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Dark network tensions and illicit forbearance: Exploring paradox and instability in illegal cartels



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ABSTRACT

In this case study investigating illegal cartels, we contribute to our understanding of the dark side of business relationships in three different areas. First, we expand upon the dark side of business relationships theme, by investigating the nature of opportunism in price-fixing cartels and the role of illicit forbearance. Due to their illicit nature, cartels are forced to operate outside legally binding contractual frameworks requiring other ways to facilitate agreements to avoid opportunistic behaviour. Second, our investigation contributes to our understanding of tensions in business relationship settings. Our findings indicate that network tensions are made significantly worse by the illicit nature of cartels, resulting in inherently unstable relationships. Third, in addition to cartels, we argue for a broadening of the scope of the 'dark side of business relationships towards one that recognises the importance of illicit practices undertaken by marketing managers. This is significant because illicit relationships are often archetypal examples of opportunistic behaviour, which are likely to result in different types of conflict in a business relationship/network context. In the case of cartels, this opportunistic behaviour influences cartel participants, customers, suppliers (not privy to the cartel agreement) and the wider public. Theoretical and practical implications are provided.

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1. Introduction: expanding the horizons of dark business relationships — the dark side of business networks

As long as there has been an interest in relationships in marketing scholarship there has been the recognition of a potentially 'dark side' to their development and existence (Tadajewski, 2010; Tadajewski & Saren, 2009), evidenced in early supply channels literature (Gaski, 1984; John, 1984). Much of the initial research on the dark side of business relationships focussed on negative relationship constructs such as opportunism and conflict (e.g. Gaski, 1984; John, 1984). In addition, significant contributions have been made in investigating the dark side of personal relationships, such as relationships between sales and marketing functions, and marketing and production (Villena, Revilla, & Choi, 2011). More recently, calls have been made to expand the scope of the dark side of business relationships, perhaps most notably by this special issue, which includes examining tensions and uncertainty as relevant areas of investigation.

In this study we contribute to our understanding of the dark side of business relationships in three different ways based on our investigation of illicit price-fixing cartels. First, we expand upon the most traditional dark side of relationships theme by investigating the nature of opportunism (and ways to manage this) in price-fixing cartels. Opportunism is a central problem in cartel relationships as their illicit nature prohibits the use of legally binding contracts. Second, we expand upon our previous understanding of the dark side of business relationships by investigating the nature of tensions in illegal cartel relationships. Our findings indicate that network tensions are made significantly worse by the illicit nature of cartels, further strengthening the problems associated with opportunistic behaviour. Here we can build upon past research where the dark side of relationships has been viewed as tensions resulting from imbalances in various business phenomena (Fang, Chang, & Peng, 2011) that give rise to negative consequences such as instability, destructive conflict or other forms of dysfunction that may arise in business relationships. This issue has attracted a modest stream of scholarly interest in recent decades (see, for example, Anderson & Jap, 2005; Barnes, 2005; Blois, 1997; Grayson & Ambler, 1999; Hibbard, Brunel, Dant, & lacobucci, 2001; Moorman, Zaltman, & Deshpande, 1992; Pressey & Tzokas, 2004; Villena et al., 2011), as well as in specific areas such as relationship dissolution (Pressey & Mathews, 2003). Third, in this study we argue for the importance of expanding the scope of dark relationships to also include illicit business relationships, which have largely remained an unexplored area. This is important because illicit relationships are often archetypal examples of opportunistic behaviour, for example, cartels are an

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extreme example of opportunism adversely influencing customers, competitors and wider society. In addition, cartels can be seen as economically one of the most significant manifestations of 'dark relationships', estimated to influence global sales by approximately \$17 trillion (Connor, 2008). In addition, due to their adverse qualities, illicit relationships are likely to manifest various different types of conflict, which is often the reason for them being illegal in the first instance. Yet past marketing research has largely omitted the impact of illegal activities that marketing managers may engage in. If we are to achieve a candid and accurate study of our discipline, then it is important that we recognise the less socially desirable activities that marketing managers may face in practice, even if this means studying deviance and criminality. A small number of studies have argued that there may be instances where marketing managers are placed in positions of vulnerability. For example, Wilkie and Moore (1999) acknowledged that the boundary-spanning position of marketing managers has the potential to compromise them in certain illegal activities such as collusion between companies. Similarly, LeClair, Ferrell, and Ferrell (1997) consider the role of marketing managers engaged in international marketing initiatives (particularly their often close relationships with government agencies, customers and even competitors), concluding that the role they adopt may at times make them vulnerable to certain illegal activities such as bribery, fraud and price-fixing.

To elaborate, as illegal manifestations of dark networks cartel management is often troubled by various internal tensions. This is in part related to well-documented network paradoxes found in all business networks. However, we maintain that these network tensions are magnified owing to the illicit nature of cartels, and the inherent imbalances are also exaggerated. As a result, we maintain that the illicit networks formed by cartels can acquire unique qualities, which are not found in ordinary business relationship networks. These imbalances are characteristically a cause of instability, which can ultimately result in the unravelling of cartels. Due to the severity of these tensions, cartels have even been described as 'born to fail' relationships. Accordingly, the ways in which these network imbalances are managed may also acquire companies to adopt unique management practices, which is the main emphasis of this study. More specifically, we will focus on psychological, behavioural and structural elements of illicit price fixing networks.

In this paper, we will provide an analysis of three price-fixing networks and the paradoxical tensions they faced, thus providing us with an understanding of these illegal and little understood practices. Accordingly, we theorise a conceptual framework of five network tensions that dark networks may face. In so doing, we respond to recent calls in the industrial marketing literature for greater research on network tensions in inter-firm relationships (e.g. Bengtsson, Eriksson, & Wincent, 2010; Bengtsson & Kock, 2000, 2003, 2014; Fang et al., 2011; Fernandez, Le Roy, & Gnyawali, 2014; Raza-Ullah, Bengtsson, & Kock, 2014; Tidström, 2014; Wilhelm, 2011; Yami & Nemeh, 2014).

The present study examines the role of marketing managers in international price-fixing cartels by drawing on data derived from past investigations by the European Union (EU) regulator for competition (the Directorate General for Competition). We also draw on the literatures related to paradox and dialectics as a theoretical base (the so-called 'contradiction-based' paradigm), which has been a subject of much attention in the social sciences for some time (see, for example, Astley & Van de Ven, 1983; Das & Teng, 2000; Ford & Ford, 1994; Kuhn, 1977; Lourenco & Glidewell, 1975; Poole & Van de Ven, 1989).

This paper is organised in the following way. Following this introduction, we examine the literature on paradox and develop a framework of dark network tensions. Next, we outline the research methods and data collection procedures adopted. The remainder of the study reports on the findings of the three price-fixing networks and the tensions actors faced in their activities. We conclude with a consideration of implications and areas that merit future investigation in the area of dark networks.

2. Towards a dialectic understanding of network paradoxes in dark cartel networks

2.1. Illicit forbearance

With regards to opportunistic behaviour in business relationships there are considerable differences between the management of legal and illicit endeavours. To begin with, the very existence of illegal business relationships is often in itself an opportunistic act, such as the case with illicit price-fixing cartels. Price-fixing cartels are by their very nature opportunistic conspiracies, which seek to generate higher prices through breaking the law via secret agreements with competitors. Thus, price-fixing cartels are a form of opportunistic behaviour against customers, competitors (not privy to the cartel agreement) and the wider public.

Cartel management, however, is also affected by high levels of opportunistic behaviour among the cartel participants, because cartel participants may have an incentive cheat on each other. Most typically, cartels agree to reduce aggregate output in order to facilitate higher product prices. As a result, it can be in firms' short-term interests to opportunistically produce more than the agreed quota. Furthermore, as cartels are illegal conspiracies, cartel agreements cannot be enforced by legally binding contracts. This, we argue, presents a central difficulty to avoiding opportunistic behaviour by other cartel participants as companies have no legal means to enforce their agreements. Consequently, for a cartel to succeed it must find other ways to reduce the threat of short-termism and opportunistic behaviour by actors. We will call this kind of mutual restraint and reduction in opportunistic behaviour in illicit business relationships as 'illicit forbearance'. Accordingly, we see illicit forbearance as the central pre-condition and cornerstone of wellfunctioning cartel conspiracies. Also, we maintain that in the absence of illicit forbearance cartel conspiracies will fail and/or unravel.

With the concept of illicit forbearance we are drawing upon past economic research investigating legitimate multi-market competition, where firms are simultaneously competing against each other in several markets. In such circumstances, companies may tacitly reduce their level of rivalry in fear of retaliatory action by competitors in other markers. This kind of legitimate multi-market behaviour is called 'mutual forbearance', which Lieberman and Asaba (2006, p. 5) describe as the following situation:

When firms compete with each other in many markets, they can more easily sustain collusion, because deviations in one market can be met by aggressive responses in many places. This is the idea of 'mutual forbearance'.

In contrast, with 'illicit forbearance' we are specifically referring to illegal conspiracies. Illicit forbearance is hence exclusively a characteristic of dark network relationships. Also, unlike mutual forbearance, illicit forbearance is not necessarily related to multi-market competition situations. Accordingly we propose that:

Proposition 1. The success of illicit cartels is positively related to the cartel's structure and practices that facilitate 'illicit forbearance'.

2.2. Network tensions

In the following sections we will examine illicit forbearance in relation to various network tensions, and in addition we will also recognise the importance of network tensions. We maintain that the illicit nature of cartel relationships magnifies and further complicates network tensions, in comparison to legitimate business relationships. Particularly, in relation to illicit forbearance, illicit network relationships acquire unique characteristics, which are in-part or entirely absent from legitimate networks. These illicit characteristics can further complicate the task of managing dark networks. Having said this, various forms of network tensions can also be found in legitimate network structures, which

can inform our understanding of dark network tensions. As Das and Teng (2000, p. 84) note, "the world is a unity of opposites"; within any social system, including organisations and business networks, there are opposing and incongruous forces competing for dominance and control (Van de Ven, 1992). Variously referred to as incongruities, opposites, contradictions, dialectics, tensions, dilemmas, and paradoxes (Quinn & Rohrbaugh, 1983), competing values abound in organisational settings. The literature on paradox and dialectics in organisational settings is well established (Benson, 1977; Lourenco & Glidewell, 1975; McGuire, 1988; Zeitz, 1980). Here our focus is on the notion of network paradox, defined as: "two contrary, or even contradictory, propositions to which we are led by apparently sound arguments" that exist in a network of actors (van Heigenoort, 1967, p. 45). For example, paradoxes (closely related to Rittel and Webber's (1973) concept of 'wicked problems') in a business context might require actors to contemplate the existence of dualities of inconsistent factors — for example, competition versus collaboration, efficiency versus innovation, change versus continuity (Eisenhardt, 2000), where contradictory factors are accepted by actors as present at any point in time (Cameron & Quinn, 1988). Unsurprisingly, a symptom of paradox in any social system is tension between actors. As Eisenhardt (2000, p. 703) notes:

This duality of coexisting tensions creates an edge of chaos, not a bland halfway point between one extreme and the other. The management of this duality hinges on exploring the tension in a creative way that captures both extremes, thereby capitalizing on the inherent pluralism within the duality.

In business networks, tensions can be seen to arise due to paradoxes present in both the internal and external environments. In the context of business-to-business relationships, Fang et al. (2011, p. 774) define tension as "two co-existing contradictory forces with conflicting goals. These forces have [the] potential to break up partnerships, and are often the primary causes of aggravation within partnerships." Indeed, the notion of tension is closely related to conflict and the presence of seemingly incompatible behaviours between actors (e.g. Brown, 1983; Hunger & Stem, 1976).

Drawing on the organisation studies, strategic alliances, and business-to-business marketing literatures (e.g. Das & Teng, 2000; Fang et al., 2011; Jehn & Mannix, 2001; Mele, 2011; Tidström, 2014), we next propose five pairs of paradoxical dark network tensions that helps us to provide a detailed understanding of how dark networks operate and function. We briefly review each in turn.

2.2.1. Partner trust versus mistrust

Our first dichotomy and source of network tension is the notion of trust versus mistrust, which we argue are a necessary precondition for illicit forbearance to become successful. Trust can be viewed as a broad concept that captures expectations that an exchange partner will behave fairly and honestly - a well understood concept in the industrial marketing literature as a feature of successful relationships (Geyskens, Steenkamp, Scheer, & Kumar, 1996) and classic relational contracting theory (Macneil, 1974, 1980). Smith, Carroll, and Ashford (1995) view honesty as a situation in which actors share information and do not engage in opportunistic acts. This view tallies with conceptions of inter-firm trust in strategic alliances where parties must strike a balance between pursuing self-interests against the common good (Das, 1998; Das & Teng, 2000). The costs of mistrust in a network can be significant and may undermine network structure (Das & Teng, 2000). For example, where partners behave dishonestly or otherwise mistrust one another can lead to greater levels of complexity and result in damaging slow network decision-making (Groot & Merchant, 2000).

In comparing illicit and legitimate networks several differences can be identified. Firstly, in the absence of legally binding agreements, cartel participants need to find other ways to trust their counterparts. It may often be the case with illegal networks that their success depends on bonds of trust between actors that were forged in times of legitimate competition and long before the formation of the illicit network (Raab & Milward, 2003). Accordingly, we maintain that a higher level of trust is required at the beginning of illicit network relationships in comparison to what is required in legitimate network relationships. This heightened importance of trust is likely to continue through the development of illicit business relationships as a means to sustain illicit forbearance. For example, cartel participants can sometimes receive reduced penalties if they collaborate with criminal prosecutions. Under these conditions, mere suspicion of mistrust (by another cartel participant) may itself result in the likelihood of betrayal and unravelling of a cartel. Also, this means that loss of trust between network members is more destabilising in illegal network relationships, in comparison to legitimate relationships. Therefore, we propose:

Proposition 2. A higher level of trust is required at the initial stages of illicit network relationships, in comparison to what is required in legitimate network relationships.

As a cartel matures, however, the trust placed on other cartel participants needs to be supported by evidence to ensure the long-term viability of illicit forbearance. Even in legitimate relationships actors often create mechanisms to monitor partner behaviour in order to detect opportunism (Das & Teng, 2000). Ironically, the creation of bureaucratic control structures may in itself contribute to the collapse of an alliance (Tomkins, 2001; Wicks, Berman, & Jones, 1999). Hence, mistrust may lead to an inability to respond to network threats unless partners can manage the compromise between control mechanisms and trust (Tomkins, 2001). Again, these problematic tendencies are felt more keenly in illicit networks, as mechanisms of control make such networks more easily detectable by authorities resulting in criminal prosecution (Pressey, Vanharanta, & Gilchrist, 2014). For example, too high levels of mistrust may motivate actors to introduce bureaucratic systems of monitoring and control that may include paper trails and electronic footprints. which may be used as evidence in criminal persecutions (Pressey et al., 2014). Yet to blindly trust one's partners in a criminal conspiracy is also not conducive to achieving the required illicit forbearance. As a result, a delicate balance must be found between trust and mistrust to allow for effective cartel management. Further, this means that cartel members need to be able to trust their counterparts' technical proficiency and attention to detail in keeping the cartel hidden. Also, cartel members need to be characteristically suspicious of all outsiders (Brzezinski, 2002), as a precondition in ensuring that cartely remain hidden. As a result, we propose the following:

Proposition 3. Illicit forbearance in cartel management is dependent on the balance between trust and mistrust between cartel members, whereby too little or too high levels of trust and mistrust are both detrimental to the survival of a cartel.

2.2.2. Short-term versus long-term interests

In any form of partnership organisations may have conflicting time horizons (typically short- versus long-term orientations) (Lawrence & Lorsch, 1967), each with their own merits and demerits. For example, long-term relationships may experience burdens associated with partner commitment such as spiralling investment costs and partner lockin, but they also potentially stand to learn more and experience fewer instances of opportunism. Whatever the temporal orientations of partners, a short-term orientation emphasises swift outcomes, whereas a longer-term orientation more strongly emphasises a commitment towards an effective working relationship (Das & Teng, 2000). Even in ordinary alliances partners may operate to different time schedules against an uncertain end point (Kogut, 1991), hence the exploitation of quick gains may be favoured over longer-term investments and potential rewards (Koot, 1988). Similarly, in buyer-seller relationships firms with a short-term orientation may view the exchange as

transactional in nature, whereas firms with a longer-term orientation may view a particular exchange as a future partnership (Fang et al., 2011). However, where actors' temporal orientations are misaligned psychological and strategic tensions may ensue.

Here it is important to note that the illicit nature of the cartel relationships is likely to somewhat magnify and alter the nature of these temporal tensions. For one, short-term profitability improvements can be seen as proof of cartel members adhering to the agreed principles of illicit forbearance. If a cartel fails to improve short-term profitability, this can be interpreted as a sign of opportunistic cheating by other cartel partners. Suspicions of cheating may result in threats of retaliation (or actual retaliatory actions), thus resulting in the collapse of illicit forbearance. Yet, for illicit forbearance to succeed in avoiding opportunistic behaviour it also requires a mutually shared long-term perspective from cartel participants. These tensions between different temporal orientations may vary again over time as cartel members learn more about the functioning of the cartel and partner behaviour. In addition, over time it is possible that cartel members may experience palpable differences in returns, despite agreed price levels. Also, the relevance of cartels may change over time, such as a particular conspiracy becoming outdated because of market developments (Pressey et al., 2014). Hence, while cartels are dependent upon a mutual long-term temporal orientation to allow for the required illicit forbearance, it may not be possible or meaningful to entirely abandon short-termism in cartel management. As a result, we maintain the following:

Proposition 4. Illicit forbearance is dependent on cartel participants' finding a mutually agreed understanding regarding a balance between short-term and long-term temporal orientations.

2.2.3. Cooperation versus competition

Where partners strive to achieve mutual interests, while simultaneously competing in other business arenas (such as in strategic alliances), then a state of 'coopetition' is said to exist (Bengtsson & Kock, 2000; Brandenburger & Nalebuff, 1996; Luo, 2004; Ritala, 2012; Rusko, 2011; Tidström, 2014; Walley, 2007). Accordingly, as long as a cartel does not entirely eliminate competition between companies, it needs to be viewed as a coopetive arrangement. The coexisting duality, however, of simultaneous cooperation and competition gives rise to behavioural tensions (Fang et al., 2011). In such circumstances, the test becomes the ability to identify the appropriate balance between cooperation and competition (Teece, 1992), particularly as imbalances may occur owing to opportunism and zero-sum game behaviour from actors who seek to satisfy their own self-interests.

Just as in a strategic alliance, a larger partner may decide to take advantage over a more vulnerable smaller partner, or else partners may share too little information or too much, which may result in a dysfunctional partnership imbalance (Das & Teng, 2000). Hence, too much – or too little – competition, or even excessive cooperation may result in destructive power and knowledge disparities and asymmetries between partner firms (Brouthers, Brouthers, & Wilkinson, 1995).

Here we again maintain that the illicit nature of cartels makes these organisational tensions worse, particularly as competitive actions may compromise their mutually agreed illicit forbearance. This is particularly problematic if various competitive arenas fall outside the cartel agreement. Hence actors in covert networks must maintain the ability to agree rules of cooperation and internal mechanisms that reinforce this, rather than allowing for harmful competition. For example, Pressey et al. (2014) have recognised how difficult it is for covert business networks to decide when partners should compete and when should they cooperate.

While it may be unrealistic to assume that all aspects of competition could entirely disappear from a competitive business relationship, the success of illicit forbearance depends directly upon firms sufficiently reducing their competitive posture to each other's satisfaction. A mutually

agreeable balance between competition and cooperation is thus required. Any such strategic changes must, however, be reciprocated by other parties to generate the required long-term shift towards illicit forbearance. Therefore, we propose the following:

Proposition 5. Illicit forbearance is positively related to cartel participants finding a mutually agreeable balance between competition and cooperation.

2.2.4. Network rigidity versus flexibility

Our fourth contradictory pairing related to illicit forbearance is linked to network rigidity, and its opposite, flexibility, in terms of network structure and decision-making. Our definitions of rigidity and flexibility are in keeping with the literature on strategic alliances, where flexibility refers to the extent to which actors are capable of adapting and adjusting their network structure in response to external conditions. In contrast, rigidity in a network context refers to a high concentration of connectedness and group decision-making.

For illicit dark networks, network rigidity/flexibility can be an existential question due to their need to evade detection (Raab & Milward, 2003). Accordingly, cartels may be faced with difficult trade-off decisions between control and secrecy, particularly in relation to designing their network structures. The mere existence of rigid networks (used for control or other purposes) can expose cartels for detection. Conversely, the risk of detection can be reduced by flexible network arrangements and, in particular, by the flexibility to reduce the overall connectedness of network actors (Pressey et al., 2014). In addition, network density can minimised by limiting membership and creating sparse networks (Milward & Raab, 2006; Pressey et al., 2014; Raab & Milward, 2003).

In the absence of formal contracts, cartels may find it necessary to closely monitor and control their partners' adherence to agreed cartel practices. This kind of monitoring, however, requires control-oriented network structures. This again imposes additional rigidity upon cartel networks, working against network flexibility. In contrast, if a cartel can adhere to illicit forbearance (and trust participants to do so) then this is likely to reduce the need for control and increased network flexibility. Therefore, we posit the following:

Proposition 6. The level of illicit forbearance is inversely related to network rigidity.

In addition, a network that is flexible will be more likely to resist network shocks (maintaining structural network rigidity versus a need for flexibility). The survival of dark networks therefore may be dependent on them having a high degree of flexibility and the capability to swiftly respond to changes in circumstances and external pressures (Raab & Milward, 2003). One reason why networks may fail is that firms opt for too much control that unbalances relationships (Miles & Snow, 1991).

The effective management of cartels is also likely to require some level of formal organisation, particularly if a cartel includes multiple parties and complex coordination between different markets (Pressey et al., 2014). Without such organisation, cartel members cannot effectively coordinate their activities, while also making cartel monitoring and control more difficult, hence this may reduce the long-term stability of a cartel network. In addition, organisations are likely to experience greater internal stability in situations when they have sufficient levels of internal rigidity, while maintaining flexibility with external partners (Das & Teng, 2000). As a result, we maintain that when either rigidity or flexibility is the dominant mode of governance or structure, this is likely to render a cartel network less viable in the long run:

Proposition 7. The stability of dark business networks is dependent on the balance between network rigidity and flexibility.

2.2.5. Risk taking versus risk aversion

Our final dialectical pairing refers to actors' proclivity for risk taking versus risk aversion behaviours (March & Shapira, 1987). Interestingly,

the extant literature on risk in coopetition and strategic alliances relates to issues such as firms' deciding to participate in inter-firm alliances in order to share risk with partners (Das & Teng, 2000; Geringer & Woodcock, 1995; Glaister & Buckley, 1996), or perhaps the belief that a cooperative endeavour itself may be regarded as a risk (Bengtsson, Hinttu, & Kock, 2003; Tidström, 2014) — clearly legal alliances and inter-firm relations do not have to consider the need for secrecy, which is a necessity for firms participating in illicit dark networks.

Milward and Raab (2006) questioned why members of dark networks continue in their illegal activities when the risk of detection and capture is high, particularly as they will face the constant challenge of having to evaluate the level of risk faced. Just as entrepreneurs will have a predisposition towards risk, however, members of covert networks will often have a greater acceptance of risk given the potential rewards (e.g. greater profits, avoiding business failure) that may be accrued (Erickson, 1981). Hence members of covert networks may take greater risks in order to avoid detection and prosecution (Pressey et al., 2014). While overt networks are free to meet in public social settings, covert networks would run the risk of heightened visibility and possible detection, hence they need to take measures that help ensure secrecy (Raab & Milward, 2003). Visibility, therefore, plays an important role in covert networks, which refers to the extent that an illicit network is detected with limited investigative endeavour (Bakker, Raab, & Milward, 2012). While public, and collective, meetings would no doubt help partners to resolve disputes and agree the desired strategy of a covert network, they run the risk of being detected; hence covert networks face restricted choices as they are under the constant threat of detection. This may cause actors to create intricate safeguards in order to minimise risk (Milward & Raab, 2006). These mechanisms might include, for example, minimising linkages between actors (Pressey et al., 2014), restricting membership (Milward & Raab, 2006), avoiding public meetings, and attempting to create a perception of legitimacy among its members (Bakker et al., 2012). Therefore, we propose:

Proposition 8. Success of illicit forbearance is dependent on a mutually agreed balance between risk taking and risk aversion.

It is important to note that the foregoing categories are not mutually exclusive, but rather there are interrelationships between them, just as tensions in strategic alliances are related to one another (Das & Teng, 2000). We can understand the differences and similarities of each pairing if we recognise the basis for each contradiction and tension. In the case of cooperation versus competition, and risk taking versus risk aversion, the basis of these tensions is fundamentally behavioural, in that it relates to the manner in which actors operate within the dark network, whereas the tension for short-term versus long-term orientation, and trust versus mistrust, is psychological, as it refers to actors' mental and emotional attitudes towards other members of the network, and the underlying basis for the tension in rigidity versus flexibility is structural, as it captures network governance. The combination of these forces, as we shall shortly see, also produces greater insights into covert network operation and unravelling. The remainder of this study examines three covert networks designed to fix-prices for three industries across the EU.

3. Methodology

In this study we follow a (quasi-) archival¹ research design. Although relatively rare in business-to-business marketing research (Gupta, Polonsky, Woodside, & Webster, 2010), this research design has the ability to illuminate certain marketing practices that might

otherwise be difficult to research (Pressey et al., 2014) – obviously a feature of the present study where the context is illegal price-fixing cartels and traditional research tools such as survey methods or face-to-face interviews may not be practical. The analysis of antitrust cases follows a tradition of scholarly scrutiny in the UK and US of examining major antitrust decisions (see, for example, Connor, 2004; Davies, Driffield, & Clarke, 1999; Gallo, Dau-Schmidt, Craycraft, & Parker, 2000; Ghosal & Gallo, 2001; Posner, 1970; Weir, 1992, 1993). Although admittedly limited in nature, archival research examining illicit behaviour can be found in the marketing literature (Ashton & Pressey, 2004, 2008; Bush & Gelb, 2005; Fontenot & Hyman, 2004; Pressey et al., 2014; Tadajewski, 2010).

Drawing on these approaches, the present study provides an analysis of price-fixing cartels published in the form of reports by the European Union based on detailed investigations they conduct into instances of illegal business practices. The published reports provide valuable sources of data particularly as they exact a high degree of triangulation. Taking on average 3-5 years to investigate and compile their report, the EU regulator draws on multiple sources of data in providing its legal assessment in order to reduce bias, including interviews with the executives involved in the illegal activities, corporate documentation related to illicit meetings (such as internal notes, agendas, and reports), and input from major stakeholder groups including suppliers, customers, competitors, consumer groups, as well as the general public. As such, the reports provide a rich source of trustworthy data. In addition, the reports provide detailed longitudinal accounts of dark relationships and tensions, well suited to understanding the dynamic nature of dark relationships largely absent from the extant literature (Fang et al., 2011).

The EU is an important context in which to examine illicit activities such as market abuses as it is a major global trading area and has one of the most highly funded antitrust agencies and is subsequently willing and able to prosecute firms who do not adhere to antitrust laws, making the EU the most significant prosecutor of antitrust violations globally in recent years (Connor, 2008). In addition, as Hylton and Deng (2007, p. 314–315) observe in a study of the investigative powers of various global agencies regulating competition: "for large enterprises 'antitrust risk' – the risk of violating some competition law provision – is substantially higher in the European Union than anywhere else."

3.1. Research design

Our research followed closely the method of systematic-combining (Dubois & Gadde, 2002), which has received considerable attention in business marketing research as a case study method. This is an iterative research method of going 'back and forth' between the key literature, data analysis, key findings, and returning again to the literature, by providing comparisons to the key literature. Accordingly, while this approach may incorporate some qualities of both inductive and deductive inference, it is perhaps best described as an 'abductive' approach to case study research. In the words of Pierce: "... [while] deduction proves something must be; Induction shows that something actually is operative; Abduction merely suggests that something may be" (reported in Hanson, 1958, p. 85). Yet, for presentation purposes, it is not meaningful to write a paper in the same 'back and forth' style to mirror the way this study was conducted. Thus to maintain presentational clarity, we state our propositions before presenting our case study evidence. These propositions were, however, informed by both the case study evidence and literature, in accordance with Dubois and Gadde's (2002) method of systematic-combining.

The cases – investigated under abuses of Articles 81 and 82 of EU competition law – from which the reports were selected in the present study, were published by the EU regulator between 1990 and 2014 and represent a larger sample of more than 500 cases investigated during that period and more than 100 cases of cartels (constituting approximately 20% of all antitrust cases). The selection of the final cases was

¹ We use the term 'quasi-archival research' as we base our investigation on secondary material from major antitrust investigations, which are combined with a case-study approach. As this material concerns highly sensitive criminal activities, in most cases, we did not have full access to materials such as interviews, minutes of meetings, memos, and internal reports, as well as the communications of investigators and judges.

Table 1Characteristics of the three price-fixing cartels.

Case	Case 1: 'The Crystal Meetings'	Case 2: 'Club Europe'	Case 3: 'The Summit Meetings'
Concluding year of investigation	2010	2010	2001
Market	LCDs.	Prestressing Steel.	Vitamins A and E.
	Liquid Crystal Displays are utilised in televisions, computers and other products	Elongated curled steel wires used with concrete in construction sites to make foundations, balconies or bridges	Vitamins A and E have a variety of applications for animal and human nutrition as ingredients to a variety of products in the pharmaceutical and cosmetic industries
Name of cartel as referred to by members	'The Crystal Meetings'	'Club Europe'	The 'Summit Meetings'
Number of companies participating in the cartel	Six	Seventeen	Four
Nationality of companies	South Korea, Taiwan, China	France, Spain, Portugal, Austria, Germany, Netherlands, Sweden, Finland, Italy	Switzerland, Germany, France, Japan
Duration of cartel	2001-2006 (5 years)	1984-2002 (18 years)	1989-1999 (10 years)
Markets affected	Pan-European	Pan-European	Pan-European
Fine	Euro 648.93 million	Euro 269.87 million	Euro 855.22 million

based on the precepts of theoretical sampling (Yin, 2003). The three investigations selected – LCD (2010), Prestressing Steel (2010), and Vitamins (2001) – were chosen on the basis of their capacity for theoretical generalizability rather than statistical generalizability. These cases also provided compelling accounts of cartels that had withstood a number of tensions but had reacted in different ways; hence, as Siggelkow (2007, p. 21–22) remarks: "[An additional] valuable use of cases in the context of making a conceptual contribution is to employ them as illustration." Consequently, the three cases were selected as they provided an effective illustration of the conceptual issues being investigated, and revealed different patterns of tensions and attempts to manage them. The three investigations also identified marketing executives playing a central role in the management and creation of the cartels being investigated, working on behalf of a number of major multinational companies based both within and outside the EU.

3.2. Analysis

Analytical labels were adopted in several independent stages: (i.) initially, each report (collectively running to several hundred pages in length) was read in its entirety to understand the background to the decision and parties involved, (ii.) the major events and activities of each cartel was labelled in order to provide an abbreviated narrative of each cartel, and (iii.) a stage of labelling the individual tensions reported in each cartel was undertaken. The final analytical label captured (i.) the salient cartel characteristics (including the firms participating, markets affected, duration of cartel, level of fine, agreements between parties), (ii.) cartel management and organisation (evidenced through written agreements/memos, emails, meetings held, telephone conversations, and handwritten notes), and (iii.) cartel structure (the nature of the meetings held and noting if this was multilateral or bilateral in nature - where a multilateral cartel is denoted by collective face-to-face meetings and committee structure with direct linkages between all parties, and a bilateral structure where members contacted one another on a one-to-one basis in order to preserve secrecy of the network).

4. Findings: dark network case studies

In this section we provide a narrative account of three major pricefixing conspiracies that took place across the EU, and how participants attempted to respond to the tensions they faced. The basis characteristic of each cartel is presented in Table 1.

4.1. Case 1: 'The Crystal Meetings'

The Liquid Crystal Displays (LCD) cartel (2010) reveals various problems associated with illicit forbearance. The case is rife with tensions related to internal cheating and deviation between participants, difficulties for members to exert control, concerns over security and leaking information, mistrust and disharmony, resulting in the secret monitoring of participants by other members. Referred to by participants as the 'Crystal Meetings', a large number of multilateral meetings were convened by members with a highly concerted structure over the five-year period the cartel existed between 2001 and 2006.

LCD panels are incorporated in numerous electronic products including computer monitors, digital watches, televisions, and calculators, using thin film transistor technology to provide high quality images on flat monitors. The global LCD industry has high market entry barriers requiring expertise in fields including semi-conductor processes and optics, and is dominated by firms located in Korea, Japan and Taiwan. Although the market for LCDs was growing in the late 1990s and early 2000s, the industry witnessed a dramatic level of oversupply due to a series of new factories beginning production in Taiwan in 2001. It was clear to industry leaders that "to avoid vicious price competition" as outlined in the personal notes of one member² an agreement to limit competition was necessary in order to put an end to the industry "price war" (European Commission, 2010a, p. 26).

Since its origins in the 1990s, the industry had grown from a global worth of \$6500 million in 1998 to \$45,000–55,000 million in 2006, at the time of the EU investigation. The six companies participating in the cartel from Korea (Samsung Electronics and LG Display Co., Ltd), Taiwan (AU Optronics Corporation, Chimei InnoLux Corporation and HannStar), and China (Chunghwa Picture Tubes) jointly held 70% of the global market for LCD products. Based on an application for immunity submitted by Samsung in 2006 (in return for immunity from any fines under a 'leniency notice' agreed by the Commission on 23rd November 2006³ (European Commission, 2010a, p. 111)), the Commission was able to conclude that a number of concerted illegal practices had taken place in the industry between 2001 and 2006:

...price fixing in the form of agreements on future prices, price ranges and minimum prices, on pricing and commercial matters for specific accounts, on future production planning and future capacity utilisation, exchange of information on pricing and other commercial aspects including sales volumes or capacity plans, as well as exchange of price information and price coordination for customers focused on GAMs (global accounts) (European Commission, 2010a, p. 18).

 $^{^{\,2}\,}$ Real identity of informant withheld by the European Commission in order to protect the informant.

³ Samsung was the first cartel member to come forward and apply for leniency and it initially received conditional immunity in 2006 under a leniency notice. This was dependent on Samsung's ability to provide a detailed account of cartel operation leading to a successful prosecution, which the European Commission deemed it had, resulting in a 100% fine leniency being awarded.

The evidence uncovered by the European Commission points to a case of illicit forbearance and mutual understanding between actors operating under two levels of meetings. One executive who had been present during the cartel meetings as a representative of one participating organisation [name and company redacted by the Commission] testified to the European Commission that the cartel comprised of "working level meetings" (European Commission, 2010a, p. 20), which were attended by lower-level employees, typically marketing managers, and "top meetings" (European Commission, 2010a, p. 20) attended by senior executives. While the two meetings existed, one executive testified [name withheld by the Commission] "the topics discussed in the meetings were similar" and designed to orchestrate price-fixing across Europe (European Commission, 2010a, p. 20).

The documentary evidence obtained (including witness testimony, emails, handwritten notes, expense accounts/reports, and minutes of meetings), demonstrated a sophisticated collusive network, highly coordinated pan-European cartel, controlled through a large number of multilateral meetings (supported with a number of ad hoc bilateral meetings) held in hotels and teahouses mostly in Taipei (Taiwan), with alternating hosts. The 'Crystal' cartel convened 58 multilateral meetings over a five-year period. Handwritten minutes obtained by the Commission taken during the first meeting of the cartel held in Taiwan by one executive [name and company redacted by the Commission] in October 2001 outlined the machinations of the cartel as well as reiterating the importance of its secretive nature:

Each maker takes turn organising each quarter ... Established Commercial Meetings will be done by vice presidents of sales set at each month to discuss how to stabilize prices and exchange necessary supply and demand information. [participants were warned not to] talk about this meeting, not even to colleagues – keep low profile [and] remind Monitor makers not to grab orders with low price and never support such conduct (European Commission, 2010a, p. 18).

Evidence obtained by the Commission regarding the meetings of the cartel established how it would operate over its five-year lifespan.⁴ In return for leniency under an immunity application, one senior corporate member⁵ involved in 'the Crystal Meetings' testified to the EU Commission that during the cartel meetings held the company hosting the meeting would take turns in deciding how sales and marketing information would be exchanged (European Commission, 2010a, p. 20). Handwritten minutes taken by one executive [name and company redacted by the Commission during the first cartel meeting held in Taiwan noted the rules by which the cartel would operate: "a rule similar to the 'yellow flag' rule in car racing [would be employed], all the makers would, through discussions, determine a common method together (such as raising the yellow flag) and obey this rule to maintain order" (European Commission, 2010a, p. 19). One senior executive and member of the top-level cartel meetings [name and company redacted by the Commission I, submitted an email that was sent to cartel members shortly after a senior executives meeting in November 2001, which recommended the use of a 'hot line' where members could share real-time data on prices in order "to prevent being tricked by customers" into cutting prices (European Commission, 2010a, p. 26). Through these mechanisms, the manufacturers sought to control the LCD market across Europe and to force customers to accept a price increase. In an email submitted to the Commission by one executive [name and company redacted by the Commission sent to executives who could not participate in the cartel meetings, it was also highlighted how customers would be forced at accept the price increases: "the customers who do not accept our price will surrender in one week (for lack of inventory)" (European Commission, 2010a, p. 53). Hence, where customers declined to accept price increases cartel members would collectively agree to withhold supply, thus forcing customers to submit to the price increases.

Despite the agreements between the manufacturers (chiefly the 'yellow flag' rule and other mechanisms the management of the cartel established), relationships were strained from an early period due to internal tensions as members of the 'Crystal' cartel deviated from the rules. One executive who was a member of the cartel [name and company redacted by the Commission] testified to the Commission that the cartel was increasingly becoming a "...complex business to manage" where market updates were constantly required for the purposes of market monitoring (European Commission, 2010a, 2010b, p. 19). Disagreements, continued overcapacity, and continued severe price competition led to tensions and frustrations between members of the cartel as early as 2002. Detailed handwritten notes were taken by one executive [name and company redacted by the Commission] during a meeting convened in September 2002 in Taipei captured the frustrations of cartel members "If it is not cleared quickly, will encounter traffic jam. New orders or demands would not be released!" indicating that (European Commission, 2010a, p. 36). This was shortly followed by an email submitted to the Commission by one executive participating in the cartel [name and company redacted by the Commission] that summarised the Taipei meeting and sent to executives unable to attend the meeting:

Limited market visibility and pricing chaos. • No meeting conclusion for price guideline and/or capacity utilisation. • Need upcoming CEO meeting for further decision and progress. How to control market? How to control price? How to control output? European Commission (2010a, p. 36–37).

Perhaps unsurprisingly, secrecy was one of the overriding concerns of the cartel, particularly related to issues regarding scrutiny by antitrust authorities, and deviance from the 'rules' by other members of the cartel. Participants were careful not to exchange any written materials at the meetings. Email exchanges between members consistently reminded the need to not disclose the information shared to nonmembers. Following a CEOs meeting convened at the Crowne Plaza Hotel in Taipei in 2002 an email was sent by one executive [name and company redacted by the Commission] with a document attached outlining the agreements of the cartel, in which the text of the email repeatedly emphasised the secrecy of the cartel: "Please do not copy and release to anyone!!!", "Confidential", and "...keep it confidential and cannot be released to outsiders strictly!!!" emphasising that executives participating in the cartel were aware of their wrongdoing (European Commission, 2010a, p. 26). These concerns were rooted in a need for constant vigilance against antitrust authorities, a source of internal tension almost to the point of paranoia. Members' consistently reminded one another of a potential antitrust investigation, and also pointed to prosecutions in other markets in the minutes of their meetings, handwritten notes and email exchanges. For example, two internal emails circulated by executives participating in the cartel [names withheld by the Commission | seized by the Commission during corporate raids outline security concerns felt by the author's: "The DOJ is vigilant for any suspicious acts, so you must never spread this information and source to others" (European Commission, 2010a, p. 58), and "we need to hold a Top Management Meeting (but, antitrust problem?)" (European Commission, 2010a, p. 49). A further email circulated to the group warned that another industry (DRAM) had been subject to recent regulatory scrutiny and cautioning members to take issues of group security seriously:

DRAM makers were subject to Anti-trust law charges two years ago, requested everybody to take care of security/confidentiality matters

⁴ In addition to the evidence provided under the immunity agreement afforded to Samsung, detailed information of the cartel's operation was provided to the European Commission or else seized in corporate raids. Such documentary evidence – information that is regarded in law as *in tempore non suspect* (contemporaneous accounts that were drafted at the time of the infringement) – help create a detailed account of the cartel's operations.

⁵ True identity hidden by European Commission to protect the witness.

and to limit written communication (European Commission, 2010a, p. 49).

It is perhaps unsurprising that participants constantly reminded one another of the need for secrecy given the low levels of trust exhibited between executives and deviations from the agreement by members. As the Commission noted in its summary of the investigation: "Though there was no formal system for sanctioning deviations, it is clear that the companies were aware from the beginning of the threat of cheating" (European Commission, 2010a, p. 22). Incidents included cartel participants favouring their own short-term interests over the long-term interests of the group, such as (i.) taking customer orders beyond the agreed limit, (ii.) failing to honour agreements on prices to be quoted to certain customers, and (iii.) reducing prices charged to some customers in contravention of the agreement. Even when the 'Crystal Meetings' achieved some degree of success, members still continued to deceive the group. For example, following a meeting in 2002, one executive [name and company redacted by the Commission] circulated a PowerPoint presentation with the bullet point: "In general, we have raised price successfully, but there's still [an] exceptional case!!!" (European Commission, 2010a, p. 26), indicating that there was a deviant member. Further, an internal email circulated between senior members of the cartel on March 2005 noted an instance where one company "alone tried to lead a price increase without any support from other makers and succeeded in the price increase [they] blamed [name removed] for staying their price [and] not joining" the cartel agreement (European Commission, 2010a, p. 53). At times, the parties simply fell-out with one another due to deviation being rife in the group, as one executive noted under testimony [name and company redacted by the Commission] in a meeting between senior members of the cartel at the end of 2004:

[The LCD] Makers could not communicate honestly at the meeting, in fear that the actual price will become the others' high-end baseline quoting standard and they will quote a few dollars lower to grab orders (European Commission, 2010a, p. 51).

The low levels of trust exhibited due to the duplicitous behaviour by participants resulted in a 'monitoring culture' and a culture of distrust, where members attempted to scrutinise the actions of participants from an early point in the cartel. In one example, an internal email exchange between two executives in one company [name withheld by the Commission] in early 2004, one executive agreed to his superior to: "continue to check competitor's movements", but conceded that such actions are difficult: "monitoring every company's production status is not possible" (European Commission, 2010a, p. 51), illustrating the lack of trust between cartel participants. Against this background, the 'Crystal' group was struggling to overcome its internal tensions and was becoming increasingly difficult to manage. An internal email circulated in 2004 from one employee [name withheld by the Commission] summarised a meeting between the participants in the cartel held in a Holiday Inn in Taipei:

It's very difficult to have the agreement among all ... makers on reduction of output ... we desperately need to find a solution, considering the dramatic change in the market condition and sharp decrease in price (European Commission, 2010a, p. 48–49).

Given the difficulties the 'Crystal' group faced due to infighting and deviance, it is perhaps unsurprising that from 2005 one corporate member [name withheld by the Commission] kept a record of the 'atmosphere' of the cartel meetings to report to his superiors as a way of gauging group solidarity. In an internal email sent to superiors in early 2005 he noted the following: "Atmosphere – ... good mood" (European Commission, 2010a, p. 52); "Atmosphere – Participants felt relieved ... (many sales VPs seemed to be getting pressure from top management and shareholders re the price increase)" (European Commission, 2010a,

p. 53). This also included one curious instance of misogyny between the male-dominated hierarchy and a lone female member: "Atmosphere – ... [name removed] did not attend and only working-level female employee at [company name removed] attended, resulting in an atmosphere that was difficult to promote active discussion" (European Commission, 2010a, p. 54).

Despite the manufacturers' self-confessed desire to "do their best to avoid a price war" (European Commission, 2010a, p. 35), as circulated in an internal email following a meeting in 2002 to colleagues among the six companies represented at the meeting, by the summer of 2005 the 'Crystal' cartel was beginning to unravel. Senior executives behind the cartel were becoming uneasy of their involvement and its potential visibility. In a report summarising a meeting held in May 2005 a senior executive [name withheld by the Commission] reported to the group a dramatic change in cartel governance:

...mid to high level personnel are not allowed to attend this kind of meeting; as such, this meeting will be down sized to be attended by a marketing person from each company to communicate market situations (European Commission, 2010a, p. 55).

An internal email between the companies participating in the cartel agreed that the size of the meetings were to be significantly reduced and would henceforth be "conducted with a focus on working level employees", rather than the former participation of the senior representatives (European Commission, 2010a, p. 57). The minutes of some of the last meetings held by the cartel at the end of 2005 and in January 2006 in Taipei provided by one executive [name withheld by the Commission] reassure members that there is "no need to have [a] price battle" (European Commission, 2010a, p. 61), and no need to take the "short-term market view" (European Commission, 2010a, p. 60), but such warnings were too late for the cartel. The last multilateral meeting took place in February 2006. Shortly afterwards Samsung applied for immunity for prosecution in return for divulging the details of the cartel, which was granted by the Commission in 2006.

4.2. Case 2: 'Club Europe'

Our second network conspiracy, the cartel for Prestressing Steel (2010), depicts a complex network comprising a series of powerful domestic cartels attempting to cooperate across Europe under the umbrella of a single gigantic cartel. The case reveals a collusive network beset with mistrust between members and numerous examples of deceptive practices by some firms towards other members of the cartel. A series of dawn raids in 2002 and 2006 of company premises uncovered detailed documentary evidence of collusive meetings taking place between 1984 and 2002, referred to by its members as 'Club Europe'.

Prestressing steel refers to the production of metal rods and wires encased by concrete chiefly used in the construction and engineering industries for building foundations, bridge building, and structural engineering, with a market value of 365,000,000 Euros at the time of the investigation. Some 17 firms participated in the cartel and collectively held an 80% share of the European market. Based on corporate documentation seized by the Commission and oral testimony, their view was that the cartel was conceived in order to maintain a competitive "equilibrium in order to avoid [a] price decline in an evolving European market, characterised by excess production capacities ... to avoid further price-undercutting" by competitors as well as to halt "the penetration of newcomers" in the market for prestressing steel in Europe (European Commission, 2010b, p. 34).

The 'Club Europe' cartel was revealed to regulators in somewhat unusual circumstances. A former employee [name withheld by the Commission] of one corporate member of the cartel (the German steel company WDI) was contesting a case of wrongful dismissal against his former employer in a German regional labour court. He disclosed that during his time at WDI, he had been personally involved in

infringements of competition (chiefly price-fixing) across Europe for a considerable period of time. The labour court handed over the evidence it had collated to the German competition authority ('Bundeskartellamt'), who in turn handed over documents to the European Commission. This triggered a series of corporate raids on HQs across Europe and one immunity application made by DWK (based in Völklingen in Germany), who were awarded a leniency notice in return for detailed testimony of the cartel's operations. Following the application for immunity by DWK, some ten companies applied to the European Commission for leniency, with all ten applications being unsuccessful.

'Club Europe' was conceived by manufacturers participating in a series of three cartels operating in parallel across Europe, referred to as the 'Zurich Club', 'Club Italia', and 'Club España'. These manufacturers controlled the industry for prestressing steel within their domestic markets (as well as other national markets) and each cartel had operated for different, but overlapping, time periods, and in 1997 decided to form an integrated European-wide cartel. The dominant 'club' was the Zurich Club, which was formed in 1984, and comprised members from the most powerful manufacturers in the industry operating in Austria, Germany, France, Italy, Belgium, the Netherlands, Luxemburg, and Spain. The participants of the individual European 'clubs' were, in the view of the Commission, "mutually aware of each other's attempts to establish equilibrium and fix prices in the market and endeavoured to agree on a common equilibrium", that would result in a set of fixed prices (European Commission, 2010b, p. 146). The organisation of the cartels was assisted through joint-membership of trade associations; the participants in the cartels were all members of various European-wide trade associations for the industry where they would use these platforms to meet publicly, and, the Commission concluded: "to discuss and agree on quotas, prices" and decide which member would target certain customers (European Commission, 2010b, p. 30). Between 1997 and 2002, over 60 meetings of Club Europe took place on a monthly basis on the margins of trade association conventions as well as at their premises in Düsseldorf, Paris, Lyon, Brussels, the Netherlands and Spain.

In terms of leadership, documents obtained by the Commission through a series of raids on corporate HQs across Europe and corporate testimony indicated that Club Europe "meetings were originally only attended by 'Seniors' (management level) and gradually also by more junior employees of the companies" in sales roles who would manage the daily operational issues of the cartel (European Commission, 2010b, p. 51). These latter operational managers (who were all the sales managers of the company with the highest market share in the country concerned) acted as country co-ordinators called 'captains'. The country co-ordinators "generally negotiated (over the phone or in bior multilateral meetings) the specific prices" and price increases that would be charged (European Commission, 2010b, p. 53). The corporate documentation seized by the Commission also revealed the role performed by the 'captains':

[who] mediated in disputes between various suppliers, arising because a club member had either been perceived to have exceeded its volume to a particular client, not respected the exclusivity of a certain client to another member, or sold below set prices (European Commission, 2010b, p. 54).

Corporate testimony [name removed by the Commission] revealed complex cartel machinery and associated rules that resulted in "a sophisticated monitoring system through an independent third party, who regularly checked prices and actual volume sold to customers", which also employed a compensation mechanism for cartel members who felt disadvantaged at any point (European Commission, 2010b, p. 35). The documentation and corporate testimony acquired by the Commission also exposed a complex set of agreements and cartel 'mechanisms' operating across Europe:

...mechanisms: (i) quota sharing, (ii) customer allocation, (iii) fixing of (target, minimum) prices, and (iv) similar implementation

(monitoring and/or compensation) schemes ... All arrangements were moreover interconnected by overlapping territory, membership and common goals (European Commission, 2010b, p. 144).

During its existence the cartel (and sub-cartels) experienced a number of tensions that caused members to put in place mechanisms to ensure the safeguard of the cartel and its longevity. Based on the evidence collated, the Commission noted that in the course of its investigation it had uncovered a cartel that had evolved in order to retain some degree of flexibility, but that had nevertheless been beset with tensions between members over the eighteen years of the cartel's existence:

It is obvious that arrangements agreed upon over such a long period involved organisational changes, a modification of some companies' membership, of their respective role within the cartel, of the frequency and of the regularity of participation in the meetings. Such a scheme necessarily entails certain tensions between the cartel members (European Commission, 2010b, p. 165).

One recurring source of tension was the potential for mistrust between members in providing accurate sales data, employed to identify if firms had met or exceeded their agreed quotas. As one corporate actor testified [name withheld by the Commission], in order to overcome cheating manufacturers used a third-party to calculate deviance from the agreement by members where each company "would submit their sales data to one person before the meetings, who was in charge of calculating the deviations from the agreed quotas in advance", and any deviation could be identified and rectified (European Commission, 2010b, p.56). During a series of corporate raids, the Commission found samples of these audited reports at several corporate HQs and testimony from corporate witnesses indicated that "external audits were chosen in order to prevent cheating, which was considered a problem" by the members of Club Europe (European Commission, 2010b, p. 56).

The external party – referred to as the 'inspector' – was a role occupied by different individuals throughout the life of the cartel, and who typically worked for a trade association, which provided some degree of legitimisation and vested interest. The 'inspector' would periodically audit the submitted sales data by each firm to establish if any deviance had occurred. For example, in one report acquired during a corporate raid, the Commission found a hand-written note by "Mr. [name withheld by the Commission]" acting as an inspector to the cartel (European Commission, 2010b, p. 104). Corporate testimony [name withheld by the Commission] indicated that the inspector "would then send a report and its invoice for the controls delivered to all the companies concerned" (European Commission, 2010b, p. 104) allowing disagreements to be resolved.

Documentary evidence obtained by the Commission also revealed that where individual members of Club Europe were seen to not have adhered to the agreement, a compensation mechanism was in place that was overseen by the 'country captains' who "would generally intervene to try to solve the conflict" (this was usually achieved in a variety of ways, such as the offending party to agree to lower their sales quotas for the following quarter) (European Commission, 2010b, p. 100). There were other instances where parties did not adhere to the agreements and exported excess domestic market capacity to other manufacturers markets. Oral testimony provided by one executive who participated in the cartel [name and company withheld by the Commission] provides detail of the compensation mechanism in operation:

...if a client was shared, the offending member might agree to reduce his sale by an equivalent amount the following quarter. If it was not shared, then the offending member might agree to 'give up' an equivalent tonnage at one of his own clients. Only when no agreement could be reached, would [name withheld by the Commission] threaten to make up the lost volume by undercutting the

offending member at one of its own clients. This typically resolved the problem (European Commission, 2010b, p. 100).

Hand-written notes made by members of the cartel during meetings seized by the Commission in a series of corporate raids also corroborate these mechanisms: "As is clear from internal notes of [name withheld by the Commission] parties deviating from the agreed quota were expected to answer to the other producers for these deviations and did also propose compensations for deviations" across Europe (European Commission, 2010b, p. 100). In this way, producers who deviated from the agreement was answerable to a number of parties, including the external inspector, country captains, as well as to the other producers, in order to resolve any disputes.

Such practices allowed Club Europe to operate for some considerable time. However, rising tensions were experienced by members between 1994 and 1995; the re-negotiations of quotas had caused disagreements between the producers. Several participants reminded one another of the importance of adhering to set quotas, as one executive [name withheld by the Commission] recalled: "in case the Club would break down, they had to maintain the system of quotas and the information exchange" or else risk total collapse (European Commission, 2010b, p. 46). Notes maintained by one company [name withheld by the Commission] point to a series of "crisis period meetings" convened (European Commission, 2010b, p. 48), where members managed to finally reach an agreement on quotas that could be periodically evaluated by the 'external auditor' and overseen by the 'country captains'.

The cartel would continue for seven years. However, as the manufacturers were undertaking negotiations to enlarge 'Club Europe' in 2002, these plans were interrupted by corporate raids shortly after the disgruntled employee came forward contesting a case of wrongful dismissal against his former employer. The last documented meeting of the cartel was towards the end of 2002 when activities ceased due to a series of dawn raids undertaken by the regulatory authorities on corporate HQs.

4.3. Case 3: 'The Summit Meetings'

Our final illegal network, the Vitamins Cartel (2001), provides a counterpoint to the preceding two cartels as a conspiracy that had minimal internal tensions between members, and despite suffering a significant network shock when it had reached a period of maturity and sophistication, was able to reconfigure its network structure in the attempt to evade detection from authorities.

Vitamins A and E have a number of applications for animal and human nutrition as ingredients to a variety of products in the pharmaceutical and cosmetics industries, and the combined EU market was worth approximately 400 million Euros at the time of the investigation. The four firms participating in the cartel from Switzerland (Roche), Germany (BASF), France (Rhône-Poulenc — now Aventis), and Japan (Eisai), participated in a price-fixing cartel that lasted from September 1989 to February 1999. On 12th May 1999, Rhône-Poulenc applied to the Commission for immunity from prosecution in return for divulging details of the cartel and its membership and was granted conditional immunity.

A senior representative from BASF who had participated in the cartel [name withheld by the Commission] testified that the cartel was instigated in response to growing capacity in the vitamins market, and as a vehicle that "explored measures to eliminate or deter marginal competitors" chiefly from Russia and China entering the European market (European Commission, 2001, p. 21). The Vitamins Cartel was almost exclusively led by the global and regional heads of marketing, who had a key role in the complex leadership of the cartel at both senior strategic levels and operational levels. Oral testimony provided to the Commission [names withheld] indicated that the conspiracy operated at four distinct levels of cartel management. The most senior level of the cartel, the 'Top level' – referred to as 'summit meetings' – were attended by "the most senior corporate officers" and occasionally by "the heads of

vitamins marketing", with the remit "to back the agreement with highlevel support [and] to define overall strategy" and to ensure that all parties adhered to the agreement (European Commission, 2001, p. 17–18). The next level of the cartel comprised only heads of marketing for their respective companies, who met 2-3 times per year, and who, according to oral testimony "took decisions on the practical operation of the agreements" as well as finalising budgets (European Commission, 2001, p. 18). Corporate oral testimony also revealed that the third level of cartel leadership was organised at the global product marketing level, consisting of "managers with product marketing responsibility for vitamins A and E at global level", who held quarterly meetings with the objective of monitoring the quota system (European Commission, 2001, p. 18). The final level of cartel management comprised managers of regional product marketing, which met four times a year and was responsible for "monitoring sales against budget on a regional level and making adjustments if necessary; identifying relevant market developments inside their region; [and] implementing the price increases agreed at the more senior levels" (European Commission, 2001, p. 18). Oral testimony reveals a complex and hierarchical structure of cartel management strongly led by marketing executives in the four participating firms.

Oral testimony indicated that the cartel prepared an annual budget that contained global information for sales figures, market size, and growth estimates for the following year, which received input from each level of the cartel's management. Referred to as the 'budget meeting', this group met on an annual basis, usually in August, and hosted by Roche in hotels near their HQ in Basel, Switzerland, and provided a setting in which price increases could be agreed (European Commission, 2001). Immediately after the budget meetings, the chairmen of each of the companies would meet along with heads of marketing, again in hotels near Roche's HQ to review the agreements made. Testimony by executives from BASF and Rhône-Poulenc [names withheld by the Commission indicate that these meetings were designed to help "resolve potential problems" (European Commission, 2001, p. 18), while other meetings would be periodically held in Basel, Frankfurt and Paris between the "most senior corporate executives ... who supervised the vitamins business", and "to demonstrate top-level support for the cartel" and determine cartel strategy (European Commission, 2001, p. 18).

Based on oral testimony and related corporate documents, the European Commission reported that the machinery of the cartel revealed "a complex structure of regular meetings", (European Commission, 2001, p. 17) with sophisticated "mechanisms ... closely modelled on the internal financial management and controls of a single undertaking," which was being operated by the four firms (European Commission, 2001, p. 18). Senior marketing managers were both present, or else provided market intelligence and data, to each of the meetings held, with regular telephone contact being maintained between members of each level of cartel management and between levels of seniority. A series of documents retained by BASF and Rhône-Poulenc provided to the European Commission were also employed to help maintain the cartel including: tables, spreadsheets, sales quotas and figures, annual budget information, "for each producer on a country-by-country basis [designed to help build] an orderly marketing system" and maintain the status quo (European Commission, 2001, p. 19). Despite the numerous artefacts and bureaucracy created by participants to maintain the cartel's existence, the network survived inspections of Roche's facilities in 1993 by French authorities following customer complaints owing to simultaneous and uniform price increases by manufacturers. One executive [name withheld by the Commission] testified how Roche felt confident that the regulatory authorities would not detect their activities:

Nothing was found in the investigation. In addition an inspection was made of RPAN⁶ but nothing was found. This type of inspection

⁶ Rhône-Poulenc Animal Nutrition (RPAN) was a wholly owned subsidiary of Rhône-Poulenc which produced and marketed nutritional additives including vitamins and amino acids for use in animal foodstuffs (poultry, pigs and ruminants).

was also held in 1991, but there was no evidence. R[oche] does not consider these inspections problematic: however they are being careful as to how they handle documentation (European Commission, 2001, p. 21).

A number of devices to encourage cooperation were employed in addition to the series of multilateral meetings described above. For example, based on spreadsheets and related cartel documents supplied by BASF and Rhône-Poulenc, the European Commission was able to identify a 'buy-back' agreement where parties who had failed to reach monthly or annual targets could either agree to "slow down sales to enable the others to catch up" (European Commission, 2001, p. 19), or else purchase vitamins from disadvantaged firms in the network as compensation. Executives from Rhône-Poulenc and BASF informed the Commission that it was agreed that each producer would take turns in announcing price increases "either in a trade journal or in direct communication with major customers" leaving the others to follow suit, that resulted in "concerted price increases [that] could be passed off, if challenged, as the result of price leadership in an oligopolistic market" (European Commission, 2001: 20), thus helping to evade detection by the authorities. Participants also provided periodic support to one another; when Rhône-Poulenc's vitamin E facility was severely damaged by fire in December 1990, it was supplied by Roche and BASF, as executives from Rhône-Poulenc and BASF testified "until its plant was back on stream" (European Commission, 2001, p. 19), while the industry shortage was used to raise prices to off-set any losses by participants.

In late 1997, The European Commission learned that the Vitamins Cartel network suffered a major shock:

...it was publicly reported in the United States of America that the US Department of Justice had convened a Federal Grand Jury to investigate possible criminal violations of Section 1 of the Sherman Act in the vitamins sector (European Commission, 2001, p. 21).

After the announcement by the DOI, rather than ceasing their illegal operations participants agreed to continue with the caveat of added security measures that would see the cartel endure for over a year. Executives from Rhône-Poulenc and BASF testified to the Commission that they "sought to minimise the number and frequency of their contacts", and agreed "that in future meetings would only occur on a bilateral basis", with "only one-on-one contacts" when they were deemed necessary (European Commission, 2001, p. 21). In addition, senior executives agreed to exchange "monthly sales data from their private residences" (European Commission, 2001, p. 22), to help ensure the cartel remained clandestine. In the belief that these measures to render the cartel secret had been successful, the continuation of the cartel after the pronouncement of the DOJ was denied by several executives; however an executive testifying for BASF [name withheld by the Commission] admitted that the cartel had instead agreed to continue on a "more discreet basis", as outlined above (European Commission, 2001, p. 22). Further, based on executive testimony by cartel participants, the Commission maintained that the members of the cartel were determined to continue their illegal operations:

...whatever formal or official instructions may have been given, the reality was otherwise: senior executives from all three companies decided to continue the cooperation in a modified form (European Commission, 2001, p. 22).

The last known meeting between any of the organisations involved was held in February 1999, where sales data were exchanged. The existence of the cartel came to light when Rhône-Poulenc came forward and acted as a whistle-blower, informing the European Commission of its involvement in the cartel, and divulged the existence of the meetings between the firms involved in return for leniency.

5. Case study comparison and discussion

Network theory traditionally views relations between actors as clear and well defined, best expressed through the pairing of competitor or collaborator. When companies who are traditionally competitors collaborate and compete simultaneously, however, in certain circumstances (or engage in 'coopetition') these roles blur (Bengtsson & Kock, 2000; Brandenburger & Nalebuff, 1996). The contribution of the present study therefore can be best demonstrated through the lens of coopetition theory, and specifically what Bengtsson and Kock (2014, p. 186) refer to as the 'coopetition paradox' – the tensions that result from the paradox of simultaneous competition and collaboration – a phenomenon about which we know little in industrial marketing scholarship (Gnyawali & Park, 2011; Raza-Ullah et al., 2014). Indeed, coopetive endeavours are likely to be rife with tensions owing to the opposing and contradictory forces at play concurrently (Fernandez et al., 2014). Initially, it is important to note that under coopetition theory, according to Bengtsson and Kock (2000), both aspects of competition and cooperation in a relationship must be visible for this state to be termed coopetition; the underlying assumptions for this reasoning (i.e. visibility), however, have never been made particularly clear.

By extending the boundaries of coopetition theory from *overt* to *covert* networks we extend our understanding of coopetive relationships, particularly when these enterprises are criminal in nature and if they occur in the form of a network. We label these economic enterprises 'dark coopetive networks'. This relates in particular to Propositions 4 and 5. By understanding the plurality of strengths and weaknesses in dark network initiatives – particularly through the pairings in the conceptual framework – we are able to provide an understanding of the contradictory tensions inherent in their development.

We reflect initially on the underlying basis each of the five dark network tensions by examining the dimensions of behaviour, structure and psychology in turn, through focusing on the salient events of the three price-fixing cartels examined in the findings section ('the Summit Meetings', 'Club Europe', and 'the Crystal Meetings'). The three cases of dark networks can be understood through their paradoxical tensions, but they are more than just the sum of their individual tensions. The case studies reveal the operations of dark networks and how participants attempt to overcome the tensions they face in order to evade detection, with various degrees of success. We find that the cartel for vitamins ('the Summit Meetings') and for prestressing steel ('Club Europe') were more effective dark network conspiracies in meeting their goals than was the cartel for liquid crystal displays ('The Crystal Meetings'). Thus, this relates in particular to an ability to facilitate illicit forbearance, or the balance between short- and long-term temporal orientations, and ways to handle network rigidity (as outlined in Propositions 1, 4, and 6). Further, we can assert that dark network conspiracies between companies are more effective in meeting their goals when they emulate the practices of truly dark networks, such as criminal enterprises, achieved by putting measures into place that both prevent and respond to any tensions faced.

5.1. Behavioural dark network tensions

We proposed under the parameters of the conceptual framework that the stability of dark business networks is dependent on the balance between network cooperation and competition (as outlined under Proposition 5) as well as between risk taking and risk aversion (as outlined under Proposition 8). In the case of 'the Summit Meetings', we see that the cooperation-competition balance was effective for a decade in deterring foreign competitors from entering the vitamins market in Europe, which would take turns in announcing price increases, and supported one another as evidenced through members supplying one company when its manufacturing plant went off-line due to a fire (and even turned this adversity to its favour by further raising prices). Risk was managed by meeting secretly in hotels near corporate HQs,

executives frequently exchanged information from their private residences, and during the last two years of the cartel operated solely along bilateral lines to help evade detection and ensure secrecy. In addition, given that inspections by regulators had previously yielded no documentation related to the cartel, we might speculate that members were effective in destroying incriminatory evidence.

Members of the 'Club Europe' cartel successfully managed cooperation between three cartels ('clubs'), who were able to coordinate activities between 1984 and 2002. Risk was minimised by meetings held at trade associations that helped reduce its visibility, particularly as the executives involved were all members of various European-wide trade associations for the industry. The collusion between the firms only became evident when a disgruntled former employee admitted wrongdoing. This indicates a high level of illicit forbearance, as outlined under Proposition 1.

In contrast to the two foregoing cases, members of 'the Crystal Meetings' cartel were unable to balance cooperation and competition (as outlined under Propositions 1 and 5), by emphasising 'excessive' competition, where individual firms would deviate from agreements. The risk of detection was also poorly managed with 58 public meetings held at various hotels and teahouses in Taipei over a period of five years.

The capability that separated our case studies in dealing with behavioural tensions was the differential capacity to draw on social capital. In the case of the cartels for vitamins and steel, membership was between executives who were familiar with one another and in some cases were members of the same trade associations (as outlined under Proposition 2). Hence when a member faced difficulties (such as shortages of supply in the case of a fire in one instance) other participants would assist. These conspiracies were also able to forge positive relationships over a number of years between the firms involved. In contrast, the LCD cartel was beset with infighting and deviation from agreements despite the close inter-linkages between the firms involved and the close cultural background of participants. Despite meeting regularly over a number of years the tensions and often negative mood at the multilateral meetings made the likelihood of building social capital between participants limited.

5.2. Structural dark network tensions

Our conceptual framework proposed that the stability of dark business networks is dependent on striking a balance between network rigidity and flexibility, taking the specific characteristics of illicit dark networks into consideration. Lasting from 1989 to 1999, 'the Summit Meetings' cartel was controlled by a close group of senior executives and four distinct levels of cartel management. A number of documents were also employed to help maintain the cartel including: tables, spreadsheets, sales quotas and figures, annual budget information, and a 'buy-back' agreement. Most significantly, the cartel was able to modify its structure from a multilateral network to a bilateral network in 1997 when threatened with detection by regulatory authorities in the United States, and by so doing was able to adopt a structure that helped ensure secrecy through minimal linkages between members (as outlined under Propositions 6 and 7). The modified structure, with its sparse network in comparison to the previously dense network structure, assisted the cartel in operating for a further two years and was only detected when one company acted as a whistle-blower.

During the 18 years of 'Club Europe's' existence, the cartel adopted a bilateral structure with day-to-day operations managed by 'country captains' who managed any disputes and who contacted one another by phone favouring few face-to-face meetings, and overseen by the most senior managers in each company. Control of the cartel was achieved by employing an independent third-party to audit sales data and enforce a compensation mechanism for any companies deviating from the agreement. In addition, the authorities discovered the cartel was happy to make changes in leadership and structure, as well as the

frequency of meetings in order to evade detection (as outlined under Propositions 6 and 7).

'The Crystal Meetings' cartel adopted a hybrid structure (comprising 'working' level and 'top' level meetings) in what was a highly coordinated pan-European cartel controlled through a large number of multilateral meetings with alternating hosts. The cartel convened 58 multilateral meetings over a five-year period and was largely unsuccessful in its attempts to 'control by committee', even with the creation of the 'yellow flag rule', which was frequently flouted by members, and lacked an effective monitoring mechanism. Although participants were able to reduce the size and membership of the cartel when they were concerned about being detected, it was ultimately destabilised through the membership of numerous executives.

The ability to cope with the structural tensions faced in the three cases can be attributed to managerial control. The cartels for vitamins and steel were able to overcome tensions in maintaining secrecy by adopting organisational modes that favoured bilateral structures that minimised visibility. The vitamins cartel switched from a multilateral network structure towards the end of its existence to a bilateral structure to ensure greater levels of secrecy. In comparison, the cartel for LCDs maintained an unwieldy multilateral structure that increased its visibility.

5.3. Psychological dark network tensions

The conceptual framework proposed that the stability of dark business networks is dependent on striking a balance between actors' short-term versus long-term orientation, as well as striking a balance between trust versus mistrust. Both of these dimensions were closely linked to the concept of illicit forbearance put forward in this study, whereby psychological mechanisms were important in avoiding opportunistic behaviour. In the case of 'the Summit Meetings', participants' temporal orientations were aligned, as we have outlined in Proposition 4. While managing the cartel's short-term interests, this cartel was also far-sighted in creating of an 'annual budget'. As noted above, members cooperated at times when they could have acted opportunistically - evidenced, for example, when one manufacturer was assisted by competitors when they had a fire - in order to ensure the longevity of the cartel (as outlined under Propositions 1 and 5). Trust between members of the cartel was also high, but the firms also met regularly to control sales data and thus monitor one another (as outlined under Proposition 3).

Participants in 'Club Europe' were also able to mutually agree to overlook some of their short-term interests in order to operate a cartel that lasted for 18 years (as outlined under Propositions 1 and 4). Trust between firms was also facilitated through permitting entry to the cartel by members of the same trade associations (in line with Proposition 2), although the use of an 'external inspector' by the cartel to audit data bypassed reliance on trust to some extent as key information such as sales data were subject to independent scrutiny (as outlined under Proposition 3).

'The Crystal Meetings' cartel was relatively short in duration, lasting only five years, and witnessed participants frequently engaging in opportunistic behaviour, favouring their own short-term interests over the long-term interests of the group, such as taking customer orders beyond the agreed limit and deception among participants (as outlined under Proposition 1). Accordingly, this case exemplified various difficulties in maintaining illicit forbearance between cartel participants. The atmosphere of the group was frequently poor with members constantly warning one another to desist from an industry price battle or to take the short-term view, but struggled to maintain long-term goals against high levels of market volatility. In terms of trust, despite the 'yellow flag rule' established by members, the cartel was beset with disagreements, suspicion, and cheating between participants. Participants frequently deviated from price agreements in order to opportunistically obtain more orders, and experienced low levels of trust due to the duplicitous

behaviour by participants resulted in a 'monitoring culture' with the covert observation of actors' activities. The culture of distrust between members manifested as bureaucracy with numerous documents created (including minutes of cartel meetings, handwritten notes and email exchanges, and expense accounts/reports) in an attempt to exert control.

The ability to deal with psychological dark network tensions is related to how actors deal with uncertainty, which is very different for dark networks in comparison to legal networks (Bakker et al., 2012). While previous research has demonstrated that networks tend to flourish if they can achieve some degree of stability (Provan & Milward, 1995), in the case of dark networks achieving stability in a task environment characterised by uncertainty is partly compromised with a need for covertness (Milward & Raab, 2006). One method of dealing with uncertainty is to establish some mechanisms that control members' activities, which would encourage network longevity and reduce the importance of trust through reducing the possibility of 'cheating' by participants. This can hence be seen as an example of control-based illicit forbearance. The cartels for vitamins and steel introduced systems whereby they could examine and validate other parties' sales data to ensure adherence to the 'rules' of the cartel, employed external agents ('third parties') to audit group data, or else created annual planning mechanisms. These methods of dealing with uncertainty facilitated a long-term temporal orientation and minimised the need to rely too heavily on network trust. In comparison, the cartel for LCDs was not able to create effective methods that ensured members did not 'cheat' on one another, increasing their reliance on trust which led to parties focusing on their own short-term interests instead. Again, we can draw a comparison with illegal dark networks, where dark illegal networks without an effective strategy are perceived to be more likely to fail (Raab & Milward, 2003). Uncertainty in dark networks is further complicated as disagreements between actors cannot be resolved by legal redress in the courts (Raab & Milward, 2003), hence the need to create a common agreement or set of rules or norms that participants can

In the three cases of price-fixing we examined, we found considerable variance in the ability of members to manage the tensions that their network faced. Overall, we found that 'Club Europe' and 'The Summit Meetings' were better able to cope with network tensions and put in place mechanisms to ensure the longevity of each conspiracy akin to truly dark networks used by criminal enterprises, whereas 'The Crystal Meetings' managed their conspiracy as they would approach any legal network endeavour — as a visible managerial project. The characteristics of each network are summarised in Table 2.

6. Conclusions: the turn to the 'dark side' in B2B marketing scholarship

In this paper, we offer implications for both theory and practice. In terms of implications for theory, we contribute to our understanding of the dark side of business relationships in three different areas. First, we expand upon the dark side of relationships theme, by investigating the nature of opportunism in illegal business-to-business price-fixing

cartels. Due to their illicit nature, cartels are forced to operate outside legally binding contractual frameworks, requiring other means to facilitate their agreements and to avoid opportunistic behaviour by participants. We label this kind of avoidance of opportunistic behaviour in illegal business relationships as 'illicit forbearance'. The case studies outlined in the present study provide examples of its different manifestations in three price-fixing cartels.

Second, we investigated the nature of tensions in illicit relationship management. Our findings indicate that network tensions are made significantly worse by the illicit nature of cartels, particularly in relation to opportunistic behaviour associated with cartels. More specifically, we focused on a group of classical pairings of management tensions, examining how our case study cartels sought to mitigate such tensions in their own network context. Actors respond in different ways to relationship tensions based on their intensity and the extent to which they can be tolerated (Yami & Nemeh, 2014).

Third, in this study we have argued for a broadening of the scope of 'dark business relationships' towards one that considers illicit practices, which at present marketing scholarship has failed to consider in any meaningful sense (Pressey et al., 2014). This is important because illicit relationships are often archetypal examples of opportunistic behaviour, asserting an extensive adverse influence upon business relationships. In addition, due to their adverse qualities, illicit relationships are likely to manifest different types of conflicts, which is often the reason for them being illegal in the first instance. Clearly our empirical analyses of certain illegal practices (for example, bribery, espionage, corruption, or antitrust violations) are stymied by access to data (which is often not available), and also arguably by the attitudes of some scholars who may feel that such research is unseemly and that by pursuing these trajectories of research we may bring the discipline of marketing into disrepute. We maintain, however, that by understanding more about illicit marketing practices then we stand to create a fuller account of our own discipline (Keen, 1992; Tonks, 2002), in particular in relation to the dark side of business relationships. Further research may find interesting new directions for marketing theory and scholarship, particularly if the illicit practices studied do not confirm to prior theoretical thinking.

Turning to implications for practice, the findings of the study indicate in the starkest terms the compromised position that some marketing managers may find themselves in. This re-emphasises the potentially precarious role that marketing management can occasionally be, as well as its boundary-spanning role that can make some marketing managers vulnerable to certain practices such as illicit inter-firm collusion (Wilkie & Moore, 1999), and may place some managers in the position of breaking the law on behalf of their superiors (LeClair et al., 1997). Further, it is imperative that executive marketing education takes into consideration the vulnerability of marketing managers in some instances.

There is ample scope for future research in relation to illicit aspects of the dark side of business relationships; as Raab and Milward (2003, p. 419) observe: "the 'turn to the dark side' has long been overdue in the discussion on network forms of governance," therefore there are many potentially 'dark' aspects of business-to-business marketing that

Table 2Dealing with dark network tensions: the three price-fixing cartels.

Case tensions	Case 1: 'The Crystal Meetings' (LCDs)	Case 2: 'Club Europe' (Prestressing Steel)	Case 3: 'The Summit Meetings' (Vitamins)
Behavioural	Unable to develop illicit forbearance due to lack of group cohesion and social capital.	Illicit forbearance facilitated social capital by enlisting members to the cartel from the same trade associations.	Illicit forbearance developed social capital as a group through mutual support.
Structural	Maintained an unwieldy and 'visible' multilateral structure (cartel management by committee).	Maintained a secretive bilateral structure to limit 'visibility' and evade detection.	Switched from a 'visible' multilateral structure to a bilateral structure when members feared detection.
Psychological	Unable to put in place mechanisms to reduce uncertainty and group members' anxieties regarding adhering to cartel rules.	Illicit forbearance facilitated by employing 3rd parties to audit sales data, reducing members' uncertainty over agreements.	Illicit forbearance facilitated by shared sales data between group members.

could be studied. For example, illegal practices such as bribery, espionage, corruption, and antitrust violations are all areas that merit attention, and would assist us in attaining a clearer comprehension of our own discipline (Shocker, 2007; Tadajewski, 2010), and not just the 'light' and legal, but also the 'dark' and illicit.

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