punishment has been also linked to cartel success and mutual forbearance (Lieberman & Asaba, 2006). Similarly, tit-for-tat retaliation in a multimarket scenario has been suggested as a feasible mechanism that improve cartel success rates (ibid). For example, if a multinational firm cheats in one market, other cartel members can retaliate in other markets. This can provide a credible threat of mutually assured destruction (Lieberman & Asaba, 2006). In the vitamin cartels multimarket retaliation was a clear possibility, as Roche and BASF shared an operational presence in 9 separate vitamin markets (Figure 2). Hence, both Roche and BASF had ample opportunities to punish each other, to ensure compliance with their cartel agreements (see Figure 2).

	Roche	BASF	Takeda	Daiichi	Merck	Ensei	Rhône-Poulenc	Solvay	Lonza	Sumitomo	Tanabe	Kongo	Yodogawa
Vitamin A & E	✓	✓				✓	✓						
Vitamin B1	✓	✓	✓										
Vitamin B2	✓	✓	✓										
Vitamin B5	✓	✓		✓									
Vitamin B6	✓	✓	✓	✓									
Vitamin C	✓	✓	✓		✓								
Vitamin D3	✓	✓						✓					
Vitamin H	✓	✓			✓				✓	✓	✓		
Folic Acid	✓	✓	✓									✓	✓
Beta-Carotene & Carotenoids	✓	✓											

Figure 3. Overlapping networks of 10 separate vitamins cartels.

From the perspective of the IMP literature, however, it can be argued that emphasis on punishment may be an overly narrow approach to theorize trust in long-term collusive relationships (Axelsson & Easton, 1992; Ford et al., 2003; Håkansson, 1982). There are differences between cartels and legitimate B2B business relationships (Pressey & Vanharanta, 2016). However, even with legitimate B2B business relationships, establishing long-term commitment and trust can be challenging. Yet, IMP literature has not theorized punishment as a central mechanism to foster trust and

mutual commitment in long-term business relationship. Instead, the IMP-literature has typically adopted a more progressive approach emphasizing positive development via mutual learning, shared benefits, and mutual interdependence.

To elaborate, in the vitamin A and & cartels, much of the cartel activity designed to facilitate illicit forbearance between cartel members (Commission, 2001). In these cartels the importance of illicit forbearance was emphasized from the very beginning by establishing strong top-level commitment to the cartel conspiracy (Figure 3). In addition, top management continued to meet up on annual basis to reassure firms' mutual commitment to the cartel agreements. These top-level meetings did not have any operational agenda, whereby the focus was purely on establishing mutual trust and commitment to the cartel. Also, these top-level meetings were an important facilitator of actor bonds between the firm (Ford et al., 2003; Håkansson & Johanson, 1992). In addition, strong commitment to illicit forbearance was also evident in lower-level interaction between the companies. Perhaps most importantly, the cartel members shared sales data with each other on weekly basis, to more accurately track the overall size of the vitamin markets. These calculations were used as the basis to establish market share agreements, whereby all cartel members agreed to limit their production to the agreed quotas. For examples, as a sign of illicit forbearance, in the very first cartel meeting, Rhône-Poulenc gave up its business objective to capture more market share from its competitors. Similar market share caps were agreed by the cartels on annual basis.

Linking these findings to IMP research, we can identify extensive interactional processes that supported the collusive relationships. Furthermore, our understanding of cartels can benefit from the network perspective (Axelsson & Easton, 1992), as no collusive cartel is an isolated island. Instead cartels are embedded in the wider network of business relationships, including complex industry dynamics. The vitamin cartels formed a collusive network of 10 separate vitamin cartels that all influenced each other (Figures 2, and 3). The wider network shaped cartel interaction, and cartel interaction influenced back at the network.

By taking the process perspective, we can also identify central path dependencies that influenced the development trajectory of the cartels, including the development of illicit forbearance (Figure 4). To begin with, we maintain that the firms' willingness to work towards illicit forbearance can be strengthened by past cartel experience. This allows cartels to utilize institutional memory in price-fixing, and to leverage pre-existing actor bonds and old knowledge of appropriate activity links and resource ties. These facilitating processes are particularly important in the early stages of cartel formation. Also, past cartel interaction can facilitate illicit forbearance. As it is illegal to discuss prices with competitors, contacts between competitors can put both firms in legal jeopardy. As a result, pre-existing trust between competitors can greatly facilitate competitors' ability to initiate price-fixing negotiations. In the case of the vitamin cartels, Roche and BASF were able to build upon their mutual trust and inter-organizational linkages accumulated in past price-fixing

arrangements (Commission, 2001). Also, there are reasons to believe that also other vitamin suppliers had participated in past price-fixing conspiracies (Commission, 2001).

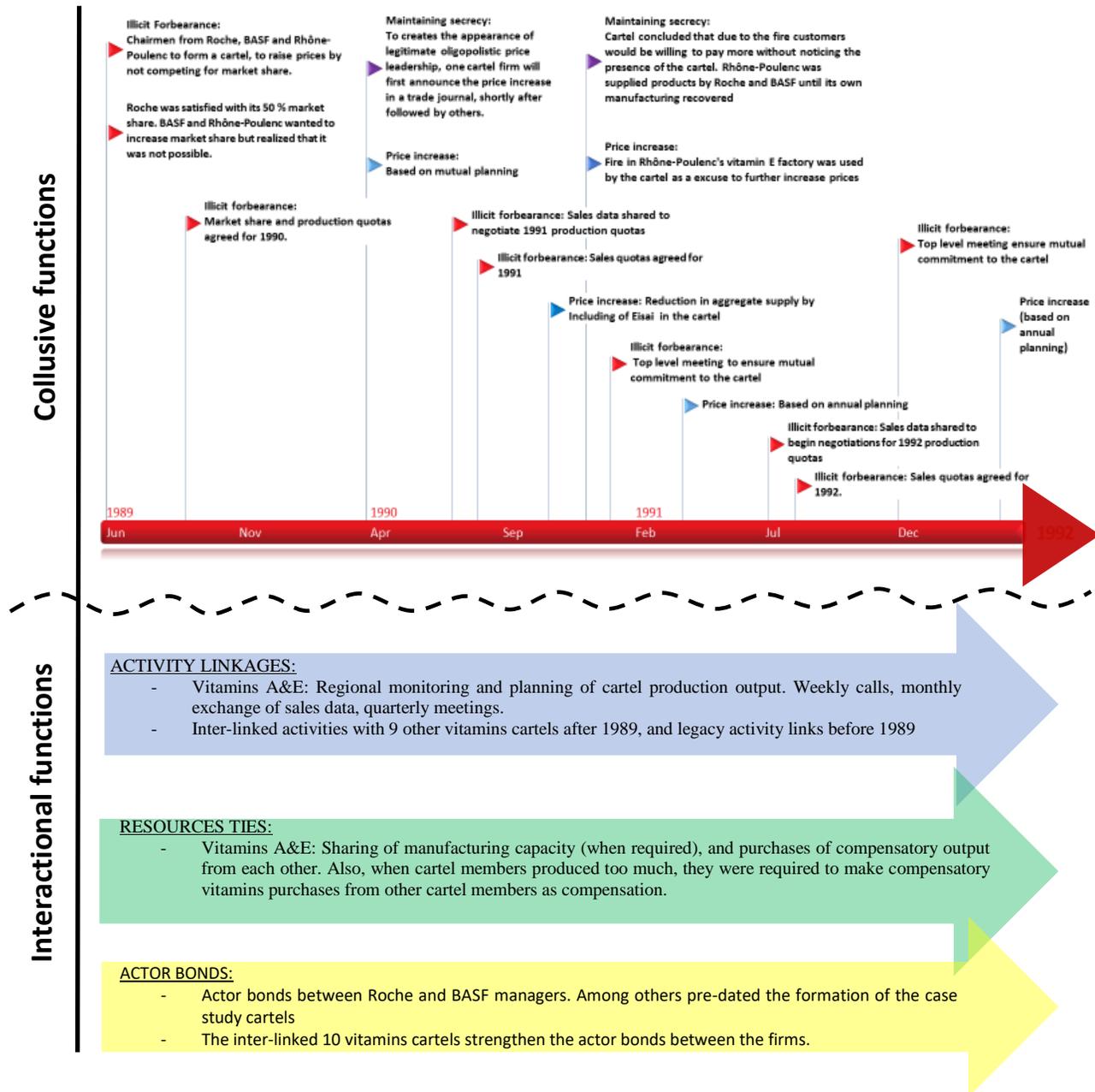


Figure 4. Collusive functions underpinned by interactional functions in the vitamins A & E cartel, 1990-3.

Also, we conjecture that firms' willingness to join illicit price-fixing cartels can be facilitated by a shared history of destructive competition. In the case of the vitamin cartels, all of the firms had struggled with their profitability due to severe competitive pressure. Oversupply and declining vitamin prices had been a persistent problem in this industry for the previous decade (Commission, 2001). These adverse experiences shared by the competing firms can be seen as an important pre-condition for the cartels. Also, this shared experience helped the firms to establish illicit forbearance. Also,

intensive price-competition can be a threat to managerial jobs, including the overall survival of the companies in question. This can be an additional motivational factor increasing managers' personal motivation to engage in illicit collusive practices. If this personal motivation is shared by all participating managers, this further facilitates illicit forbearance and mutual trust. In some industries, there can even be an institutional memory regarding dangers of extreme competitive pressures and the importance of collusion as a means to overcome excessive competitive pressures (Sampson, 1975).

5. Conclusions

In this manuscript, we theorize linkages between illicit price-fixing cartels and interactional processes investigated by the IMP Group. We maintain that relationships between competitors provide significant opportunities to broaden the scope of IMP research. In addition, we maintain that understanding of illicit cartels can be enhanced via stronger theoretical linkages to the extant IMP-literature. In our analysis, we took the process perspective to evaluate interfirm interaction over time, identify illicit forbearance, ability to raise prices, and ability to sustain secrecy as the core collusive functions, establishing necessary conditions for price-fixing conspiracy.

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