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The role of fairness in buyer-supplier relationships in times of crisisAristides Matopoulos¹, Simone Didonet², Vaios Tsanasidis³ Andrew Fearne⁴

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The role of perceived justice in buyer-supplier relationships in times of economic crisis

Introduction

It is widely accepted that collaborative relationships are an important input to the development of sustainable supply chains (Cao and Zhang, 2011; Ralston et al. 2017). However, the longevity of buyer-supplier relationships can be undermined by opportunistic behaviour (Huo et al. 2016), inadequate communication (Hsu et al. 2008) or limited process integration (Petersen et al. 2005) and threatened by unforeseen events in the external (socio-economic or political) environment (Ellram and Krause, 2014). As a result, many buyer-supplier relationships (BSR), particularly in highly competitive and dynamic markets such as grocery retailing, fail to develop beyond the level of transactional exchanges (Anderson and Jap, 2005; Nix et al. 2007). One of the primary causes of relationship failure in dyads characterised by asymmetric dependency, as is generally the case in supermarket supply chains, is the perceived unfair treatment of suppliers by (more powerful) buyers (Duffy et al. 2013; Liu et al. 2012). The systematic abuse of market power has even resulted in government intervention. For example, the UK Groceries Code Adjudicator has launched two investigations about retailers' unfair practices and treatment of their suppliers (GCA, 2018).

Perceived organisational justice (POJ) has been identified in the literature as an important element of successful BSR, both as an antecedent and an outcome. The concept of POJ is very strongly interrelated to that of fairness (with POJ being a reflective construct which captures the multi-dimensionality of fairness), as suggested by Truxillo et al. (2001). POJ facilitates citizenship behaviours, such as collaboration and commitment (Zaeferian et al. 2016; Huo et al. 2016), reduces the likelihood of opportunistic behaviour (Luo et al. 2015) and has been shown to have a positive effect on aspects of supplier performance (Duffy et al. 2013; Malagueno et al, 2019, Zaeferian et al. 2016). However, despite the significant number of studies focusing on the impact of POJ on BSR, there are a number of shortcomings in the literature. One major gap is that previous research has ignored the potential impact of the external environment (e.g. economic climate) on BSR. Research by Ellram and Krause, (2014) showed that in times of crisis a stressful event may reveal surprising relationship vulnerabilities. In other words, the evolution of BSR is often negatively affected by external factors. When businesses are growing and the economic climate is favourable, they are more likely to adopt a positive stance towards supply chain collaboration than when the reverse is true. Dysfunctional conflict is more likely to surface in a 'difficult' trading environment but is also more difficult to study.

To date, the purchasing and supply chain literature has explored POJ in non-asymmetric BSR (in the manufacturing and technology sectors) and mainly from the perspective of the buyer (e.g. Yilmaz, 2004; Griffith et al. 2006; Huo et al. 2016; Jokela and Söderman, 2017). We argue that by examining POJ in the grocery retail sector, which is characterised by asymmetric dependency (Bloom and Perry, 2001; Hingley et al. 2015) we can gain a better understanding of suppliers' perceptions of justice and its role in times of (economic) crisis. In addition, the retail sector was one of the sectors affected the most during the recent global financial crisis, which put an end to 15 years of uninterrupted prosperity (Flatters and Willmott, 2009) creating a fertile environment for conflicts and disagreements to occur.

In light of the gap in the extant literature, this research makes a valuable contribution by investigating how POJ influences BSR in times of (economic) crisis. More specifically, our research is novel in that it explores the role that certain aspects of POJ (i.e. inter-organisational justice and interactional justice) play in mitigating the impact of a financial crisis on suppliers' performance, both operational and financial. Moreover, we examine POJ from the suppliers' point of view and in the context of the Greek grocery retail sector at the peak of the most severe and long-lasting financial crisis in living memory, which resulted in

an unprecedented reduction in Greek household consumption (Eurostat, 2017). After a decade of rapid growth (2000-2008), retail trade in Greece contracted by 5 per cent per year in terms of volume during the recession (Mylonas and Tzakou-Lambropoulou, 2016). Food sales dropped by 18 percent (13.15 billion euros) between 2009 and 2016 (Nielsen report, 2017). In parallel to the economic crisis, the Greek retail sector also went through a period of consolidation with a number of companies being pushed out of the market. For example, the number of small retailers dropped by circa 30,000 stores during the period 2008-2013 (Euromonitor, 2018) and there was significant increase in mergers and acquisitions due to the pressures of the recession (Mylonas and Tzakou-Lambropoulou, 2016). Not surprisingly, the impact of the crisis in many cases was cascaded down to suppliers. For example, the bankruptcy of Marinopoulos (Greece's largest supermarket chain) left 2,000 suppliers unpaid with 50 percent of Marinopoulos's debts being written off. As a result, several suppliers, mainly small businesses, were left on the brink of bankruptcy.

We anchor our research on the theory of organisational justice in order to explain the relationship between POJ, commitment and supplier performance in BSR involving a major Greek grocery retailer (hereinafter referred to as Retailer-Co) and a sample of their Greek main suppliers, drawing on survey data collected at the height of the Greek financial crisis.

The paper is in four parts. We start with a review of the literature focusing on the theoretical underpinning of this research followed by the proposed research model and the hypothesised relationships between the variables. Next, we describe the research methodology followed by the results. We continue with a discussion of the results with reference to the extant literature and a reflective workshop that was held with the retailer involved in the study, in the spring of 2018. The paper concludes with a discussion of the managerial and research implications.

Literature review and theoretical underpinnings

In examining the nature of BSR, a well-established stream of literature identifies a continuum ranging from discrete to relational behaviour (Dwyer et al. 1987; Siguaw et al. 2003). However, it has been observed that firms struggle to develop and sustain collaborative initiatives towards the end of the relational continuum (Spekman and Carraway 2006) as many buyers continue to abuse their position of power and strangle suppliers with short term, cost-driven decisions (Rossetti and Choi 2005), particularly in retailer-supplier relationships (Corsten and Kumar 2005). Ultimately, Giunipero and Eltantawy (2004) warn that this is detrimental to long term competitiveness given that the capabilities of a supplier will be undermined. Recent research by Carnovale et al. (2019) has shown that buyers' aggressive practices can backfire too. More specifically, the evaluation of over 1,700 purchasing instances across several years collected from Tier 1 suppliers to major automotive manufacturers showed that suppliers compensate for price pressures by reducing product quality, service support, and R&D expenditures.

One important dimension affecting an individual's actions and reactions such as those found in the above research is how fairly they perceive their treatment by the other, often more powerful, party. The theory of organisational justice (Greenberg, 1987) has been used extensively in the intra-organisational literature, where the traditional focus has been on the role of justice in the workplace. The assumption is that employees' perceptions of justice will impact upon their behaviour and therefore on organisational outcomes and performance (Colquitt 2001). Employees who perceive they are treated fairly contribute to performance through positive behaviours exemplary of what is referred to as organisational citizenship, which includes organisational commitment. Likewise, for those employees who feel they are being treated unfairly, resultant damaging retaliatory behaviours will negatively impact upon organisational performance (LePine et al. 2002).

In the context of this study the theory of organisational justice is applied to inter-organisational relationships. It is proposed that POJ will influence the strength of BSR and in particular, supplier commitment – in good times as well as bad. Previous research on POJ comes with shortcomings and gaps. For example, Lusch (2000) and Brown and Cobb (2006) focused exclusively on the consequences of POJ, but only for a limited number of justice dimensions. Likewise, Luo et al. (2015) and Huo et al. (2016) focused on the dimensions of POJ and how these dimensions relate to opportunism and relationship specific investment and their positive association with suppliers' trust (Hemmert et al. 2016), without considering the impact on performance. Indeed, the implications for firm performance have received little attention and very few studies (Griffith et. al, 2006) have examined the impact of fairness on firm performance. Research by Chad and Golicic (2010) with participants from the construction industry aspired to link performance with POJ using social capital theory, but their model did not consider variables tied to relationship strength, such as information sharing and commitment.

Furthermore, we examine POJ influence on the strength of BSR during a financial crisis and the implications for firm performance. Previous research has shown that during a crisis relationships between buyer and suppliers change, but this has not been examined in relation to firm performance. For example, the research by Ogawa and Tanaka (2013) revealed that during the global financial crisis long term customer-supplier relationship played an important role in mitigating the shock. More recently, research by Soundararajan and Brammer (2018) showed that suppliers' perceptions of fairness could change during a crisis, which may affect their responses to social sustainability requirements. This paper makes a distinct contribution by exploring the role that POJ plays in mitigating the impact of a financial crisis on two aspects of suppliers' performance, operational and financial. Moreover, we explore the role of commitment as a mediator between POJ and performance, in the specific context of a financial crisis.

Research model and hypotheses development

Based on the theory of organisational justice literature and informed by the recommendations from Rungtusanatham et al. (2014) on how to hypothesise the mediation effects, a research model (Figure 1) is proposed which explores the relationship between POJ and organisational performance in the presence of commitment. Drawing on previous conceptualisations of POJ (e.g. Greenberg, 1993; Colquit, 2001) we group the four dimensions of POJ into two distinct constructs which reflect the level of justice at an organisational level (inter-organisational justice) and a personal level (inter-personal justice). We do this in order to reflect the distinct characteristics of the supermarket sector in which the way that the retailer (buyer) interacts with the supplier (account manager) is driven, on the one hand, by the policies and the practices dictated by the buyer's organisation, which we argue are reflected in the organisational dimensions of POJ - distributive and procedural justice and, on the other hand, by the way in which these policies and practices are operationalised and implemented by the buyer, with whom the supplier's account manager interacts at a personal level, and which we argue are reflected in the inter-personal dimensions of POJ - informational and inter-personal justice. We are also extending the work by Zaheer et al. (1998), Currall and Inkpen, (2002) and Colquitt and Rodell (2011), which found that inter-personal and inter-organisational trust play different roles in affecting different aspects of performance.

Recent research by Jokela and Söderman, (2017) with participants from technology industry firms in Finland re-examined the link between POJ and commitment proposing that the relationship between the two is bi-directional and that the presence of positive buyer commitment can have a positive influence on supplier perceptions of justice. In this paper we

consider the actions taken by the buyer to foster commitment on the part of suppliers during the financial crisis in Greece, but our primary interest is in the role that POJ plays in mitigating the impact of the crisis on the suppliers' performance. For this reason we explore the role of commitment as a mediator between POJ and performance purely from the perspective of suppliers. Organisational (firm) performance refers to how well a firm achieves its goals. Past research has measured firm performance using primarily financial indicators such as return on investment (ROI), market share, profit margin on sales (Sánchez and Pérez, 2005). In this research, in addition to financial related indicators (e.g. market share growth, sales growth, new customers) we consider operational performance (e.g. on-time delivery, quality control procedures, incomplete orders) which gives a much more complete overview of the performance implications (Protopappa-Sieke and Seifert, 2010).

In brief, the proposed research model assumes that inter-organisational justice positively affects both financial and operational performance through commitment (H_1 and H_2). Furthermore, it is hypothesised that inter-personal justice positively impacts both financial and operational performance through commitment (H_3 and H_4). Finally, financial crisis is assumed as moderating all indirect effects of both inter-organisational and inter-personal justice on both financial and operational performance through commitment (H_{5a} to H_{5d}). The development of the hypotheses is presented below in the following way: we first establish the path between the two constructs of POJ (i.e. inter-organisational and inter-personal justice) and commitment, which is used as the basis for all the hypotheses. We then discuss it as a way of influencing organisational performance. Subsequently, we look at the moderating role of financial crisis in the previous relationships.

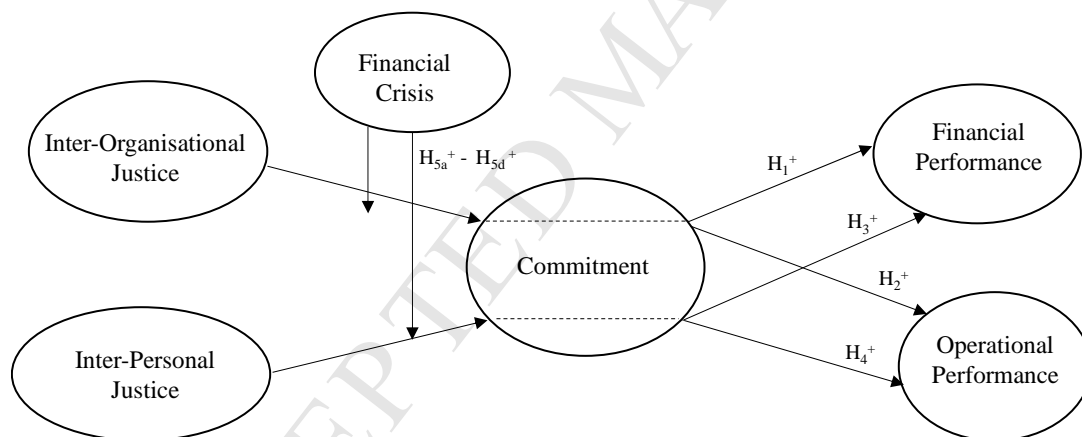


Figure 1. The research model depicting the proposed mediated-moderated relationships.

The relationship between organisational justice and commitment may be a relatively new lens in approaching relationships in supply management research, but it is one that has received a lot of attention in organisational behaviour studies. The link between the two concepts has been well established in prior research (Cohen-Charash and Spector, 2001). Loi et al. (2010) showed that both procedural and distributive justice contributed to the development of perceived organisational support which mediated their effects on organisational commitment. Also, Farnedale et al. (2011) showed that employees' commitment was strongly mediated by related perceptions of organisational justice. Interestingly, this link between perceived justice and commitments has been also manifested in other settings. More recently, the examination by Gomes et al. (2017) of the link between perceptions of justice and commitment in a cross-border acquisition showed also a strong

association between employees' perceptions of justice during the merger and commitment to the new organisation.

In a similar vein there have been efforts in the literature to establish the links between commitment and performance. In general, there seems to be a consensus amongst researchers about the perceived gains from successful relationships (e.g. Morgan and Hunt, 1994; Spekman and Davis 2004). These benefits can be realised at an operational level (e.g. improved quality or delivery service, reduced cost), but also at a strategic level (e.g. enhanced competitiveness, and increased market share) leading to improvements in financial performance although there is limited empirical evidence (Kannan and Choon Tan, 2006). For example, Griffith et al. (2006), which looked at POJ from the buyer's perspective, indicated that the perceived procedural and distributive justice of a supplier's policies enhance the long-term orientation and relational behaviours of its distributor, which, in turn, are associated with decreased conflict and increased satisfaction, that influence the distributor's financial performance (e.g. sales growth, profit growth, overall profitability, liquidity, and cash flow). The study by Zaeferian et al. (2016) on the other hand, which explored POJ from the supplier's perspective looked only at sales growth as a proxy for financial performance. More specifically, their research of automotive part suppliers in Iran showed that interactional and distributive fairness have a positive and significant effect on both trust and commitment, which in turn have a positive effect on sales growth. As a result, the following hypothesis is proposed:

H₁: Inter-organisational justice positively influences financial performance through commitment.

Similar to the link between inter-organisational justice and financial performance previous literature has only partially established the link with some aspects of operational performance (e.g. task or relational performance). It is a common belief that effective collaboration requires more than just co-ordination at the transactional level of the relationship, but intent on the part of boundary spanners in buyer organisations to build strong relationships in which trust and commitment are fostered and protected. This positive behavioural intent is critical to developing and sustaining collaborative initiatives, as it encourages partners to dedicate assets on behalf of others in the chain, thus creating efficiencies (Spekman and Davis 2004) and affecting positively the continuity of the relationship (Kaynak, 2015). For example, research by Zapata-Phelan, et al. (2009) showed that procedural justice predicted task performance, a relationship that was partially mediated by intrinsic motivation. Also, the analysis of Liu et al. (2012) of 216 manufacturer–distributor dyads in China, found that a higher level of justice mutually perceived by two parties is positively associated with higher levels of coupling behaviours devoted to supply chain activities by both parties which in turn, contribute to the relationship performance of the dyad. As a result, we hypothesise the following:

H₂: Inter-organisational justice positively influences operational performance through commitment.

It is generally believed that when buyers and suppliers have positive experiences with one another, this leads to increased trust in the relationship, which is highly associated with perceptions of justice (Currall and Inkpen, 2002; Colquitt and Rodell 2011). Previous research by Hornibrook et al. (2009), Duffy et al. (2013) argued that suppliers who perceive a relationship to be fair are more likely to allocate resources to support the development of that relationship, which will be reciprocated by the buyer, in the way they treat them. Relationship-specific investment promotes a high level of interdependency that cultivates trust and commitment (Gulati and Sytch, 2007). Similarly, Zaeferian et al. (2016) argued that in long-lasting effective relationships manufacturers need to carefully understand (and manage) the fairness perceptions of their suppliers, as problems in this area could decrease the

quality of the exchange relationship, which has a strong positive effect on sales growth. Based on the above our hypothesis is that:

H₃: Inter-personal justice positively influences financial performance through commitment.

Recent evidence from the automotive sector (Carnovale et al. 2019) has shown that interpersonal justice, reflected in trust, leads to positive supplier relational performance particularly in relation to service offered and the R&D expenditures. However, trust is tightly connected with commitment. As Morgan and Hunt (1994, p. 22) put it: “...when both commitment and trust --not just one or the other -- are present, they produce outcomes that promote efficiency, productivity, and effectiveness”. In the presence of commitment suppliers and buyers adopt more cooperative behaviours, but also work at preserving relationship investments. When a supplier is more committed to a buyer–supplier relationship, it is more loyal to such a relationship and is more willing to invest its time, effort, and attention (Wang et al. 2014). These relationships are a source of complementary resources and in the presence of managerial commitment further resources can be mobilised (“Henry” Jin et al. 2013). Such commitment can provide a degree of constancy in the midst of chaos and influence operating performance. We therefore hypothesise that:

H₄: Inter-personal justice positively influences operational performance through commitment.

Previous research of BSR during crisis (e.g. Trkman and McCormack, 2009; Blome and Schoenherr 2011) explored the issue mainly from the risk management perspective. Lamming’s (2000) research on the other hand investigated the ways in which recession affected supply chain relationships in Japan, showing that Japanese industrial customers put increased pressure on their suppliers to provide technical solutions and to develop links with other customers for the first time. In a similar vein, research by Autry and Golicic (2010) provided empirical insights of the linkage between relationship strength and performance of BSR providing evidence from the construction industry that relationship strength influences performance which was measured as a function of task completion and cost efficiency. Servais and Jensen (2012) investigated the role of buyer-supplier cooperation, conflict and trust in customer satisfaction by using data collected in a period of recession. Their research showed that the relationship quality (i.e. higher-order concept that involves satisfaction, fair results and the propensity to continue to collaborate) between buyers and suppliers might act as a buffer against external forces during a financial crisis, but without considering the performance implications. Wang et al. (2014) found evidence that in the case of supplier-induced disruptions the selective use of appropriate justice approaches (procedural, interactional, or distributive justice) by suppliers helps mitigating damaged trust, which, in turn, foster relationship continuity intentions. Hence, the following hypotheses are proposed:

H₅: There is a moderated role of financial crisis on:

- a) The indirect effect of inter-organisational justice on financial performance through commitment.
- b) The indirect effect of inter-organisational justice on operational performance through commitment.
- c) The indirect effect of inter-personal justice on financial performance through commitment.
- d) The indirect effect of inter-personal justice on operational performance through commitment.

In conclusion, a limited number of BSR studies have specifically examined from the supplier’s perspective, the linkages between the two main building blocks (i.e. inter-organisational and inter-personal justice) of POJ and financial or operational performance

(hence the development of H_{1-4}). What is also novel in our research is the representation of POJ in two distinct constructs that distinguish those elements of POJ that reflect the organisational dimensions of POJ (distributional and procedural justice) from those dimensions that reflect the personal dimensions of POJ (informational and inter-personal justice), the measurement of their distinct relationships with performance and the moderating role of financial crisis therein (H_5).

Research methodology

Sampling and Data Collection

Data was collected during the summer/autumn of 2016 via an on-line survey of a sample of Retailer-Co's suppliers. Two criteria were used for selecting the sample of suppliers: firstly, they had to be domestic in order to ensure that they were exposed to the overall climate of the financial crisis. Secondly, they had to be regular, as opposed to sporadic, suppliers, with whom Retailer-Co would have had both reason and time to establish a meaningful relationship. An email invitation to participate anonymously in the survey was sent by the buying team at Retailer-Co to 250 of the suppliers across a range of product categories (e.g. processed fruits and vegetables, dairy products, bakeries). A total of 119 questionnaires were completed, representing a response rate of 47.2%. Almost all (98%) of respondents regarded the supermarket as a key customer. Out of the 119 questionnaires completed two were excluded from the sample due to missing values and so a total of 117 questionnaires were analysed. The average time to complete the questionnaire was 20 minutes. There were two rounds of data collection. The participants received the first reminder three weeks after sending the survey link and the second reminder three weeks later. Table 1 presents the sectors represented in the sample with canned food products having the highest frequency of responding companies, followed by sausages and dairy products and non-food products.

Table 1 Food sub-sectors represented in the sample

Sector	Frequency	Percentage
Canned food products	53	45.3
Sausages and dairy products	23	19.6
Non-food products	23	19.6
Fresh produce	7	5.9
Fresh meat	6	5.1
Other	5	4.5

Table 2 presents the years the company had been in operation at the time of data collection. The great majority of companies represented in the research were well-established business with more than 10 years in operation.

Table 2 Participant companies' years in operation

Sector	Frequency	Percentage
Less than 5 years	4	3.4
5 to 10 years	8	6.8
10 to 20 years	18	15.4
More than 20 years	87	74.4

In addition, for triangulation purposes, a reflective workshop was held with a group of managers from Retailer-Co, in the spring of 2018, in order to discuss the findings of the survey and explore what, if any initiatives were undertaken that may have affected supplier

relationships, positively or negatively, during the crisis. This is in line with Edmonson and Mc Manus (2007), who argue that combining quantitative and follow-up qualitative data helps to understand the quantitative findings. In total, eleven senior and middle managers participated in the workshop representing three core functions: procurement, business strategy and stores/network operations. The use of multiple functional representatives enabled data source triangulation (Jack and Raturi, 2006; van der Valk and Wynstra, 2012) and enabled the researchers to get a more detailed understanding of the initiatives that Retailer-Co undertook to counter the effects of the financial crisis. The workshop was held in the premises of Retailer-Co and lasted for two hours.

In terms of the survey, it is assumed that survey measurement procedures, choice of respondents, and survey context affect the common method variance (Rindfleisch et al., 2008). Podsakoff et al. (2003) note that common method biases (CMB) can result from the fact that the predictor and criterion variables are obtained from the same source, whereas others are produced by the measurement items themselves, the context of the items within the measurement instrument, and/or the context in which the measures are obtained. To reduce the potential CMB, the measures of dependent and independent constructs were separated from one another physically within the questionnaire. This is a procedural remedy that was recommended by Podsakoff et al (2003) and further reinforced by Hulland et al. (2018). Two post-hoc procedure were also considered to assess CMB: (1) Harman's one-factor test which is emphasised by Babin et al. (2016, p.3136) as been "more powerful diagnostically than previously thought"; (2) construct validity (Conway and Lance, 2010). Regarding the Harman's test, the unrotated factor solution was used for all the items measured in the study and it generated more than a single factor with eigen values greater than 1. In addition, the first factor explained 33% of the variance. This result suggests that common method bias is not a concern in this study (Babin et al., 2016). Our measures also presented a high level of construct validity (see Table 3 for reliability evidence, i.e. Cronbach's alpha) which has been proposed as one way to minimize the possible negative effects of common method bias (Conway and Lance, 2010).

Measures and measurement model testing

The survey included 25 questions both closed (using 1-5 likert scale) and open ended including questions about the company. The questionnaire consisted of five parts. The first one included questions that referred to the profile of the respondents and of the company. The next one focussed on information sharing issues (e.g. the level of perceived trust and reliance). The third part captured suppliers' perceptions of inter-organisational justice, reflected in the perceptions of distributive and procedural justice and inter-personal justice, reflected in the perceptions of informational and inter-personal justice. The scales used for the measurement of the dimensions of POJ were based on previous research (Colquitt, 2001; Griffith and Lusch, 2000; Duffy et al. 2013), but adapted to reflect the context (i.e. retail) of this research. As a result, 13 items were used to measure procedural and distributive justice and 12 items were used to measure informational and inter-personal justice. Regarding commitment, we adopted the scale by Buxton and Tait (2012) comprising 7 items. Section four comprised 6 items designed to capture the extent to which the economic crisis affected demand, distribution, ranging and prices. The last section contained 4 items for the measurement of operational performance and 5 items for financial performance, which reflected the key performance indicators of Retailer Co. which were identified through interviews conducted with the director of procurement from Retailer-Co and also the logistics director for one of the main distribution centres.

Table 3 shows the details and the descriptive statistics for the study variables. Values of Cronbach's alpha are exhibited between parentheses and confirm high reliability of scale in

all cases. These values also attest the convergent validity of constructs under analysis as aforementioned.

Table 3. Measures and Descriptive Statistics

Variable	Measures	Mean	Standard Deviation
Inter-Organisational Justice ($\alpha = .90$)	1. We are giving opportunities to express our views and offer input to decisions that affect our relationship with retailer	2.28	.83
	2. We have some influence over the outcome of decisions taken by retailer that affect our relationship with them	2.50	.94
	3. Retailer staff will occasionally alter their decisions in response to our suggestions or concerns	2.61	.94
	4. Retailer staff is aware of the market conditions we face when making specific requests of our business	2.30	.83
	5. Retailer staff is consistent in their dealings with us	2.16	.86
	6. We have a good understanding of retailer's purchasing procedures and procurement policies	2.01	.84
	7. Retailer staff adheres strictly their company's purchasing procedures and procurement policies	2.02	.85
	8. Retailer staff never use threats to secure better terms of trade	2.22	.81
	9. Retailer staff recognizes that both parties need to benefit from our relationship with them	2.09	.74
	10. The rewards we receive from our relationship with retailer are fair given to our contribution	2.42	.87
	11. Any investment required to improve the performance of our operations with retailer is fairly distributed between ourselves and retailer	2.43	.86
	12. We occasionally allocate resources to support retailer for no direct benefit to ourselves	2.27	.90
	13. We are satisfied with retailer's time-frame of payments	2.20	.98
Inter-Personal Justice ($\alpha = .93$)	1. Staff at retailer is polite	1.85	.75
	2. Staff at retailer treats us with dignity	1.76	.68
	3. Staff at retailer treats us with respect	1.82	.76
	4. Staff at retailer refrains from making improper remarks or insensitive comments when dealing with us	1.91	.75
	5. Retailer store management is always willing to collaborate with our sales representatives	2.20	.98
	6. Retailer store management treats our sales representatives with dignity	2.09	.99
	7. Retailer store management treats our sales representatives with respect	2.01	.91
	8. Retailer store management does not ignore our sales representatives	2.19	.90
	9. Staff at retailer clearly explains policies and procedures that affect our business	2.17	.79
	10. Staff at retailer is willing to discuss the reasons behind their decisions and actions	2.37	.85
	11. Staff at retailer always presents valid reasons for any changes they make to decisions or procedures that affect our business	2.34	.82
	12. Staff at retailer is open and honest when explaining the reasons behind their decision and actions	2.26	.83
Financial Crisis ($\alpha = .84$)	1. Financial crisis has led to reduction of the variety of products that we used to sell to the retailer.	2.72	1.07
	2. Financial crisis has led to continuous fluctuations in demand and unexpected amount of requests in distributed products by the retailer	2.51	1.09
	3. Financial crisis has led to reduction of our total sales	2.61	1.14

	4. Financial crisis has led to put the retailer more pressure on us in the negotiation of prices	2.12	.81
	5. Financial crisis has led to increased disagreements and conflicts with the retailer	2.52	.89
	6. Financial crisis has led to increase the retailer pressure to extend our contribution in promotional activities	2.05	.86
	1. We expect our relationship with retailer to continue for a long time	1.62	.61
	2. We are willing to make investments to help develop and improve our business with retailer	1.70	.67
	3. We expect our relationship with retailer to strengthen overtime	1.69	.66
Commitment ($\alpha = .88$)	4. Our positive feelings towards retailer are a major reason we want to continue working with them	1.95	.76
	5. We are prepared to go the 'extra mile' for retailer	1.95	.69
	6. We are willing to support retailer if they have a problem	1.88	.59
	7. We are flexible and prepared to accommodate unexpected requests from retailer	2.30	.81
	1. Our sales have been improved	2.04	.75
	2. Our profits have been improved	2.44	.89
	3. Our market presence has grown (new markets)	2.21	.83
Financial Performance ($\alpha = .85$)	4. Our customer numbers have been increased (new collaborations in existing markets)	2.35	.84
	5. Our labor productivity (sales/man-hours) have been improved exceeding company's initial expectations	2.33	.75
	1. During the collaboration with the retailer my company has improved its on time delivery performance	1.97	.63
	2. During the collaboration with the retailer my company has improved its quality controls procedures	1.85	.69
	3. During the collaboration with the retailer my company has reduced the levels of incomplete orders	1.91	.69
Operational Performance ($\alpha = .87$)	4. During the collaboration with the retailer my company has managed to improve its overall performance as a result of retailer communicating its KPI requirements	1.88	.66

Table 4 shows the correlation matrix of variables that were tested in the model (see Figure 1). The results indicate that there are no high correlations among constructs which attest that there is not a concern for further analysis.

Table 4. Correlation matrix

Variable	1	2	3	4	5	6
1. Inter-Organisational Justice	1					
2. Inter-Personal Justice	.57**	1				
3. Financial Crisis	.14	.07	1			
4. Commitment	.44**	.58**	.15	1		
5. Financial Performance	.36**	.32**	.34**	.36**	1	
6. Operational Performance	.40**	.38**	.14	.52**	.54**	1

Note: **correlation is significant at the 0.01 level (2-tailed)

To test the research hypotheses, a total of four regressions was performed. The Preacher and Hayes' (2008) procedure was used to run the regressions in the SPSS PROCESS macro outlined by Hayes (2013). A mediated moderated model was considered in order to test the contingent nature of the mechanisms by which inter-organisational and inter-personal justice influence financial and operational performance. Hayes (2013, p.327) named this as a

“conditional process analysis” and note that PROCESS is a very easy way of running these interactions. Specifically, we considered a conditional indirect effect in our model (see Figure 1) which quantifies how differences in inter-organisational justice and inter-personal justice cause differences in both operational and financial performance indirectly through commitment (mediator) depending on the level of financial crisis (moderator). The levels of financial crisis were assumed as changes in its percentiles ranging from 10th (very low level) to 90th (very high level) as recommended by Hayes (2013). The recommended 5,000 bootstrap samples for bias corrected bootstrap confidence intervals and a level of confidence of 95 percent were considered to run the model. Confidence intervals were used to confirm/reject hypotheses. Thus, if a confidence interval for an estimated coefficient does not include zero, a significant effect is assumed (Hayes, 2013).

Factor scores of each variable were used to run regression models. Previously, exploratory factor analyses were run in the SPSS 19.0 statistical package to generate the scores. One factor score was extracted from all measures that describe every variable. For example, the score of commitment was extracted from the 7 measures that describe commitment (see Table 3). This procedure was followed to extract the factor of every variable. Subsequently, these scores were used to run the regression models as above-mentioned. The use of factor scores to represent variables in regression models is in line with previous research in the field (see Avlonitis and Gounaris, 1997; 1999).

Results

Tables 5 and 6 show the results of the proposed relationships (see Figure 1), i.e. they detail the indirect effect of inter-organisational justice and inter-personal justice on financial and operational performance through commitment and the conditional effect of each kind of organisational justice, i.e. inter-organisational and inter-personal on both performances with the moderation of financial crisis.

Table 5. Results for the relationship between inter-organisational justice and performance

Indirect Effects		Effect (β)	SE(Boot)	BootLLCI95%	BootULCI95%
	IntOrg Justice -> Commitment -> Financial Perf	.1105	.0523	.0252	.2316
	IntOrg Justice -> Commitment -> Operational Perf	.1871	.0610	.0934	.3330
Conditional Indirect Effect (moderated by levels of financial crisis)		Effect (β)	SE(Boot)	BootLLCI95%	BootULCI95%
Levels of Financial crisis	Very High	-.0055	.0471	-.1004	.0946
(IntOrgJ ->Commit -> FinPerf)	High	.0675	.0405	.0121	.1746
	Moderate	.1031	.0492	.0218	.2162
	Low	.1412	.0634	.0321	.2857
	Very Low	.1790	.0800	.0426	.3611
Levels of Financial crisis		Effect (β)	SE(Boot)	BootLLCI95%	BootULCI95%
(IntOrgJ ->Commit -> OpPerf)	Very High	-.0093	.0788	-.1484	.1669
	High	.1144	.0557	.0348	.2545
	Moderate	.1746	.0585	.0894	.3157
	Low	.2392	.0714	.1306	.4135
	Very Low	.3033	.0901	.1642	.5225
Direct Effects and Interaction		Effect (β)	SE(Boot)	BootLLCI95%	BootULCI95%
	IntOrgJustice -> Financial Perf	.2543	.1080	.0402	.4683
	Commitment -> Financial Perf	.2508	.1004	.0518	.4497
	IntOrgJustice -> Operational Perf	.2090	.0950	.0209	.3972
	Commitment -> Operational Perf	.4248	.0900	.2465	.6031
	IntOrgJustice -> Commitment	.4067	.0937	.2211	.5923
	IntOrg x Financial Crisis	.1990	.0921	.0166	.3814

Note: Boot= bootstrap sample size; CI= confidence interval; SE=standard error

The results shown in Table 5 confirm that inter-organisational justice positively influences financial performance and operational performance through commitment. These results lead us to accept H_1 and H_2 . It is important to note that in both cases, i.e., financial and operational performance, the relationship is partially mediated by commitment. This was verified by calculating the variance accounted for (VAF) to determine the size of the indirect effect in relation to the total (Hair et al., 2014). The outcomes exhibited VAF larger than 20% and less than 80% which characterised a partial mediation (Hair et al., 2014). Overall, the results indicate that high levels of inter-organisational justice lead to high commitment and, in turn, high commitment leads to high performance. The direct effects confirm this statement, as all partial paths are positive and significant. This is relevant when considering the strong direct impact of commitment on operational performance (effect= .4248; CI 95% ranging from .2465 to .6031). Furthermore, inter-organisational justice affects commitment strongly and positively (effect=.4067; CI 95% ranging from .2211 to .5923). Interestingly also, inter-organisational justice directly and positively influences both types of performance, i.e. financial and operational (effect=.2543 and CI 95% ranging from .0402 to .4683 for financial performance; effect= .2090 and CI 95% ranging from .0209 to .3972 for operational performance). Inter-personal justice also affects positively both financial and operational performance through commitment as can be seen in Table 6. The model is partially mediated as in the case of inter-organisational justice considering that VAF outcomes were larger than 20% and less than 80% (Hair et al., 2014).

Table 6. Results for the relationship between inter-personal justice and performance

Indirect Effects		Effect (β)	SE (Boot)	BootLLCI95%	BootULCI95%
	IntPers Justice -> Commitment -> Financial Perf	.1584	.0655	.0382	.2970
	IntPers Justice -> Commitment -> Operational Perf	.2615	.0678	.1470	.4160
Conditional Indirect Effect (moderated by levels of financial crisis)		Effect (β)	SE (Boot)	BootLLCI95%	BootULCI95%
Levels of Financial crisis	Very High	.0600	.0555	-.0162	.2180
(IntPersJ -> Commit -> FinPerf)	High	.1241	.0534	.0355	.2496
	Moderate	.1553	.0623	.0421	.2889
	Low	.1888	.0764	.0494	.3508
	Very Low	.2220	.0929	.0593	.4274
Levels of Financial crisis		Effect (β)	SE (Boot)	BootLLCI95%	BootULCI95%
(IntPersJ -> Commit -> OpPerf)	Very High	.0990	.0838	-.0406	.3064
	High	.2049	.0592	.1101	.3473
	Moderate	.2564	.0628	.1453	.3965
	Low	.3117	.0773	.1693	.4752
	Very Low	.3665	.0979	.1926	.5751
Direct Effects and Interaction		Effect (β)	SE (Boot)	BootLLCI95%	BootULCI95%
	IntPers Justice -> Financial Perf	.1570	.1145	-.0698	.3838
	Commitment -> Financial Perf	.2710	.1095	.0542	.4879
	IntPers Justice -> Operational Perf	.1188	.0878	-.0551	.2927
	Commitment -> Operational Perf	.4474	.0952	.2588	.6360
	IntPers Justice -> Commitment	.5696	.0691	.4327	.7065
	IntPers x Financial Crisis	.2449	.0863	.0739	.4158

Note: Boot= bootstrap sample size; CI= confidence interval; SE=standard error

The findings shown in Table 6 reveal that commitment is important to improve the impact of inter-personal justice on both financial and operational performance. These results lead us to accept both H_3 and H_4 . This is particularly relevant when considering operational performance. The indirect effect of inter-personal justice on operational performance through commitment is positive and significant (effect = .2615; CI 95% ranging from .1470 to 4160) which outweigh the non-significant direct effect. Therefore, inter-personal justice only

improves performance through commitment. As we can see in the results for the direct effects, inter-personal justice does not influence both financial and operational performance directly, i.e. the influence is not significant (CI 95% ranging from $-.0698$ to $.3838$ for financial performance and from $-.0551$ to $.2927$ for operational performance).

Moderating effect of financial crisis

Overall, the results indicate that there is a conditional indirect effect of both inter-organisational and inter-personal justice on both financial and operational performance, which lead us to accept hypotheses H_{5a}-H_{5d}. Specifically, financial crisis moderates:

- the indirect effect of inter-organisational justice on financial performance through commitment, which confirm H_{5a} (see Table 5).
- the indirect effect of inter-organisational justice on operational performance through commitment, which confirm H_{5b} (see Table 5).
- the indirect effect of inter-personal justice on financial performance through commitment, which confirm H_{5c} (see Table 6).
- the indirect effect of inter-personal justice on operational performance through commitment, which confirm H_{5d} (see Table 6).

Two perspectives should be emphasised considering these results. Firstly, it is interesting to note that the moderation occurs with the exception of very high levels of financial crisis which does not moderate the proposed relationships, i.e. is non-significant. In the case of financial performance, the indirect effect of inter-organisational justice on performance through commitment is $-.0055$ and not significant (CI 95% ranging between $-.1004$ and $.0946$) in the presence of very high level of financial crisis (see Table 5). Moreover, the indirect effect of inter-personal justice on financial performance through commitment is $.0600$ and not significant (CI 95% ranging between $-.0162$ and $.2180$) when financial crisis is considered in a very high level (see Table 6). The same occurs in the case of operational performance in both OJ dimensions. As Table 5 shows the indirect effect of inter-organisational justice on operational performance through commitment is not moderated by the very high level of financial crisis (effect = $-.0093$; CI 95% ranging from $-.1484$ to $.1669$). Besides, the indirect effect of inter-personal justice in operational performance through commitment is also not moderated by the very high level of financial crisis (effect = $.0990$; CI 95% ranging from $-.0406$ to $-.3064$).

Secondly, the indirect effect of both inter-organisational and inter-personal justice on both financial and operational performance improves as financial crisis levels reduce. This is more emphasised in the case of operational performance, where the indirect effect of inter-organisational justice through commitment is $.1144$ and significant (CI 95% ranging from $.0348$ to $.2545$) in the presence of high levels of financial crisis. Otherwise, when there is a very low level of financial crisis, the indirect effect of inter-organisational justice on operational performance through commitment is $.3033$ (CI 95% ranging from $.1642$ to $.5225$) (see Table 5). This means that inter-organisational justice is more successful to improve operational performance through commitment in the presence of low levels of financial crisis. The same is true in the indirect relationship between inter-personal justice and operational performance through commitment. In the presence of a high level of financial crisis, the indirect effect of inter-personal justice on operational performance through commitment is $.2049$ and significant (CI 95% ranging from $.1101$ to $.3473$) (see Table 6). However, when there is a very low level of financial crisis, the indirect effect of inter-personal justice on operational performance through commitment is $.3665$ and significant (CI 95% ranging from $.1926$ to $.5751$) (see Table 6). Thus, it can be assumed that inter-personal justice is more

important to improve operational performance through commitment in the presence of very low levels of financial crisis.

Discussion

In this section we discuss the main results from the survey using also our insights from the reflective workshop. This was designed to shed further light on the behaviour of Retailer Co. and to elicit feedback from Retailer-Co on the results of the survey. More specifically, it aimed at exploring what, if, any specific policies or practices Retailer-Co had been implemented to mitigate the impact of the financial crisis on their supply base, and to identify any other events that might have affected suppliers' perceptions of their relationship with Retailer-Co at the time of the survey. The senior managers invited to the workshop had been sent a summary of the survey findings in advance of the meeting, but a short presentation was made to stimulate discussion.

POJ, commitment and performance

Overall, our results offer support for our main argument that organisational justice influences firm performance through commitment and that the financial crisis moderates the relationship. More specifically, we found strong evidence that both inter-organisational and inter-personal justice positively influence through commitment not just financial performance, as already supported in the literature (e.g. Zapata-Phelan, et al. 2009; Liu et al. 2012; Henry" Jin et al. 2013; Zaferian et al. 2016) but also operational. This particular link between inter-organisational justice and operational performance had only partially been established in the past (e.g. Zapata-Phelan, et al. 2009). One major implication of this finding is that in the presence of organisational justice and commitment shorter-term benefits related to operations (e.g. on-time delivery performance, quality controls procedures, reduced levels of incomplete orders) can be also realised in addition to the more longer-term financial gains.

In the case of Retailer-Co, which is no different to any large multiple retailer with a large and diverse supply base, it is important to recognise that certain suppliers warrant stronger relationships than others. However, the development of collaborative relationships requires firm foundations based on trust, mutual respect and commitment from both parties, which appeared to be part of the strategy and culture of the business. There was also a strong link, made repeatedly, between building customer loyalty for long term growth and working with suppliers to improve operations and remove cost from processes, but also to develop innovative promotions and new products exclusive to Retailer-Co, rather than competing purely on price. Retailer-Co has a loyalty programme and works hard with suppliers to develop targeted promotions that reward loyal shoppers with meaningful incentives. According to one of senior purchasing managers:

"We work hard with our suppliers to develop innovative promotions targeting specific shopper segments. We prefer to do this than compete purely on price with the discounters".

The role of the financial crisis

Although prior research by Lamming (2000) and more recently by Ellram and Krause (2014), has pointed out that in times of crisis surprising vulnerabilities in BSR may be revealed there is still little empirical evidence particularly in relation to the role of POJ. Overall, the findings reveal that depending on the level of financial crisis, OJ dimensions affect more or less performance indirectly through commitment. The indirect effect of both inter-organisational and inter-personal justice on performance improves as financial crisis levels reduce. From high to very low levels, financial crisis positively moderates the proposed relationships, but the same is not true in the case of very high levels of financial crisis. Our analysis shows that

the conditional indirect effect of OJ on performance improves as the level of the financial crisis reduces (see Tables 5 and 6). Interestingly though, when suppliers perceive that the restrictions imposed by financial crisis are very high, this neither results in disturbances in their relationships with retailer regarding OJ and commitment nor in deterioration of financial and operational performance. This is more emphasised in the case of operational performance. This means that inter-organisational justice is more successful to improve operational performance through commitment in the presence of low levels of financial crisis. The same is true in the indirect relationship between inter-personal justice and operational performance through commitment. Despite the apparent paradox the workshop discussion revealed that this was due to the overall strategy that the purchasing team of Retailer-Co had adopted. This was clearly evident and particularly highlighted by the reference to the demise of one of the closest rivals to Retailer-Co, a large multi-national supermarket with a reputation for discounting and aggressive buyer behaviour. This retailer went bankrupt at the height of the financial crisis leaving many of Retailer-Co's suppliers vulnerable, a position that Retailer-Co could have exploited but chose not to. As one member of the business strategy team explained:

"We worked very hard during the crisis to retain customers by making them feel we were paying careful attention to their needs... we could not have done this without the support of key suppliers, who could see the benefit in investing in us rather than some of our competitors".

Our results also show that the financial crisis, as suppliers experienced it, moderated the relationship between the two different types of POJ and performance. So what could buyers do during financial crises to enhance suppliers' commitment? As one of the buying team put it: *"We have always tried to be fair with our suppliers and find ways to work more closely with some of them"*

Clearly, not all suppliers are equal in terms of their strategic contribution and members of the buying team took pains to emphasise the rationale for working more closely with some suppliers than others. However, they were equally keen to point out that this did not mean that less important suppliers were treated unfairly, but that relationships with smaller suppliers were, inevitably, more transactional in nature. Significantly, one buyer stressed that regardless of who he was buying from:

"I always give concrete arguments for spending more time working with certain suppliers but I also make sure that all my suppliers understand what the strategy is and where they fit and I am always open to suggestions. Not all suppliers can invest in promotions or new product development, but that does not mean I don't care about them, I just don't spend so much time with them".

These quotes are indicative of a retail business with a clear strategy based on innovation and growth that is conducive to the development of collaborative relationships and less likely to result in undue or unfair pressure being placed on suppliers during times of stress. The demise of their closest competitor, who they perceived to be following a very different strategy is testimony to the critical role that strategic orientation and business culture plays in shaping buyer behaviour and procurement practices. They also exemplify the value of qualitative feedback on survey results, providing confirmatory evidence of actual buyer behaviour, the

underlying factors driving that behaviour (strategy and culture) and additional environmental factors (competitive behaviour) ignored or not captured by a questionnaire designed to test very specific hypotheses.

Conclusions

Summary of results

Our results from the survey support the findings from previous research regarding the benefits of strong inter-organisational relationships for business performance (Liu et al 2016, Jap, 2001; Yilmaz et al. 2004; Zaeferian et al. 2016). But interestingly, our results also suggest that (even) in times of crisis suppliers who perceive themselves to be fairly treated by their customers will devote additional resources to ‘go the extra mile’ for the benefit of both partners in the trading relationship. The commitment that comes from being fairly treated pays dividends in ‘normal’ trading environments by facilitating the sharing of risk, joint decision-taking and the collaborative allocation of resources. However, as previous research has suggested, it is in times of crisis that the citizenship behaviours of committed suppliers are most appreciated and duly rewarded, through reciprocal risk sharing and corrective actions designed to ease the pain. This is reflected in our research with the positively indirect influence of POJ (via commitment) on both financial and operational performance. The workshop revealed also that the development of collaborative relationships with suppliers goes beyond the remit of the purchasing department, which is in line with Bendixen and Abratt (2007) about the importance of having a clear corporate strategy, commitment and culture in addition to the existence and implementation of fair purchasing practices.

Theoretical contributions

The theory of organisational justice is an attractive lens through which inter-organisational relationships can be explored. Previous research (e.g. Lusch 2000; Brown and Cobb, 2006; Luo et al. 2015; Huo et al. 2016) focused on fewer dimensions of POJ. In this research we considered both the two fundamental aspects of POJ: organisational (distributive and procedural) and the personal (informational and inter-personal elements of relationships). Particularly regarding inter-personal justice, we found that its unique way to contribute to improve both types of performance is through commitment. Hence, commitment is the condition to improve performance in the presence of inter-personal justice. The separation of the organisational and personal elements is particularly valuable in the context of supermarket supply chains and fast-moving consumer goods, where transactions are many and margins are tight and individuals (buyers and account managers) are under significant pressure to deliver results over short time horizons (Fearne et al. 2005; Jiang, 2009). This pressure can only intensify in times of economic uncertainty and financial austerity. Yet, the results of this study suggest that, with the right strategy, suppliers can withstand these pressures, provided they are treated fairly by their (more powerful) trading partners. This is in line with the findings by Zaeferian et al. (2016) and Carnovale et al. (2019) from the automotive sector and particularly the part suppliers.

Managerial implications

This research has several implications for managers of grocery retailers (buyers) and suppliers. First, for buyers it is important to realise that fair treatment of suppliers does pay off. Even when there are difficult conversations with suppliers that need to take place it is in the interest of buyers to be perceived as fair (Corsten and Kumar 2005). Practically, this often could even mean simple things such as to communicate clearly what the “rules of the game” are, to explain how decisions are taken and/or to share more information about an event. Much of the responsibility lies with the purchasing team who not only need to provide

concrete arguments, but also to avoid building “single point of failure” relationships with suppliers. In other words buyers need to exercise discretion and be flexible in their dealings with suppliers and be ready to accept “in-kind” contribution during the negotiations. For example, securing suppliers’ commitment for product development or innovative promotional activities might be, in the medium to long-term a more rewarding option than focusing on simple price discounts which may put at risk the profitability of suppliers. Managers of suppliers should also make sure that they require clarity around terms and conditions. Secondly, as organisational justice stimulates commitment, managers of both sides should devote resources to cultivate the four types of organisational justice. At the very practical and operational level both suppliers and buyers may want to consider implementing specific standards (e.g. ISO 44001) in order to specify the requirements for the effective identification, development and management of collaborative business relationships.

Limitations and future research

Notwithstanding the novel context of this study and the significance of the results reported here, the study is not without its limitations. First of all, the research was restricted to one retailer and their relationship with its main suppliers, which limits to some extent our ability to make broader generalisations to other contexts. In addition, the sample size in this research was relatively small which limited our ability to do further analysis. Further research may include data collection from other suppliers to Retailer-Co. Similarly, our focus to one country raises also questions regarding the cultural implications of perceived fairness. It would be interesting to run the same survey in a similar, acute crisis, setting in order to explore the role of culture in perceived fairness.

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Table 5. Summary of Results: Inter-Organisational Justice and Performance

Indirect Effects		Effect β	SE (Boot)	BootLLCI 95%	BootULCI 95%
IntOrg Justice -> Commitment -> Financial Perf		.1105	.0523	.0252	.2316
IntOrg Justice -> Commitment -> Operational Perf		.1871	.0610	.0934	.3330
Conditional Indirect Effect (moderated by levels of financial crisis)		Effect (β)	SE (Boot)	BootLLCI 95%	BootULCI 95%
Levels of Financial crisis (IntOrgJ ->Commit -> FinPerf)	Very High	-.0055	.0471	-.1004	.0946
	High	.0675	.0405	.0121	.1746
	Moderate	.1031	.0492	.0218	.2162
	Low	.1412	.0634	.0321	.2857
	Very Low	.1790	.0800	.0426	.3611
Levels of Financial crisis (IntOrgJ ->Commit -> OpPerf)		Effect (β)	SE (Boot)	BootLLCI 95%	BootULCI 95%
Levels of Financial crisis (IntOrgJ ->Commit -> OpPerf)	Very High	-.0093	.0788	-.1484	.1669
	High	.1144	.0557	.0348	.2545
	Moderate	.1746	.0585	.0894	.3157
	Low	.2392	.0714	.1306	.4135
	Very Low	.3033	.0901	.1642	.5225
Direct Effects and Interaction		Effect (β)	SE (Boot)	BootLLCI 95%	BootULCI 95%
IntOrgJustice -> Financial Perf		.2543	.1080	.0402	.4683
Commitment -> Financial Perf		.2508	.1004	.0518	.4497
IntOrgJustice -> Operational Perf		.2090	.0950	.0209	.3972
Commitment -> Operational Perf		.4248	.0900	.2465	.6031
IntOrgJustice -> Commitment		.4067	.0937	.2211	.5923
IntOrg x Financial Crisis		.1990	.0921	.0166	.3814

Note: Boot= bootstrap sample size; CI= confidence interval; SE=standard error

Table 6. Summary of Results: Inter-Personal Justice and Performance

Indirect Effects		Effect (β)	SE (Boot)	BootLLCI 95%	BootULCI 95%
IntPers Justice -> Commitment -> Financial Perf		.1584	.0655	.0382	.2970
IntPers Justice -> Commitment -> Operational Perf		.2615	.0678	.1470	.4160
Conditional Indirect Effect (moderated by levels of financial crisis)		Effect (β)	SE (Boot)	BootLLCI 95%	BootULCI 95%
Levels of Financial crisis (IntPersJ ->Commit -> FinPerf)	Very High	.0600	.0555	-.0162	.2180
	High	.1241	.0534	.0355	.2496
	Moderate	.1553	.0623	.0421	.2889
	Low	.1888	.0764	.0494	.3508
	Very Low	.2220	.0929	.0593	.4274
Levels of Financial crisis (IntPersJ ->Commit -> OpPerf)		Effect (β)	SE (Boot)	BootLLCI 95%	BootULCI 95%
Levels of Financial crisis (IntPersJ ->Commit -> OpPerf)	Very High	.0990	.0838	-.0406	.3064
	High	.2049	.0592	.1101	.3473
	Moderate	.2564	.0628	.1453	.3965
	Low	.3117	.0773	.1693	.4752
	Very Low	.3665	.0979	.1926	.5751
Direct Effects and Interaction		Effect (β)	SE (Boot)	BootLLCI 95%	BootULCI 95%
IntPers Justice -> Financial Perf		.1570	.1145	-.0698	.3838
Commitment -> Financial Perf		.2710	.1095	.0542	.4879
IntPers Justice -> Operational Perf		.1188	.0878	-.0551	.2927
Commitment -> Operational Perf		.4474	.0952	.2588	.6360
IntPers Justice -> Commitment		.5696	.0691	.4327	.7065
IntPers x Financial Crisis		.2449	.0863	.0739	.4158

Note: Boot= bootstrap sample size; CI= confidence interval; SE=standard error

Highlights

- In times of crisis suppliers who perceive themselves to be fairly treated by their customers will devote additional resources to the relationship
- The commitment that comes from being fairly treated pays dividends in 'normal' trading environments by facilitating the sharing of risk, joint decision-taking and the collaborative allocation of resources.
- In strong buyer-supplier relationships the underlying processes of collaborative working are more important than the contractual distribution of benefits.