Do Supplier Perceptions of Buyer Fairness Lead to Supplier Sales Growth?

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1. Introduction

Today’s competitive environment has increased the importance of building and maintaining effective relationships with supplying companies. The fundamental assumption of supply chain management is that long-lasting relationships between a manufacturer and its suppliers can provide significant opportunities for gaining competitive advantage and improving financial performance (De Wulf et al. 2001; Palmatier et al. 2008). Perceptions of fairness in such relationships between manufacturers and suppliers become a vital factor in the sustainability and quality of these long-term relationships (Gassenheimer et al. 1998; Kumar et al. 1995b).

Automotive manufacturers and suppliers are critically aware of such issues; for example Nissan uses its ‘Total Cost Control’ programs to improve their relationships with suppliers, not just in terms of bringing procurement costs down, but also to create a fair and equitable partnership (Carr and Ng 1995). Total Cost Control, a strategic approach to target costing, is aimed at reducing specifically the life cycle costs of new products by controlling costs throughout the whole supply chain as well as in the supply portfolio (Dubois 2003). It helps key suppliers particularly with small incremental cost improvements, thereby creating quick-wins which are shared with Nissan (Sako 2004). As a result of the equitable and transparent process, these suppliers perceive their relationship with Nissan as being fair in terms of outcomes as well as interactions, and consequently increase certain relational activities (such as ‘open-book’ accounting, or relationship-specific investments) (Möller et al. 2011). This in turn allows them to improve their offerings to Nissan, which consequently results in higher sales by increasing their share-of-purchasing by category with Nissan (Carr and Ng 1995).
Despite the growing research interest in the management of supply chains in general, and the
issue of perceived fairness (justice) in business relationships in particular, a review of the
extant literature reveals a number of shortcomings. First, the body of literature on
organizational fairness has been heavily skewed towards research studies conducted in the
business-to-consumer environment. For a comprehensive review see for example Orsingher
et al. (2010) and Cohen-Charash and Spector (2001). The fairness research in business-to-
business settings in general and buyer-supplier relationships in particular has been somewhat
neglected. Luo’s (2005, 2007) study on fairness in international cooperative alliances is
among the exceptions, as are Griffith et al. (2006) and Kumar et al. (1995b) with their
research on fairness in buyer-supplier relationships.

Secondly, in spite of the tripartite conceptualization of fairness perceptions in consumer
research (distinguishing between distributive, procedural, and interactional justice) (e.g.
Grégoire et al. 2010; Wirtz and McColl-Kennedy 2010), the existing inter-organizational
studies have not considered all three dimensions of justice simultaneously. For instance, Luo
(2005) focuses solely on procedural justice; Griffith et al. (2006), Ireland and Webb (2007),
and Kumar et al. (1995b) focus on procedural and distributive justice. However, a
comprehensive examination of relational activities employed by supply chain members to
stimulate sales growth and foster relational characteristics (trust, satisfaction, commitment,
long-term orientation, etc.) requires a simultaneous examination of all three dimensions of
justice and their combined effect on relationship performance (Homburg and Fürst 2005).

Thirdly, fairness perceptions are usually analyzed from a buyer’s point of view, and resulting
outcomes (e.g. sales, performance) are associated with such buyer perceptions (e.g. Griffith et
al. 2006; Homburg and Fürst 2005; Kumar et al. 1995b). However, relational characteristics
are underpinned by actions, attitudes, and behaviors of all partners within a relationship; thus
supplier perceptions are equally important but often overlooked in this context.
Fourthly, it has been argued that the degree of dependence may lead to contradictory results in justice perception studies (Grégoire and Fisher 2008; Kumar 1996). Therefore, while fairness perceptions as well as relationship quality may impact a suppliers’ sales growth, it is not clear whether such associations are equally relevant in situations of different degrees of dependency within the business relationship. As such, we posit that the lack of attention regarding the issue of dependency in examining the impact of justice perceptions in buyer-supplier relationships limits our current understanding.

The aim of this study is to investigate the direct and indirect impact of justice perceptions on relationship quality and on sales growth, based on a seller perspective. The contribution of this research is fivefold: First, it examines the *simultaneous impact* of distributive, procedural, and interactional justice, whereas prior studies often focus on one or two dimensions of justice perceptions. This is important because the three justice dimensions represent overlapping aspects; limiting an analysis to studying the effect of one or two of the justice dimensions does not fully cover the phenomenon of fairness perceptions. Secondly, we use *seller fairness perceptions* as possible antecedents for sales effects, and test whether justice issues have a direct effect on sales levels, or if that effect is mediated. As business interactions are characterized by interdependence, the attitudes of the selling entity are equally important for affecting relational outcomes (Ford et al. 2003; Håkansson and Snehota 1995), however, in existing research sales outcomes have been exclusively linked to buyer-related constructs of fairness. Thirdly, we employ *objective longitudinal sales data* to capture time-lag issues of these direct and/or indirect effects of justice perceptions. This is important because the effects of attitudes such as fairness perceptions are unlikely to materialize instantaneously; therefore, understanding such phenomena needs to take into account dynamics in the outcome constructs (George and Jones 2000). Fourthly, we assert that the level of dependency can considerably influence the tested associations, an issue that has not
been investigated before. Therefore, our research contributes to the literature on supply chain management by examining the moderating effects of dependence. This is important because a considerable number of business supply relationships are characterized by a seller being dependent on a particular buying company, for example due to high proportions of sales and profitability being associated with a single customer firm.

Finally, sales growth aspects are managerially critical (together with profit growth) but have been neglected in marketing studies. We therefore relate our analyses to a dependent construct, which is directly linked to managerial practice considerations (Morgan et al. 2009). In the subsequent sections we first outline the justice theory assumptions underlying our study. We then explore the mediating impact of relationship quality and proceed by developing a nomological model and some research hypotheses, including moderation effects of dependencies. We introduce our research design and report the results of the data analysis based on an empirical study with 212 automotive parts suppliers (APSs) in Iran. This data was enriched by using objective longitudinal data about sales levels for these supplier companies with a particular car manufacturer over a three-year period. The hypotheses are tested using a latent growth curve model (LGCM) (Duncan et al. 2006), and finally we conclude with a discussion of the results, and outline theoretical and managerial implications, as well as directions for future research.

2. Theoretical background

2.1. Justice theory

Justice or fairness theory is derived from social exchange and equity theory (Cohen-Charash and Spector 2001; Homburg and Fürst 2005; Orsingher et al. 2010). Organizational justice refers to the organization’s perception of the fairness of treatment received from other organizations, and their reactions to such perceptions (Aryee et al. 2002; Homburg and Fürst 2005). Extensive research on organizational justice has identified three justice dimensions:
distributive, procedural, and interactional justice (Cohen-Charash and Spector 2001; Orsingher et al. 2010).

*Distributive justice* deals with the perceived fairness of the outcomes received (Kumar 1996; Maxwell et al. 1999; Patterson et al. 2006). In supply chain and relationship management, distributive justice focuses for example on how the benefits and risks are shared between the supplier and manufacturer (Griffith et al. 2006; Kumar 1996). A manufacturer can positively impact the perception of its relational supply partner regarding the fairness of outputs through various ways. For instance, if a manufacturer requires a change in processes or products from its supplier, it can share the costs for the resulting R&D activities, or it can share the economic benefits gained from such changes. Furthermore, the methods for price negotiations can impact on the perceived distributive fairness (Kumar et al. 1995b).

*Procedural justice* refers to the processes, practices and policies guiding the interactions between organizations. These processes are used to determine the exchange outcomes (Kumar et al. 1995b). This type of justice has its roots in legal research by Thibaut and Walker (1975) but has subsequently become a focus of research in organizational psychology (Colquitt et al. 2001) and strategy (Ellis et al. 2009; Kim and Mauborgne 1998; Luo 2007). Focusing on supplier-manufacturer relationships, procedural fairness is related to some of the following activities: the willingness of the manufacturer or supplier to engage in open two-way communication, the consistency of manufacturer’s purchasing policies, the extent to which a supplier can question and challenge a manufacturer’s policies, or the extent to which a manufacturer or supplier provides rational explanations for certain decisions affecting its interaction partner (Kumar 1996).

Finally, *interactional justice* involves the manner in which an exchange partner is treated during the exchange process (Cohen-Charash and Spector 2001). In a buyer-supplier relationship, interactional justice refers to the behaviours and the degree of interpersonal
sensitivity that supplier’s employees exhibit towards buyer’s representatives. This relates to the social glue of business relationships, for example honesty, empathy, courtesy, or respect (Homburg and Fürst 2007; Patterson et al. 2006).

In our research, we focus on organizational justice perceptions from the supplier perspective, and operationalize organizational justice as a higher-order construct consisting of distributive, procedural, and interactional justice. A number of studies have examined the impact of organizational justice on organizational behavior and outcomes (however, these studies have mainly focused on customers’ fairness perceptions). Generally, the results of these studies indicate that higher perceived levels of organizational justice not only improve relationship quality but also impact other organizational outcomes and overall performance (Griffith et al. 2006; Kumar et al. 1995b; Luo 2005). Table 1 provides an overview of existing studies using justice theory in an inter-organizational setting.

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### 2.2. Relationship quality

In today’s business environment, characterized by high level of uncertainty, suppliers and manufacturers try to maintain long-lasting relationships to reduce transactional costs and risks, and to increase co-created benefits (Crosby et al. 1990; Dabholkar et al. 1994; Palmatier et al. 2008). Business relationships are multi-faceted, i.e. relationships between business partners are comprised of various dimensions such as trust, commitment, satisfaction, communication, cooperation, etc. (Palmatier et al. 2007a). To address the multidimensionality of business relationship characteristics a number of studies have focused on the concept of relationship quality (Morgan and Hunt 1994; Palmatier 2008; Van Bruggen et al. 2005). Relationship quality refers to the characteristics and the quality of relational ties between two business partners (Palmatier 2008; Van Bruggen et al. 2005).
Relationship quality is usually considered as consisting of distinct but interrelated components that reinforce each other (Crosby et al. 1990; Jap et al. 1999). Although relationship quality has been the focus of many studies (e.g. Crosby et al. 1990; Skarmeas and Robson 2008), there exists no consensus on the operationalization of relationship quality. Nonetheless, most studies consider relationship quality as a construct that reflects issues around trust (Morgan and Hunt 1994), commitment (Dorsch et al. 1998; Kumar et al. 1995b), satisfaction (Garbarino and Johnson 1999; Smith 1998), conflict resolution (Jap et al. 1999; Kumar et al. 1995b), and long-term orientation (Lages et al. 2005; Ural 2009). For a more comprehensive overview of the relationship quality construct see Athanasopoulou (2009).

For the purpose of our study, we conceptualize relationship quality as a higher order construct and propose that relationship quality consists of trust, commitment, and long-term orientation since these factors capture the essential aspects of supplier-manufacturer relationships. In particular, we chose trust and commitment as prior studies on relationship quality have frequently highlighted the importance of these two dimensions (e.g. Crosby et al. 1990; Huntley 2006; Kumar et al. 1995b; Morgan and Hunt 1994). In addition, following Lages et al.’s (2005) contribution, we conclude that long-term orientation is a crucial feature of every business relationship and thus should be considered as a pivotal dimension of relationship quality.

*Trust* is one of the pivotal characteristics of a business relationship (Andaleeb 1995; Anderson and Narus 1990; Morgan and Hunt 1994). It refers to the willingness of the firm to rely on its partner in whom it has confidence (Morgan et al. 2004). Trust in the honesty of the partner, and trust in the partner’s benevolence (the belief that the partner is interested in the firms’ welfare and will avoid actions that have negative impact on the firm) are the two main sub-components of trust (Kumar et al. 1995b). It has been shown that through decreasing the
impact of more formal contracts, trust reduces the transaction costs and creates a positive working environment in business relationships (Zhang et al. 2003).

Similar to trust, commitment is one of the most widely accepted components of relationship quality. Commitment refers to the willingness of the exchange partners to make short-term sacrifices to develop and maintain long-lasting, stable, and profitable relationships (Anderson and Weitz 1992). Commitment has been posited as having a crucial role in the structuring of business relationships (Söllner 1999). Mutual commitment in a marketing channel is seen as key to building a successful business relationship and creating competitive advantages (Geyskens et al. 1996).

The third element, long-term orientation is defined as the perception of the interdependence of outcomes, i.e. the expectation that both proprietary outcomes and joint outcomes are benefiting the partners in the long run (Ganesan 1994). Firm relationships based on long-term orientation tend to rely on cooperation, goal sharing, and risk sharing to maximize their joint profits (Lages et al. 2005). The underlying assumption is that long-term relationships are more efficient and thus they can offset short-term inequities. Overall, it has been argued that long-term orientation can augment relational behavior, decrease conflict, and enhance satisfaction (Griffith et al. 2006). There are two main differences between the firms with a long-term orientation vis-à-vis those with a short-term orientation. First, while long-term oriented firms rely on a string of connected transactions, the short-term oriented firms rely on single transactions to maximize their benefits. Secondly, firms with short-term orientation focus on present goals and opportunities, while firms with long-term orientation tend try to achieve future goals and manage both current and future outcomes (Ganesan 1994).

3. Hypothesis development

3.1. The mediating role of relationship quality
In the literature on organizational justice, there exists evidence suggesting that perceived fairness is closely linked to different aspects of relationship quality (Aryee et al. 2002; Cohen-Charash and Spector 2001; Griffith et al. 2006; Ireland and Webb 2007; Kumar et al. 1995b). For instance, Aryee et al. (2002) demonstrate that organizational justice can considerably increase trust at an individual level. Patterson et al. (2006) find a positive association between all three forms of organizational justice and service recovery satisfaction. Focusing on procedural and interactional justice, Kumar et al. (1995b) show that a reseller’s perception of fairness has a positive impact on relationship quality with suppliers. Moreover, the results of Griffith et al. (2006) indicate that perceptions of the fairness of a business partner are positively associated with the firm’s long-term orientation towards that partner.

However, most studies have focused on fairness perceptions of the customer company in a business relationship (Homburg and Fürst 2005; Kumar et al. 1995a). Our study focuses on fairness perceptions by the supplier, and assesses consequences for the business relationship as well as the sales performance of this supplier within the relationship. A supplier that is not treated well by its buyer (in our study: an automotive manufacturer) will develop negative attitudes such as lower trust and commitment, and a more short-term orientation. In contrast, the existence of organizational justice can serve as a sign for a supplier that it is valued by a manufacturer, which in turn leads to the creation of positive attitudes. Moreover, when the supplier believes that its contributions are being sufficiently rewarded, it will respond by not only developing a stronger relationship with its partner (manufacturer) but also by signaling its desire to continue the partnership (Griffith et al. 2006). This should result in an increase in the relationship quality.

According to the findings of prior studies, through decreasing the possibility of opportunism, relationship quality increases the supplier’s confidence in the relationship (Anderson and Weitz 1989, 1992). Consequently, it can be assumed that suppliers’ willingness and ability to
do business with manufacturers increases when they have strong and long-lasting relationships (here characterized by high level of trust and commitment and a long-term orientation). This could mean further relationship-specific investments, or adaptations on the seller side which increase the likelihood of sales to the manufacturer (Palmatier et al. 2007a).

In addition, although traditionally car manufacturers are seen as ultimately determining the decisions regarding sales levels, we argue in line with the relational approach to inter-organizational marketing that sales levels are based on interactions, i.e. managerial decisions on both sides, and thus partly even on mutual agreements between a car manufacturer and APSs. Car manufacturers often simultaneously source a particular part from several APSs in order to avoid strong dependency on individual APSs. Thus, what drives the sales levels, and its growth, is not solely the car manufacturer’s autonomous decision, rather it is the quality of the relationship, and the resulting interactions between the parties, that drives sales (Gassenheimer and Manolis 2001; Palmatier et al. 2008; Palmatier et al. 2007b; Skarmeas et al. 2008). Thus, it is expected that, *ceteris paribus*, higher levels of relationship quality increase the sales level of a supplier within that relationship over time (Huntley 2006). Consequently, we hypothesize a mediating effect of relationship quality on the relationship between the seller’s justice perceptions and sales growth.

**Hypothesis 1:** Relationship quality mediates the positive association between seller’s perceptions of organizational justice and sales growth in a business relationship.

3.2. The moderating role of dependency

Dependency in supply chains and business relationships is defined as a firm’s need to maintain a relationship with a specific partner for the fulfillment of its aims (Hewett and Bearden 2001). While a company may become dependent on its partner for various reasons, the inability to change partner has been recognized as one of the main signs of (inter)dependency (Heide and John 1988; Kim and Hsieh 2003). High specificity of the
supplier’s products and the existence of few customers (e.g. manufacturers) in the market are amongst the main reasons for such inability to switch.

The concept of dependency has been shown to be of crucial importance in buyer-seller relationships (Gassenheimer et al. 1998; Kim and Hsieh 2003; Kumar et al. 1995a). The existence of dependency will increase the possibility of opportunism and mistreatment by the more powerful partner (Lawler et al. 1988) and therefore can impede the development of collaborative business activities between the two parties. We argue that the more a supplier depends on a manufacturer, the less sensitive it would be towards the quality of the relationship with the manufacturer. This is mainly due to the fact that highly dependent suppliers find it very hard to replace their partner with other customers (manufacturers) simply because there are few other alternatives available, and/or associated costs and risks of changing partners are very high. In such circumstances, and regardless of the underlying levels of relationship quality, the supplier may do anything to maintain or even improve its relationship with the manufacturer.

This situation, however, is expected to be reversed when the dependency is low: in this case, the supplier can replace the manufacturer as a business partner, for example because it has a number of attractive alternatives, or a change to a new customer would not incur high costs or risks. Consequently, the supplier becomes very sensitive to the characteristics of its relationship with the manufacturer, i.e. the relationship quality. If the relationship between a supplier and a manufacturer is characterized by trust, commitment, and long-term orientation (i.e. high levels of relationship quality), then the supplier may make efforts to increase its sales levels over time (i.e. achieve sales growth). If not, the supplier simply switches to other manufacturers as customer companies. Building on the above arguments, we hypothesize that:
**Hypothesis 2:** Supplier dependence on a manufacturer negatively moderates the association between relationship quality and sales growth in a business relationship.

4. Research design and analysis

4.1. Sample and data collection procedure

We employed longitudinal data for our empirical analysis. We test our hypotheses with a sample drawn from the automotive industry in Iran, where a relatively large number of Automotive Parts Suppliers are affiliated with half a dozen large national automotive manufacturers. Data from Iran was selected due to several reasons. First, Iran’s internationally oriented fast-growing economy represents a developing and rapidly emerging market, yet, business marketers know little –if anything- about business relationships in this country (Mafi and Carr 1990). Secondly, the unique economic conditions of the automotive market, e.g. the absence of any foreign automotive manufacturers in Iran, have created a distinctive situation in which some of the APSs have developed the capacity and capabilities that enables them to simultaneously work with different automotive manufacturers in Iran. This is an important characteristic as it provides the potential for switching between customers (at least for some APSs), therefore allowing us to directly understand the reaction of these APSs to perceived unfairness or low relationship quality in business relationships.

We collected primary data using a two key-informant survey design. The original questionnaire was first designed and refined in English. Next, the original English version of the survey was translated into Persian and back translated into English to ensure translation equivalence. Differences between the original and the back-translated versions were then reconciled. We initially used face-to-face interviews to pre-test the questionnaire with four managers of APSs in Iran to ensure the comprehensibility of the translated questionnaire. After few minor wording changes, we mailed the translated questionnaire to both the CEO and the chief marketing officer of 500 APSs (i.e. 1000 informants) in January 2009. The
common theme among these APSs is that for all of them a particular automobile manufacturer is a major buyer of their products. In the personal letter that accompanied the questionnaire, respondents were guaranteed anonymity and confidentiality of the data to reduce evaluation apprehension.

We received completed and useable questionnaires from a total of 326 informants. We evaluated each informant’s knowledge of the APS’s business relationship with the car manufacturers, as well as their level of knowledgeability regarding the survey in general, using a 7-point Likert scale. We dropped three questionnaires (i.e. informants indicating levels of 4 or less for either of these questions). Therefore the final sample includes 323 responses from 212 APSs, resulting in a 32.3% response rate, which is generally accepted as satisfactory for comparable studies (e.g. Van Bruggen et al. 2005). Following the approach of Anderson and Narus (1990), we then verified that random measurement errors across informants’ reports are uncorrelated, suggesting that two informants in each APS independently answered the questionnaire. On average our sample APSs had been in business for 20 years. A total of 50% of APSs reported sales of less than $50 million, 20% reported sales of $50-$100 million, and 30% reported sales greater than $100 million. Of these APSs, 36 were small companies, 93 were medium-sized, and 83 were categorized as large based on the number of full-time employees. We further conducted a short telephone survey about company information with a sample of 40 non-respondents, which was then compared with the original sample data. The results of a t-test for equality of means of these two groups suggest that non-response bias is not a problem.

This study also benefits from a longitudinal design. George and Jones (2000) argue that the relationships between constructs in organizational behavior studies are often not instantaneous, i.e. changes in a predictor variable are not instantly accompanied by changes in the criterion variable. Instead, some level of time aggregation is involved. Since our goal is
to predict the impact of fairness and relationship quality on sales growth, we felt it necessary to incorporate sales growth data for several years after our predictors (fairness perceptions and relationship quality) were measured. The chosen three-year period is expected to provide adequate time for the effects of fairness and relationship quality to become manifest in changes in sales growth. Similar approaches are often practiced in comparable business marketing research (Fang et al. 2008; Palmatier et al. 2007a).

Therefore, a second round of data collection followed after three years, in December 2011. We contacted the automotive manufacturer to get objective sales data for each of the 212 APSs in our sample over the last three years. This minimized the potential existence of common method bias in two related ways: First, we measure the independent predictor constructs (i.e. perception of fairness and relationship quality) in time 1, using where possible two key informants from the supplier side of the business relationship. Secondly, we measure the dependent construct (i.e. supplier sale growth based on sales level data) through objective data from the buyer end of the business relationship (i.e. the automobile manufacturer) at 3 different points in time (time 1, 2, and 3). Both the two key informant approach followed in our research design, and the collection of objective sales data for our dependent variable are recommended approaches to address common method bias issues (Podsakoff et al. 2003).

4.2. Measurements

We used existing multi-item measurement models with a strong psychometric test history for their validity and reliability in business marketing research. The final set of measures is presented in Table 2. All constructs in our model are measured with reflective scales, in line with their original conceptualization (Diamantopoulos and Siguaw 2006).

Perception of fairness, following our theoretical conceptualization, is operationalized as a higher order construct (Anderson and Gerbing 1988; Jarvis et al. 2003) through its dimensions of procedural, interactional, and distributive fairness. The rationale for using a
A reflective higher order construct relates to the fact that the three justice dimensions represent overlapping characteristics. For example, Kumar et al. (1995b) found that the correlation between the procedural and distributive justice is .5 (also relating to an inter-organizational setting). Similarly, Tax et al. (1998) report significant interaction effects between the three justice dimensions (although in a business-to-consumer complaint management context). Thus, although fairness is conceptualized as consisting of three dimensions, these are not fully independent from each other but rather there exist spill-over effects which are captured in the operationalization as a higher order construct in our study. All of the items for the three dimensions of fairness are adapted from Homburg and Fürst (2005), and are operationalized through three, five, and four items respectively.

Several different operational alternatives exist for the relationship quality construct (for comprehensive review of the literature see Athanasopoulou 2009). Relationship quality in the literature is often established as a higher order construct (Anderson and Gerbing 1988; Jarvis et al. 2003) with trust and commitment as its major dimensions (e.g. Crosby et al. 1990). To obtain a comprehensive coverage of relationship quality, we added long-term orientation as a third dimension of relationship quality. Long-term orientation incorporates the APS’s perception of both its own and the automotive manufacturer’s intention to continue the relationship in the long term. In addition, trust in our study is measured at two different levels, the interpersonal and the interorganizational level (Zaheer et al. 1998). Consequently, relationship quality in this study is manifested in four reflective first-order factors, all measured via existing items: interpersonal trust (Zaheer et al. 1998); interorganizational trust (Zaheer et al. 1998); commitment (Kumar et al. 1995b); and long-term orientation (Ganesan 1994). These factors are measured, using four, five, three, and four items respectively.
The *dependence* construct is adapted from Kim and Hsieh (2003). The four items for this construct capture the extent to which an APS is dependent on the car manufacturer. Finally, to capture the dependent *sales variable*, we used objective data i.e. absolute sales levels, collected from the automotive manufacturer for each of the APSs in our dataset over the last three years (i.e. sales in year 2009, 2010, and 2011). Given that we collected objective data for each APS in our sample, the level of analysis is represented by the APS in its relationship with the automotive manufacturer. By taking the averages, we combined responses for those APSs where two informants returned the completed questionnaires (n=111), leaving 101 APSs with only one informant, thus creating an overall sample size of 212. We assessed interrater reliability between the two informants by calculating the intra-class correlation coefficient (ICC) (McGraw and Wong 1996). The ICC across scales ranged from .65 to .78 (*p* < .01).

We took several steps to evaluate the robustness of the measures. First, we performed a confirmatory factor analysis on our sample using the maximum likelihood method in LISREL to evaluate the psychometric properties of the constructs. We limited each of our 36 measurement items to load onto its pre-identified factor and correlated each factor with all other factors in the model. We removed 4 items that performed poorly, using the cut-off point of .7 (Hair et al. 2010). Our purified measurement model suggests a good fit with the data, ($\chi^2(\text{df}=436)=694.56$ *p* < .01, CFI = .98, IFI = .98, NFI = .96, NNFI = .98, SRMR = .048 and RMSEA = .052). All item loading are significant (*p* < .01) and ranged between .73 and .93, thus supporting convergent validity (see Table 2). Both composite reliability (Fornell and Larcker 1981) and Cronbach's alpha are .87 or above, indicating good internal reliability for all the constructs in our study. We provide the descriptive statistics and correlations in Table 3.

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**Insert Tables 2 and 3 around here**

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We confirmed discriminant validity by calculating average variance extracted (AVE) for each construct (see Table 3) and verified that it was higher than the squared correlations for all possible pairs of constructs (Fornell and Larcker 1981). In addition, following Anderson’s approach (1987), we analyzed all pairs of constructs in a series of two-factor CFA models (the $f$ coefficient in model one was set as free, while it was set to unity in model two) and performed a $\chi^2$-difference test on the paired nested models. In all pairs the critical value ($\Delta \chi^2_{(df-1)}=3.84$) was exceeded, further supporting discriminant validity.

4.3. Data analysis

Following the approach by Eggert et al. (2011), we used latent growth curve modeling (LGCM) for our data analysis regarding the impact of perceived fairness and relationship quality on longitudinal sales growth trajectories. LGCM is an advanced application of structural equation modeling that is used on repeatedly measured dependent data to model individual growth trajectories (Jaramillo and Grisaffe 2009). LGCM is used to reveal the trajectories for those latent constructs that are specified and observed as a function of the same item across multiple time points (Duncan et al. 2006). It has been argued in the literature that LGCM is one of the most powerful and informative approaches for the analysis of longitudinal data (Byrne et al. 2008; Eggert et al. 2011). LGCM has several advantages compared with more traditional methods of the analysis of growth curves such as autoregressive and simple difference scores. LGCM is performed using structural equation modeling approaches and therefore shares the same strengths with regard to its statistical methodology (Duncan et al. 2006): e.g. the ability to provide within-case and between-case models of individual growth within the same study; accounting for measurement errors and different residual structures; and its capacity to test complex relationships including mediation and moderation tests (Byrne et al. 2008; Eggert et al. 2011). Yet, it has been
argued that modeling through latent growth curve approaches is underused, at least in the marketing discipline (Eggert et al. 2011).

5. Model Specification

To develop and test our LGCM, we used LISREL and followed the two-step approach explained by Bollen and Curran (2006). In the first step, we build an unconditional LGCM (i.e. within-case model) comprising two constructs, namely sales level and sales growth. These two constructs are fit to the repeatedly measured sales variable to model intra-case change and simultaneously examine between-case variability (Jaramillo and Grisaffe 2009). Once the optimum growth model with satisfactory fit statistics and significant intercept and slope variability is identified, we develop in a second step a conditional LGCM (i.e. between-case model) to explain inter-individual differences by adding explanatory (i.e. independent) constructs and by testing both the hypothesized mediation effect of relationship quality and the moderation effect of dependency.

5.1. Unconditional LGCM

To develop the unconditional LGCM, we fit the two constructs of sales level and sales growth to three measures of sales in three consecutive years. We then compared alternative growth models for sales. These nested models vary in terms of the functional form and the residual structure of the growth curve (Eggert et al. 2011). As illustrated in Table 4, we first examined whether the change of APSs’ sales to the car manufacturer over the three years was linear. A $\chi^2$-difference test verified that estimating a free, non-linear LGCM does not significantly perform better than the linear model. This finding suggests that the change of sales over the last three years for APSs is reasonably linear. Next, we compared two nested linear LGCMs: one with different time-specific residual variances and one where they were set to be the same. Our $\chi^2$-difference test favored the more parsimonious homoscedastic residual structure (i.e. the model with the same residual variance).
The estimated values for the parameters of this unconditional LGCM indicate that the average initial level of sales in our APSs in 2009 is 2.556, and sales increase by .426 from 2009 to 2011. Therefore, on average, the percentage of increase in sales growth for our sample ASPs is 16.67% whereas according to publicly available data, at the same time, the number of cars produced by the specific car manufacturer increased by 4.8% only. This finding indicates that the sales growth in APSs is only marginally due to the increase in the overall number of cars produced by the car manufacture, i.e. other factors are responsible for the sales growth. The covariance between sales level and sales growth is -.081 (p<.05), which suggests that APSs with low levels of sales in year 2009 are exhibiting greater rates of increase over the next years in comparison to the APSs with high levels of sales in that year.

In addition, the significant variances for sales level (1.555) and sales growth (.179) confirms considerable inter-company differences in both the APSs’ initial levels of sales in 2009, and their changes between 2009 and 2011. Therefore, a more comprehensive conditional LGCM which incorporates antecedent constructs can be used to explain the varying sales growth trajectories.

5.2. Conditional LGCM and hypothesis testing

Once the optimum unconditional LGCM was identified, we introduced both fairness and relationship quality as two higher-order constructs into our model (see Figure 1). We also controlled for APS size, APS age, relationship age between the APS and the car manufacturer, and macro level fairness of the automobile industry in general (Aurier and Siadou-Martin 2007).
The analysis of the conditional LGCM for testing the first hypothesis proceeded in a way similar to the approach specified by (Baron and Kenny 1986), using structural path modeling with maximum likelihood criteria. We performed a formal test of mediation, using a $\chi^2$-difference test. We examined two alternative nested models: a baseline model, where relationship quality fully mediates the relationship between fairness and sales growth, and a rival model, where we added the direct link from fairness to sales growth to our baseline model.

Results of these analyses are provided in Table 5. The first row in the table illustrates the goodness-of-fit findings for the baseline model. The second row presents the $\chi^2$ value for the same model but with one added direct path from fairness to sales growth. The difference in $\chi^2$ values between the baseline model and this rival model ($\Delta\chi^2(1)=.1, \text{n.s}$) with one degree of freedom, is therefore the test of the significance of this added path. Since this difference is not significant, we can conclude that the direct path from fairness to sales growth is not relevant, and therefore relationship quality is fully and strongly mediating the effects of fairness on sales growth ($R^2=.36$).

The results of our path analysis indicates that fairness has a strongly positive and significant effect on relationship quality ($\beta=.65$, $p<.01$), and increasing relationship quality leads to significant sales growth in the following years ($\beta=.54$, $p<.01$). Therefore, the mediated effect of seller’s fairness perception on sales growth is 0.35, while the direct path from perception of fairness to sales growth is not significant ($\beta=.06$, $p>.3$). Furthermore, when relationship quality is removed from the model, the direct path from fairness to sales growth becomes significant ($\beta=.23$, $p<.01$). This finding further supports our hypothesis that relationship quality is the mediator of the link between fairness and sales growth, and thus fairness is not merely an antecedent for the relationship quality. We also controlled for the effect of fairness and relationship quality on sales levels; both paths are not significant, and the overall
explained variance of sales levels is only $R^2 = .03$, suggesting that other explanatory variables account for sales levels. Thus, in line with our hypothesis it can be shown that our model focuses exclusively on understanding sales growth trajectories and not sales levels in general. It is noteworthy to mention that the standardized factor loadings between three first-order constructs of procedural, interactional, and distributive justice, and the second-order construct of fairness are .78, .76, and .82 respectively (all significant at $p < .01$). These loadings are representative of the relative importance of each of the three dimensions of fairness on relationship quality and sales growth. As an alternative model, we also tested the model using first-order conceptualizations of the three fairness dimensions and found similar results: While the direct paths from procedural, interactional, and distributive justice to sales growth are not significant, the paths from these three dimensions of fairness to relationship quality are significant ($\beta_{procedural} = .16$, $\beta_{interactional} = .32$, and $\beta_{distributive} = .40$, all $p < .01$). In addition the path from relationship quality to sales growth is significant ($\beta = .58$, $p < .01$).

To test for our second hypothesis, we performed a multi-group LGCM. Such a multi-group approach is commonly used in business and marketing research (Palmatier et al. 2007c). We split our sample into two groups of high versus low levels of dependency between APSs and the car manufacturer. We then examined the moderating effect of the level of dependency by running our LGCM model for each sub-group separately, and comparing the link between relationship quality and sales growth for the two sub-groups. The results revealed that the two groups of APSs significantly differ concerning the impact of relationship quality on sales growth ($\Delta \chi^2_{(1)} = 68.8$ $p < .01$). Whereas the direct effect of relationship quality on sales growth is strengthened for APSs with low levels of dependency ($\beta_{(Low \ Dependency)} = .74$, $p < .01$), this effect becomes insignificant for APSs with high levels of dependency, hence providing support for hypothesis 2. The R-square for sales growth for the low dependency APSs
increases from .36 overall to .57, whereas it marginally decreases for the high dependency APSs ($R^2_{\text{High dependency}} = .34$).

6. Discussion

This study was aimed at investigating the direct versus indirect impact of organizational justice as perceived by the seller company. Specifically, the study examined the potential mediating effect of relationship quality on the link between organizational justice and sales growth on one hand, and the moderating effect of dependence on the effect that relationship quality has on sales growth on the other hand. The results of a latent growth curve model analysis on our longitudinal data revealed that seller’s organizational justice perceptions considerably enhance the quality of the relationship between the automotive manufacturer and its APSs. This result is in line with the finding of Kumar et al. (1995b) for customer justice perceptions; they demonstrate that reseller perception of the supplier fairness is positively associated with relationship quality. Relationship quality in our study was also found to be significantly and positively related to sales growth.

The findings further provided full support for our proposition that APSs’ dependence negatively moderates the effects of relationship quality on sales growth. We find that higher relationship quality leads to increased sales growth when the APSs are less dependent on the automotive manufacturer. This can be due to the fact that both parties are in (perceived) equal positions. Therefore, the main factors that persuade APSs to maintain (and increase) the partnership is the existence of a relationship that is long-term oriented and based on commitment and trust. However, we found no significant association between relationship quality and sales growth when the level of dependency was high. This might be due to the fact that when the APS is highly dependent on the car manufacturer, it cannot easily switch to other manufacturers since such changes are considered costly and risky. Therefore, the APS maintains its partnership (and may even increase its collaboration activities) not because it
has a reliable long-lasting relationship but because it has no other options. This phenomenon is the flip side of what Homburg and Furst (2007) coined as defensive organizational behavior towards customer complaints.

6.1. Implications for Theory

Several theoretical implications can be gauged from our study. First, we found that although all three dimensions of fairness are important and positively enhance APSs’ perception of relationship quality; their relative importance varies. To APSs, distributive and interactional justice are more important than procedural justice. In other words, the outcome and the interactions between the APSs’ and the car manufacturer’s representatives are the key in enhancing relationship quality.

Moreover, our findings add to the body of knowledge about why dependency matters in the study of fairness in business relationships. Previous studies have largely failed to consider the effect of dependency on the link between fairness and financial outcome in buyer supplier relationship. We addressed this gap and found that APSs are in fact very sensitive to the extent to which their partners misuse their power in pursuing their own interests. Such unfairness perceptions may decrease the financial and non-financial satisfaction of the APSs with the business relationship in the short run and increases conflict in the long run (Geyskens et al. 1999).

To further investigate this point, we also examined the moderating effect of dependency on the link between perceptions of fairness and relationship quality, using a multi-group analysis approach. The results of our post-hoc analysis revealed that there is no significant difference between the two groups regarding the impact of fairness on relationship quality $\Delta\chi^2(1) = 1.5$. This finding indicates that APSs are highly sensitive to their perception of fairness irrespective of their dependency levels. Nevertheless, only less dependent APSs respond to perceived unfairness through reducing their level of sales with the car manufacturer.
In essence, if a powerful manufacturer treats its independent APSs fairly, the latter will be more satisfied with the relationship. Hence, they are more interested in maintaining and developing the relationship, consequently leading to growth in sales. Therefore, to maintain 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. Our findings also show a strong positive effect of relationship quality on sales growth, in line with previous results (Kumar et al. 1995a). However, there was no direct impact of seller’s fairness perceptions on sales growth, i.e. the effect of seller fairness assessments are fully mediated (by relationship quality). Nevertheless, this indirect effect of fairness perceptions on sales growth is considerable.

In addition, our study provides empirical support that the effect of unfairness perceived by suppliers in business relationships are not immediately affecting sales levels. The non-significant effect of fairness and relationship quality on sales levels ($R^2 = .03$) provides evidence that sales growth, i.e. relative changes in sales, is a more appropriate dependent variable in the study of fairness theory.

6.2. Implications for Managers

Our findings have direct implications for the managers of both APSs and the car manufacturer. The managers of both APSs and car manufacturer should understand that although fair processes, practices and policies can help to improve relationship quality, our study shows that the main drivers are interactional and distributive justice. Thus, to enhance relationship quality, these managers should have mechanisms in place that fairly share the risks and benefits between the two parties. Also, those involved in these relationships need training in social skills that allow them to engage in empathetic, responsive, and courteous interactions.
It is crucially important for managers how they perceive and understand dependency, and how they read the industry. On the one hand, managers of APSs can focus on the fact that their market is extremely limited i.e. they can potentially only work with half a dozen car manufacturers in a limited domestic market. As such the way they may read the industry may lead them to feel that they are highly dependent to these manufacturers. This view limits their negotiation power and corners them to the point that despite having a propensity to switch, they have to maintain their relationship even under poor relationship quality conditions.

However, these APSs fail to appreciate the flip side, that in fact the car manufacturer could potentially read the industry in the same way, i.e. they can only target the domestic supply market and for each part, there are only a few suppliers that can actually meat their expectations and desired standards. Therefore, contrary to what APSs managers may believe, it could well be that the car manufacturer that is in a weaker position given that a short delay in providing a simple part can shut down the whole production line, incurring large losses. Therefore, to the extent that the APSs top management team realize their exact position in the market, they can shift the balance of power in their favor. Overall, our results indicate that managing exchange relationships requires that both automotive manufacturers and APSs realize the importance of fairness (as an antecedent of relationship quality) and interdependency that is based on mutual understanding (and not on one-way dependency) in their dyadic relationships.

6.3. Limitations and Directions for Future Research

Despite the contributions of the study, including both managerial and theoretical implications, we acknowledge some limitations due to trade-off decisions in designing this research. These limitations provide new avenues for future research in this subject area. First, this study focused exclusively on the car industry in Iran. Although focusing on a single industry discards the noise creates by uncontrollable factors in cross-industry studies, the
particularity of this research setting limits the external validity, i.e. generalizability of the findings to markedly different populations, given the environmental and cultural differences that exist between industries and countries (a limitation that our study shares with virtually all other studies in the area). Future research ought to examine this model in other industries and countries. The second limitation stems from the angle taken in our data collection. We concentrated explicitly on the APS side of the supplier-manufacturer relationship in measuring the perception of fairness in relationships. Although we collected objective sales data from the car manufacturer side (to avoid common method bias), measuring perceptions of fairness additionally from the car manufacturers’ sides could add more insights to the findings of our research. Furthermore, while our research explains sales growth trajectories very well, no significant effect on sales level could be shown. Therefore, further research needs to examine additional antecedents to explain sales levels as well.
References


Table 1: Marketing Research on Fairness

<table>
<thead>
<tr>
<th>Reference</th>
<th>Context</th>
<th>Sample</th>
<th>Research settings</th>
<th>Key findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colquitt and Rodell (2011)</td>
<td>Business-to-consumer across industries</td>
<td>Longitudinal design with two periods: 256 registered alumni from a large southeastern university in the first run and 209 in the second run</td>
<td>Procedural dimensions: Distributive justice, Interactional justice, Informational justice</td>
<td>Trust and Trustworthiness were significant predictors of subsequent levels of benevolence and integrity, with integrity predicting subsequent levels of all four justice dimensions.</td>
</tr>
<tr>
<td>Grégoire et al. (2010)</td>
<td>Business-to-consumer</td>
<td>Study1: 233 complainers Study2: 103 students from a public American university</td>
<td>Distributive justice, Procedural justice, Interactional justice</td>
<td>Perceived greed is found as the most influential cognition that leads to a customer desire for revenge, even after accounting for well-studied cognitions (i.e., fairness and blame) in the service literature. Power is instrumental only in the case of direct acts of revenge.</td>
</tr>
<tr>
<td>Wirtz and McColl-Kennedy (2010)</td>
<td>Business-to-consumer</td>
<td>A multi-stage research program, comprising actual customer claims (Study 1), in depth customer interviews (Study 2) and three experimental studies (Studies 3, 4, 5)</td>
<td>Distributive justice, Procedural justice, Interactional justice</td>
<td>Opportunistic claiming behavior was found to be significant in the recovery process. Satisfaction with service recovery depended on customer characteristics (variety seeking, involvement, age), and the overall customer satisfaction with the relationship.</td>
</tr>
<tr>
<td>Ellis et al. (2009)</td>
<td>Merger and acquisition process management within large, related deals involving similar-sized firms.</td>
<td>107 acquisition</td>
<td>Procedural justice, Informational justice</td>
<td>Informational justice and procedural justice affect different components of value creation. Procedural justice reduces the positive effects of informational justice on financial return during the integration process, while it magnifies the effects of informational justice on the combined firms’ market position during integration efforts.</td>
</tr>
<tr>
<td>Grégoire and Fisher (2008)</td>
<td>Business-to-consumer</td>
<td>226 complainers: Travelers who experienced poor recoveries with an airline and subsequently complained to the Canadian Transportation Agency</td>
<td>Distributive justice, Procedural justice, Interactional justice</td>
<td>Betrayal is a key motivational force that leads customers to restore fairness by all means possible, including retaliation. Relationship quality has unfavorable effects on a customer’s response to a service recovery. As a relationship gains in strength, a violation of the fairness norm was found to have a stronger effect on the sense of betrayal experienced by customers.</td>
</tr>
<tr>
<td>Homburg et al. (2007)</td>
<td>Business-to-consumer</td>
<td>110 telephone interviews with customers who had terminated their relationship with a telecommunication company</td>
<td>Distributive justice, Procedural justice, Interactional justice</td>
<td>The customer’s perceived interactional, procedural, and distributive justice with respect to revival activities positively affect his or her revival-specific satisfaction, which in turn, has a strong impact on revival performance. Furthermore, revival performance depends on customer characteristics (variety seeking, involvement, age), and the overall customer satisfaction with the relationship.</td>
</tr>
<tr>
<td>Ireland and Webb</td>
<td>Strategic supply</td>
<td>Conceptual</td>
<td>Distributive justice, Procedural justice</td>
<td>Using a multi-theoretic perspective, the authors discuss four strategies that firms use to balance a climate of trust and power in a strategic supply chain.</td>
</tr>
<tr>
<td>Year</td>
<td>Study</td>
<td>Sample Description</td>
<td>Study Details</td>
<td>Findings</td>
</tr>
<tr>
<td>------</td>
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</tr>
<tr>
<td>2007</td>
<td>Luo</td>
<td>International cooperative alliances</td>
<td>127 dyadic cross cultural alliances in China</td>
<td>Strategic alliance performance</td>
</tr>
<tr>
<td>2007</td>
<td>Wiesenfeld et al.</td>
<td>5 complementary studies on employees of five different organizations</td>
<td>Study1: 33 employees of a US telecommunications company; Study2: 179 employees of a US utility company; Study3: 608 employees of a Hospital in Iceland; Study4: 78 employees of business school students; and Study5: 83 undergraduate students in a business school.</td>
<td>Procedural justice</td>
</tr>
<tr>
<td>2006</td>
<td>Griffith et al.</td>
<td>Supplier–distributor supply chain</td>
<td>290 merchant wholesale distributors</td>
<td>Long-term orientation, Relational behavior, Conflict, Satisfaction, Performance</td>
</tr>
<tr>
<td>2006</td>
<td>Patterson et al.</td>
<td>Individual consumers</td>
<td>246 undergraduate students in Thailand and 241 in Australia</td>
<td>Satisfaction with the overall service recovery effort</td>
</tr>
<tr>
<td>2005</td>
<td>Homburg and Fürst</td>
<td>Both business-to-consumer and business-to-business</td>
<td>110 dyads, Each consists of a managerial assessment of the firm’s complaint handling and five customer assessments related to perceived fairness</td>
<td>Complaint satisfaction, Overall customer satisfaction after the complaint, Customer loyalty after the complaint</td>
</tr>
<tr>
<td>2005</td>
<td>Luo</td>
<td>International cooperative alliances</td>
<td>124 dyadic cross cultural alliances in China</td>
<td>Procedural justice</td>
</tr>
<tr>
<td>Study</td>
<td>Context</td>
<td>Sample Size</td>
<td>Variables</td>
<td>Findings</td>
</tr>
<tr>
<td>-------</td>
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</tr>
<tr>
<td>Ramaswami and Singh (2003)</td>
<td>Industrial salespeople</td>
<td>165 salespeople employed by a Fortune 500 organization</td>
<td>Distributive justice, Procedural justice, Interactional justice, Supervisor trust, Job satisfaction, Job outcome</td>
<td>Interactional fairness is relatively more important than procedural or distributive fairness in influencing job outcomes of salespeople. Supervisory behaviors have significant influence in shaping salespeople’s fairness judgments, particularly judgments of distributive and interactional fairness. Although trust in the supervisor is important in reducing salespeople’s opportunistic behaviors, job satisfaction is important in enhancing their loyalty to the organization. Salespeople’s job performance is influenced directly by extrinsic factors such as fairness of current rewards and potential for rewards.</td>
</tr>
<tr>
<td>Aryee et al. (2002)</td>
<td>A public sector organization</td>
<td>179 supervisor–subordinate dyads (179 subordinates and 28 supervisors)</td>
<td>Distributive justice, Procedural justice, Interactional justice, Trust in organization, Trust in supervisor, Work outcomes</td>
<td>Whereas the three organizational justice dimensions are related to trust in organization only interactional justice is related to trust in supervisor. Trust in organization partially mediates the relationship between distributive and procedural justice and work attitudes but fully mediates the relationship between interactional justice and work attitudes. Trust in supervisor fully mediates the relationship between interactional justice and the work outcomes.</td>
</tr>
<tr>
<td>Tax et al. (1998)</td>
<td>Service employees</td>
<td>257 employees from four medium to large-sized firms in services industries</td>
<td>Distributive justice, Procedural justice, Interactional justice, Satisfaction with compliant handling, Prior experience with the firm, Trust, Commitment</td>
<td>Customers evaluate complaint incidents in terms of the outcomes they receive, the procedures used to arrive at the outcomes, and the nature of the interpersonal treatment during the process.</td>
</tr>
<tr>
<td>Kumar et al. (1995b)</td>
<td>Supplier-reseller relationships in automobile industry in the United States and Netherlands</td>
<td>417 dealers from the US and 289 Dutch dealers</td>
<td>Distributive fairness, Procedural fairness, Relationship quality</td>
<td>Vulnerable resellers’ perceptions of both distributive and procedural fairness enhance their relationship quality, although these effects are moderated by the level of outcomes and environmental uncertainty. Furthermore, procedural fairness has relatively stronger effects on relationship quality than distributive fairness.</td>
</tr>
<tr>
<td>Korsgaard et al. (1995)</td>
<td>An organization</td>
<td>20 intact management teams of a Fortune 500 company</td>
<td>Procedural fairness, Decision commitment, Group attachment, and trust in the leader</td>
<td>Perceived fairness partially mediated the impact of procedures on commitment, attachment, and trust.</td>
</tr>
</tbody>
</table>
Table 2: Construct Overview

<table>
<thead>
<tr>
<th>Constructs and reflective scales</th>
<th>Standardized Item Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interpersonal Trust</strong> (Zaheer et al. 1998)</td>
<td></td>
</tr>
<tr>
<td>IPT1: My contact persons have always been fair in negotiations with me.</td>
<td>.82</td>
</tr>
<tr>
<td>IPT2: I know how my contact persons are going to act. They can always be counted on to act as I expect.</td>
<td>.86</td>
</tr>
<tr>
<td>IPT3: My contact persons are trustworthy.</td>
<td>.83</td>
</tr>
<tr>
<td>IPT4: I have faith in my contact persons to look out for my interests even when it is costly to do so.</td>
<td>.82</td>
</tr>
<tr>
<td><strong>Interorganizational Trust</strong> (Zaheer et al. 1998)</td>
<td></td>
</tr>
<tr>
<td>IOT1: This car manufacturer has always been evenhanded in its negotiation with us.</td>
<td>.87</td>
</tr>
<tr>
<td>IOT2: This car manufacturer may use opportunities that arise to profit at our expense. (R)</td>
<td>.81</td>
</tr>
<tr>
<td>IOT3: Based on past experience, we cannot with complete confidence rely on this car manufacturer to keep promises made to us. (R)</td>
<td>.82</td>
</tr>
<tr>
<td>IOT4: We are hesitant to transact with this car manufacturer when the specifications are vague. (R)</td>
<td>.73</td>
</tr>
<tr>
<td>IOT5: This car manufacturer is trustworthy.</td>
<td>.87</td>
</tr>
<tr>
<td><strong>Commitment</strong> (Kumar et al. 1995b)</td>
<td></td>
</tr>
<tr>
<td>Com1: Even if we could, we would not drop the car manufacturer because we like being associated with it.</td>
<td>.85</td>
</tr>
<tr>
<td>Com2: We want to remain a member of the car manufacturer’s network because we genuinely enjoy our relationship with it.</td>
<td>.91</td>
</tr>
<tr>
<td>Com3: Our positive feelings towards the car manufacturer are a major reason we continue working with it.</td>
<td>.90</td>
</tr>
<tr>
<td><strong>Long-term Orientation</strong> (Ganesan 1994)</td>
<td></td>
</tr>
<tr>
<td>LOT1: We believe that over the long run our relationship with this car manufacturer will be profitable.</td>
<td>.79</td>
</tr>
<tr>
<td>LOT2: Maintaining a long-term relationship with this car manufacturer is important to us.</td>
<td>.93</td>
</tr>
<tr>
<td>LOT3: We focus on long-term goals in this relationship.</td>
<td>.82</td>
</tr>
<tr>
<td>LOT4: We expect this car manufacturer to be working with us for a long time.</td>
<td>.90</td>
</tr>
<tr>
<td><strong>Procedural Fairness</strong> (Homburg and Fürst 2005)</td>
<td></td>
</tr>
<tr>
<td>PF1: The car manufacturer quickly reacts to complaints or suggestions we have.</td>
<td>.80</td>
</tr>
<tr>
<td>PF2: The car manufacturer gives us the opportunity to explain our point of view regarding aspects of the business relationship.</td>
<td>.85</td>
</tr>
<tr>
<td>PF3: Overall, the car manufacturer’s procedures within our business relationship are fair.</td>
<td>.82</td>
</tr>
<tr>
<td><strong>Distributive Fairness</strong> (Homburg and Fürst 2005)</td>
<td></td>
</tr>
<tr>
<td>DF1: We receive adequate benefits from the relationship with the car manufacturer.</td>
<td>.80</td>
</tr>
<tr>
<td>DF2: In case of complaints we receive about as much compensation from the car manufacturer as expected.</td>
<td>.70</td>
</tr>
<tr>
<td>DF3: In solving our problems, the car manufacturer gives us exactly what we need in the business relationship.</td>
<td>.83</td>
</tr>
</tbody>
</table>
**DF4:** Overall, the benefits we get from the business relationship with the car manufacturer are fair. .82

**Interactional Fairness** (Homburg and Fürst 2005)

**IF1:** The employees of the car manufacturer seemed to be very interested in the business relationship with us. .78

**IF2:** The employees of the car manufacturer understand exactly what we want from this business relationship. .74

**IF3:** I feel treated rudely by the employees of the car manufacturer. (R) .81

**IF4:** The employees of the car manufacturer are very keen to solve our problems. .87

**IF5:** Overall, the car manufacturer employees’ behavior as part of our business relationship is fair. .82

**Dependence** (Kim and Hsieh 2003)

**Dep1:** It would be difficult for us to replace the sales that our relationship with this car manufacture generates. .85

**Dep2:** There are other car manufacturers that could buy comparable amount of products/services. (R) .89

**Dep3:** Our firm would suffer greatly if we lost this car manufacturer. .93

**Dep4:** We would incur minimal costs in replacing this car manufacturer with another car manufacturer. (R) .76

Note: All items were measured using seven-point Likert scales anchored by 1 = “strongly disagree”, 4 = “neither agree nor disagree”, and 7 = “strongly agree”. (R): reverse item
Table 3: Mean, Standard Deviation, Cronbach's Alpha, AVE, Correlation Matrix and Composite reliability

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>α</th>
<th>AVE</th>
<th>Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>1- Procedural justice</td>
<td>4.37</td>
<td>1.12</td>
<td>.87</td>
<td>.68</td>
<td>.87</td>
</tr>
<tr>
<td>2- Interaction justice</td>
<td>4.47</td>
<td>1.19</td>
<td>.90</td>
<td>.64</td>
<td>.53**</td>
</tr>
<tr>
<td>3- Distributive justice</td>
<td>4.31</td>
<td>1.22</td>
<td>.87</td>
<td>.62</td>
<td>.54**</td>
</tr>
<tr>
<td>4- Interpersonal trust</td>
<td>4.24</td>
<td>1.33</td>
<td>.90</td>
<td>.70</td>
<td>.47**</td>
</tr>
<tr>
<td>5- Interorganizational trust</td>
<td>4.50</td>
<td>1.25</td>
<td>.91</td>
<td>.67</td>
<td>.46**</td>
</tr>
<tr>
<td>6- Commitment</td>
<td>4.93</td>
<td>1.36</td>
<td>.93</td>
<td>.80</td>
<td>.59**</td>
</tr>
<tr>
<td>7- Long-term orientation</td>
<td>5.46</td>
<td>1.42</td>
<td>.92</td>
<td>.76</td>
<td>.41**</td>
</tr>
<tr>
<td>8- Dependence</td>
<td>4.73</td>
<td>1.77</td>
<td>.92</td>
<td>.74</td>
<td>.20**</td>
</tr>
<tr>
<td>9- Sales t1</td>
<td>2.97</td>
<td>1.23</td>
<td>NA</td>
<td>NA</td>
<td>-.12</td>
</tr>
<tr>
<td>10- Sales t2</td>
<td>3.37</td>
<td>1.25</td>
<td>NA</td>
<td>NA</td>
<td>.01</td>
</tr>
<tr>
<td>11- Sales t3</td>
<td>3.85</td>
<td>1.71</td>
<td>NA</td>
<td>NA</td>
<td>.22**</td>
</tr>
</tbody>
</table>

Notes: Bold numbers on the diagonal show the composite reliability; lower diagonal represents correlation

M represent mean
SD refers to standard deviation
AVE refers to average variance extracted
α refers to coefficient alphas
* P < .05
** P < .01
Table 4: model specification and comparison of the nested models.

<table>
<thead>
<tr>
<th>Model specification</th>
<th>$\chi^2$</th>
<th>df</th>
<th>Comparison of the nested models</th>
<th>$\Delta \chi^2$</th>
<th>$\Delta df$</th>
<th>NFI</th>
<th>CFI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1 (linear growth; homoscedastic residual structure)</td>
<td>2.8</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td>.996</td>
<td>.999</td>
<td>.017</td>
</tr>
<tr>
<td>Model 2 (optimal growth; homoscedastic residual structure)</td>
<td>1.1</td>
<td>2</td>
<td>Model 1 v Model 2</td>
<td>1.7</td>
<td>1</td>
<td>.998</td>
<td>1.000</td>
<td>.000</td>
</tr>
<tr>
<td>Model 3 (linear growth; heteroscedastic residual structure)</td>
<td>1.4</td>
<td>1</td>
<td>Model 1 v Model 3</td>
<td>1.4</td>
<td>2</td>
<td>.997</td>
<td>1.000</td>
<td>.033</td>
</tr>
</tbody>
</table>
Table 5: Results of the mediation tests

<table>
<thead>
<tr>
<th>Model</th>
<th>Goodness-of-fit</th>
<th>Tests of hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- Baseline model</td>
<td>( \chi^2_{(df=425)} = 772.9 ) ( p &lt; .01 ), CFI = .935, IFI = .935, TLI = .924, and RMSEA = .062</td>
<td>--</td>
</tr>
<tr>
<td>2- Baseline plus Fairness ( \rightarrow ) Sales growth</td>
<td>( \chi^2_{(df=425)} = 773 ) ( R^2_{SG} = .36 )</td>
<td>( \Delta \chi^2_{(df=1)} = .1, n.s )</td>
</tr>
</tbody>
</table>
Figure 1: Conditional Latent Growth Curve Model

Note: Dotted lines represent insignificant paths.