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Value congruence of manufacturer: Distributor guanxi orientation and manufacturer’s relationship specific investments

PAN Xuan* and ZANG Shuwei

School of Economics and Management, Department of Marketing, Tsinghua University, 100088, Beijing Shi, China.

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Values are very important for guiding firm’s attitude, minds and behaviors. From intra- to inter-firm management, value congruence between cooperative firms is the cornerstone for relationship building. This paper focused on guanxi orientation values, popular in Chinese business context, and found the positive effect of value congruence in guanxi orientation on manufacturers’ relationship specific investments (RSIs). The authors collected dyadic data, and applied polynomial regression and response surface approach in this paper. One surprising result is that manufacturer’s RSIs keep high when manufacturer’s guanxi orientation is low but distributor’s is low. The results shed some light on the dynamic interplay between guanxi orientation and RSIs in marketing channel context.

Key words: Value congruence, Guanxi orientation, relationship specific investments (RSIs), dyadic data analysis.

INTRODUCTION

Nowadays, firms are looking for partners or alliances who share common values and Human Resource managers are also trying to find potential employees who admire firms’ business values or at least believe in basic values. Given the fundamental nature of values in business markets, it is vital for firms to comprehend the mechanisms of how common values or value congruence work and the influence of common values on business relationships, especially among cooperative partners. Based on the research in marketing channel context, manufacturers and distributors are motivated to maintain close and coordinated interactions under shared values. Therefore, value congruence is especially important for channel members to build and sustain strong relationships with each other (Zhang and Bloemer, 2008).

By integrating research from organizational behavior and relationship marketing, we develop and test a model that explores the effect of firm-level value congruence in guanxi orientation on member’s RSIs behavior in channel context. The focus on guanxi orientation values is narrower than the traditional business philosophy, but it is in line with research in marketing channel management especially in Chinese context. In addition, we are more concerned with manufacturer’s channel behaviors and

*Corresponding author. E-mail: panx3.14@sem.tsinghua.edu.cn or sunnyzshuw@126.com. Tel: (86)18511366196.

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relationship specific investments (RSIs). The answers to these questions will allow us to extend our understanding of value congruence and relationship marketing in new form. In addition, it will give practitioners guidelines on how to build business values and maintain long-time inter-firm relationships with partners.

**THEORY AND HYPOTHESES**

**Value congruence**

Edwards and Cable (2009) define values as “general beliefs about the importance of normatively desirable or end states”. Values are also defined as “enduring belief about what is preferred or desirable and standards by which existing structures or behaviors can be measured and assessed” by Scott (2014). Values guide organizational behaviors and provide motivations, enforcing cooperating parties’ obligations, promises, and expectations (Wang and Zhang, 2016), critical for understanding actions in and out organizations, influencing both individual and organizational performance (Gehman et al., 2013; Schein, 2010). Similar to organizational culture, which is defined as “the underlying values, beliefs, and principles” (Denison, 1990), organizational values guide an organization’s management practice. Besides, values manifest themselves through the actions of employees within firms, shape and integrate employees’ activities, and promote simultaneous pursuit with firms (Lee et al., 2017). Value congruence refers to the similarity, fit, confirmation, or comparability between values held by individuals or organizations. Similar to shared goals, value congruence represents the degree to which partners share a common understanding and approach to achievement of bilateral tasks and outcomes (Inkpen and Tsang, 2005).

For partnership selection, the first principle is whether the candidate shares the same business values with themselves. Shared values reduce unnecessary conflicts or disagreements and motivate both partners to engage in positive behaviors. Given the importance of values, yet research on inter-firm values remains rare, let alone value congruence. Therefore, it is critical to address this gap and understand how values are practiced across organizations and that values congruence influences inter-organizational relationships.

Currently, value congruence is more researched in organizational behavior and social psychology research. In organizational behavior studies, a number of organizational behavior studies demonstrated that value congruence between employees and organizations or groups, through influencing employees’ attitudes and behaviors, enhances employee’s job satisfaction, commitment, trust, wish to continue their employment relationship, and performance, and lowers the rate of turnover (Krisof-Brown et al., 2005; Cable and Edwards, 2004; Edwards and Cable, 2009; Cloe, Carter and Zhang, 2013). In social psychology studies, researchers use similarity-attraction theory (Schneider, 1987) to explain the effect of similarity in values on relationship quality and other outcomes.

In marketing field, Dwyer and Oh (1988) demonstrated the importance of goal congruence between channel members on commitment. Zhang and Bloemer’s (2008) study was the first to clearly point the concept of value congruence in marketing field. They supposed that consumer-brand value congruence is antecedents of relationship quality and outcomes (satisfaction, trust, affective commitment and loyalty) and found that value congruence has positive and direct influence on these relationship marketing outcomes. Two recent studies have investigated value congruence between channel members, both of which focused on the direct effects of perceptual congruence on channel relationship outcomes. Wang and Zhang (2016) showed that value congruence between manufacturers and their distributors were positively related to distributors’ performance. Kashiyp and Siyadas (2012) demonstrated that franchisors’ perceived value congruence could ensure themselves to finish their duty and encourage voluntary extra-role behavior. Chen et al. (2014) confirmed that shared values are antecedents of inter-organizational trust. In the same vein, Villena and Craighead (2017) pointed out that size and relational capital incongruence between buyers and suppliers has influence on opportunism and performance of each side. The current research focuses more on direct effect of value congruence, treating it as antecedents. In this paper, value congruence was also treated as antecedent variable.

**Guanxi orientation**

Focus is on one of the most important shared values in Chinese business environment, guanxi orientation, and investigate the effect of guanxi orientation congruence on manufacturers’ relationship specific investments.

Guanxi, opposite to arm’s length dealings, is built on mutual acquaintance or recognition in a network (Inkpen and Tsang, 2005). Knowledge, resources, markets or technologies can be provided to each other in the network when necessary. In Chinese business network, manufacturers and distributors develop mutual guanxi and build cooperative relationship. Good guanxi with each other is beneficial for achieving a higher level of trust. Luo (1997) found that guanxi-based business relationship has a significant and positive impact on the performance of foreign-invested enterprises.

As to guanxi orientation, it is defined as “the extent to which people willingly recognize obligations, harmony, and long-term reciprocation in their daily socialization” in individual level (Murray and Fu, 2016). Guanxi orientation is deeply rooted in Chinese culture. Similar to guanxi, this
kind of orientation also place great emphasize on reciprocity or favor (renqing), emotional attachment (gängqing), trust (xinyong), and preserving face (miǎnzi). Reciprocity or favor implies that once a benefactor gives a benefit to another, the receiver is obligated to repay the favor in order to restore balance (Hwang, 1987). Face (miǎnzi) in China represents an individual’s social position or prestige, involved in impression management. Preserving or earning face is gained by successfully performing one or more specific social roles well recognized by others in his/her social network (Hwang, 1987), leaving a favorable image in others’ minds. Emotional attachment (gängqing) is defined as a kind of feelings, indicating closeness of guanxi among members of social network. The aforementioned are key concepts involved in guanxi orientation research.

Guanxi is particularly important in sales force marketing, an important kind of firm-specific assets (Luo, 1997; Wang, 2007). Previous research suggest that guanxi orientation with its strategic role, benefits firms in cultivating business relationships, managing asset scarcity, securing production and distribution channels (Xin and Pearce, 1996), and creating an inter-organizational atmosphere where boundary spanners and firms actively establish and maintain interpersonal or inter-organizational relationships with their counterparts. Guanxi-orientated firms are committed to the code of reciprocity, obligated to return the favor in the future, and take partners’ social reputation into consideration, maintaining and accumulating social capital during inter-firm exchanges.

Normally, contract governance mechanism is used to regulate exchanges with partners. Contracts are complex and specific; however, they cannot foresee all the situations in advance during their cooperation with their partners. Sometimes when urgent or unpredictable things happen, firms have to come up with appropriate solutions. In this case, firms with guanxi orientation will make use of their network to work out a solution, where guanxi orientation plays partial role of relational governance mechanism, complementary to contract governance (Yang and Wang, 2011). Although each firm is self-interested, guanxi-orientated firms will still treat partners as business friends and believe they will make it through together.

Guanxi orientation congruence and RSIs

According to Williamson (1985), RSIs increase the efficiency of production and show willingness to cooperate and trust in the partner. Relationship specific assets are the key determinant which influences synergy value creation through strategic alliance (Li, 2018). However, it is difficult to induce manufacturers’ RSIs due to moral hazards and opportunism of distributors. Furthermore, if the relationship is terminated, the specialized and customized investments cannot be transformed into other relationships, resulting in an irrevocable loss (Yu et al., 2006). Nonetheless, guanxi is the lubricant for cooperative relationships, and works as the governance mechanism, safeguarding the manufacturers’ investment and keeping the investment recipient out of opportunistic behaviors. Established guanxi between manufacturers and distributors creates a competitive synergy advantage in the marketplace (Wu and Choi, 2004). Flexible models of cooperation can be adopted, trust is fostered, mutual benefits and reciprocity are created between guanxi-orientated firms, eventually inducing manufacturers’ RSIs (Morgan and Hunt, 1994). Under values of guanxi orientation, norms of reciprocity in dyadic relationships, and consideration of social reputation or prestige inhibit opportunistic behaviors, thus partners are capable of preserving social capital within the network and are more committed in relationship-specific investments. No matter to keep emotional attachment or leave a good impression, guanxi building process needs necessary investments to each other. Recognizing the importance of guanxi, guanxi-orientated manufacturers make RSIs in the dyads to maintain trustful and cooperative relationship with distributors. In other words, manufacturers are motivated to make relationship specific investments as distributors and manufacturers are congruent in guanxi orientation. However, when manufacturers and distributors have unbalanced or incongruent level of guanxi orientation, whether the manufacturer or the distributor is higher, manufacturers’ intention to make RSIs is lower than when manufacturers and distributors are congruent in guanxi orientation because of cognitive dissonance. If the manufacturers have higher guanxi orientation, they feel undeserved and their redundant RSIs would not pay back. In contrast, when the distributors have higher guanxi orientation, manufacturers believe that the distributors are bundled and would not leave the relationship voluntarily so they will decrease RSIs in the distributors and rearrange the RSIs in other parts. Therefore, we hypothesize:

Hypothesis: Manufacturer-distributor congruence in guanxi orientation has positive impact on manufacturer’s relationship specific investments.

Therefore, we draw on the aforementioned literature to propose a conceptual model for manufacturer-distributor value congruence (guanxi orientation) and manufacturer’s RSIs. Figure 1 depicts the conceptual model of this study.

METHODS

Data and sample

In order to investigate the relationships illustrated in Figure 1 and test the hypothesis, a survey using key informants was conducted. Our study used matched survey data from both manufacturer and distributor sides in cellphone distribution network, which includes one major brand manufacturer and its various distributors. Sales
managers from the manufacturer and owners from distributors are surveyed as key informants. A double-blinded translation was followed when translating the items from English to Chinese, for the reason that most of our key informants speak Chinese. Satisfactory psychometric properties in Chinese business context of constructs and measures are taken into consideration during revision process. All measures used a Likert response scale ranging from 1 (strongly disagree) to 5 (strongly agree). For dyadic research, parallel wording in the measures of paired questionnaires was used. Under the help of the manufacturer, we employed a simple random sampling method to choose cellphone distributors with average monthly sales of more than 200 cellphones, resulting in qualified 613 distributors nationwide. Questionnaires were distributed to 613 distributors and counterpart manufacturer respondents, respectively. Finally, we collect qualified 342 dyads of questionnaire, with a response rate of 55.8%. The methodological design for collecting dyadic data not only diversifies our data and research perspectives, but also provides our study with advantage of reducing common method variance associated with unilateral data, checking data quality, and observing firm behavior differences and perception bias across various dimensions (Su et al., 2009; Huang et al., 2016). To test nonresponse bias, we compared firm attributes (size, revenues, and relationship length) of respondent distributors and non-respondent firms. None of the results were significant, suggesting the absence of nonresponse bias.

Measures

The values, guanxi orientation were measured using six items. Following the research of Su et al. (2009), these items assessed key features of guanxi practice in China business environment. On this basis, we conceptualize and measure guanxi orientation congruence between manufacturers and distributors in terms of objective fit, which assumes that manufacturer and distributor guanxi orientation values exist independently (Edwards and Cable, 2009). We measure the outcome construct, RSIs in one rough item (Claro et al., 2003; William, 1975; Wang et al., 2014). Smart PLS 3.0 was used to calculate factor loadings of every measurement. Items and factor loadings are illustrated in Appendix Table 1. Appendix contains parameter estimates for the measurement model. In the polynomial regression model, four variables (firm size, yearly revenues, relationship duration, and dependence structure) are considered to influence the outcome variable. To control the effects, respondents were asked to indicate distributor’s number of employees (firm size), yearly revenues, relationship duration and dependence (Jap and Ganesan, 2000). All data were collected from both distributor and manufacturer’s side to mitigate common method bias.

Analytical strategy

The polynomial regression and response surface approach was used for dyadic data analysis, widely used in marketing (Ceniels et al., 2017), organizational behavior (Edwards and Parry, 1993; Shanock et al., 2010; Cloe et al., 2013), innovation (Lee et al., 2017), information system (Venkatesh and Goyal, 2010) (Figure 2 and Table 2). Compared with traditional research methods, polynomial regression and response surface avoid ambiguous and confounding results, and the loss of information of independent variables, and present three-dimensional and non-linear findings. The hypothesis was tested by estimating the following equation (to simplify, we cancelled all control variables in the Equation 1):

$$RSIs=b_0+b_1D+b_2M+b_3D^2+b_4D\times M+b_5M^2+e,$$  

(1)

where RSIs represent the outcome variable and D and M are distributor’s and manufacturer’s guanxi orientation respectively (single character was used to simplify the equation1). D, D×M, and M$^2$ stand for quadratic combinations of D and M. Regression coefficients ($b_1$, $b_2$, $b_3$, $b_4$, $b_5$) were then calculated to plot the three-dimensional response surface where D and M were plotted on the perpendicular horizontal axes, and RSIs were plotted on the vertical axis (Edwards and Parry, 1993; Shanock et al., 2010).

To test the hypothesis (congruence effect of manufacturer-distributor guanxi orientation), three key features of the plotted response surface were examined, underlined by Edwards and Parry (1993) and Edwards (2002). Regression coefficients from Equation 1 were to calculate the curvature and slopes along congruence line and incongruence line. To interpret the results from the surface, we examine the incongruence line ($D=M$) on the response surface firstly. To testify the hypothesis, the curvature along incongruence line should be negative (curvature=$b_3$, concave along incongruence line). Secondly, tests of whether slope $p_{11}$ of the first principle axe differed from 1, and intercept $p_{10}$ differed from 0 were conducted. The tests were to verify the ridge of the response surface runs along the congruence line, providing additional evidence for hypothesis. If $p_{11}=1$, $p_{10}=0$, then manufacturer’s RSIs are maximized when guanxi orientation between manufacturer and distributor are equal. Suggested by Cole et al. (2013), bootstrapping method was used to calculate 95% bias-corrected confidence intervals (CIs) for $p_{11}$ and $p_{10}$, because of nonlinear combinations of regressions from Equation 1. Thirdly, we examine the curvature and slope along congruence line ($D=M$), to determine whether the surface along congruence line is flat. If the slope ($b_3+b_4$) and curvature ($b_3+b_4+b_5$) of congruence line do not significantly differ from zero, then the level of manufacturer’s RSIs is the same no matter whether the level of manufacturer-distributor value congruence is high or low. According to Edwards and Cable
Table 1. Means, standard deviations, and correlations among variables.

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Tenure</td>
<td>1.44</td>
<td>1.12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Firm size</td>
<td>2.55</td>
<td>2.14</td>
<td>0.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Interdependence</td>
<td>5.92</td>
<td>1.23</td>
<td>-0.00</td>
<td>0.14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Dependence asymmetry (D)</td>
<td>0.68</td>
<td>0.83</td>
<td>-0.02</td>
<td>-0.18</td>
<td>0.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Dependence asymmetry (M)</td>
<td>0.36</td>
<td>0.64</td>
<td>-0.01</td>
<td>0.05</td>
<td>-0.01</td>
<td>-0.46</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. D- guanxi orientation</td>
<td>3.79</td>
<td>0.63</td>
<td>0.05</td>
<td>-0.07</td>
<td>0.13</td>
<td>0.04</td>
<td>0.01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. M- guanxi orientation</td>
<td>3.61</td>
<td>0.57</td>
<td>-0.01</td>
<td>0.13</td>
<td>0.17</td>
<td>-0.12</td>
<td>0.06</td>
<td>0.17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. M-RSIs</td>
<td>3.41</td>
<td>1.04</td>
<td>0.01</td>
<td>0.15</td>
<td>0.17</td>
<td>-0.11</td>
<td>0.07</td>
<td>0.04</td>
<td>0.16</td>
<td></td>
</tr>
</tbody>
</table>

Values on the diagonal represent correlations. Correlations greater than 0.13 are significant at p < 0.01. Correlations greater than 0.10 are significant at p < 0.05. Variables interdependence and dependence asymmetry (D and M) are calculated by adding or subtracting the dependence scores from manufacturer and distributor side.

(2009), if the third condition mentioned cannot be met, it does not exclude congruence effect. However, the maximized level of manufacturer's RSIs will be determined by whether manufacturer and distributor guanxi orientation are low or high, because the response surface along congruence line is not flat but changing with the level of values.

**RESULTS**

Table 1 shows means, standard deviations, and correlations among variables studied in this research. Table 2 illustrates the regression results of Equation 1.

The hypothesis predicted a congruence effect in which manufacturer's RSIs will increase as manufacturer-distributor guanxi orientation values become more aligned, and RSIs will decrease as discrepancy between manufacturer and distributor guanxi orientation values become larger. As shown in Table 2, Model 2 with nonlinear relationships explains a significant incremental variance in RSIs than Model 1, indicating a nonlinear relationship exists between manufacturer-distributor guanxi orientation and manufacturer's RSIs. Next, we examined the three conditions for congruence effect (Edwards and Parry, 1993). From Table 2, the surface along incongruence line is curved downward (curvature=0.241), meeting the first condition. In addition, the slope $p_{11}$ of the first principle axis does not significantly differ from 1 (95% CI [-5116.231, 5127.548]), and the intercept $p_{10}$ does not significantly differ from 0 (95% CI [-1144.102, 1185.18]), satisfying the second condition. Finally, the slope of congruence is positive (slope=0.255), indicating that manufacturer's RSIs increase as the aligned manufacturer-distributor guanxi orientation level are from low-low to high-high. The curvature of congruence line is not significantly different from zero. The significant and positive slope of incongruence line ($b_1-b_2=2.479$, p<0.001) indicates that manufacturer's RSIs is higher when distributor's guanxi orientation is higher than manufacturer's (right side) than when manufacturer's guanxi orientation is higher than the distributor's (left side).

In summary, congruence effect of manufacturer-distributor guanxi orientation on RSIs is satisfied.

To give a visual explanation, we plotted the response surface in Figure 2 using estimated coefficients from Equation 1. The surface looks like a saddle, curved downward along incongruence line (dashed line in the bottom). This implies that the levels of manufacturer's RSIs increase as guanxi orientation between manufacturer and distributor become more aligned, and decrease as discrepancy in guanxi orientation between manufacturer and distributor is larger. As depicted, the ridge of the response surface does not deviate little from congruence line (solid line in the bottom), and the surface along the congruence line rises across the congruence line.

A 2×2 matrix was drawn to give a sketch of RSIs distribution (Figure 3). The darker the color is, the higher RSIs value is, indicating the more manufacturers invest. From Figure 3, we can conclude that when guanxi orientation values of manufacturer and distributor are both high and congruent, manufacturer's RSIs are highest, providing further evidence for the hypothesis. Under normal conditions, manufacturer with low guanxi orientation is unwilling to invest in the bilateral relationship. However, we found an inspiring result that when manufacturer's guanxi orientation is low but distributor's guanxi orientation is high, manufacturer's RSIs still keep comparatively high. The following explanations that contract mechanism regulates routines and details, used to govern the manufacturer-distributor relationship are given. Manufacturer’s intention to decrease RSIs is constrained by contract governance mechanism so it cannot adjust investments at will. Moreover, the manufacturer decides to invest according to economic input-output potentials. For the distributor with high guanxi orientation, its intention to maintain the exchange relationship remains strong. Therefore, as long as the exchange exists and remains profitable, manufacturer's
Table 2. Polynomial regression results for relationship specific investments.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenure</td>
<td>0.089***</td>
<td>0.013</td>
</tr>
<tr>
<td>Firm size</td>
<td>0.029*</td>
<td>0.053**</td>
</tr>
<tr>
<td>Interdependence</td>
<td>0.101***</td>
<td>0.109**</td>
</tr>
<tr>
<td>Dependence asymmetry (D)</td>
<td>0.029</td>
<td>-0.079</td>
</tr>
<tr>
<td>Dependence asymmetry (M)</td>
<td>0.154*</td>
<td>0.041</td>
</tr>
<tr>
<td>Constant</td>
<td>1.756***</td>
<td>1.836</td>
</tr>
<tr>
<td>D</td>
<td>0.026</td>
<td>1.367*</td>
</tr>
<tr>
<td>M</td>
<td>0.289***</td>
<td>-1.112</td>
</tr>
<tr>
<td>D²</td>
<td>-</td>
<td>-0.240**</td>
</tr>
<tr>
<td>D×M</td>
<td>-</td>
<td>0.115</td>
</tr>
<tr>
<td>M²</td>
<td>-</td>
<td>0.134</td>
</tr>
<tr>
<td>R²</td>
<td>0.026</td>
<td>0.047</td>
</tr>
<tr>
<td>ΔR²</td>
<td>-</td>
<td>0.021**</td>
</tr>
</tbody>
</table>

**Incongruence line (D–M)**

- Slope (b₁-b₃)                          | -         | 2.479**   |
- Curvature (b₃-b₄+b₅)                   | -         | -0.241    |

**Congruence line (D=M)**

- Slope (b₁+b₂)                          | -         | 0.255     |
- Curvature (b₂+b₄+b₅)                   | -         | 0.009     |
- Lateral shift quantity (b₂-b₁) / [2×(b₃-b₄+b₅)] | -         | -5.143    |

***p<0.01, **p<0.05, *p<0.1.

Figure 2. Congruence effect of manufacturer-distributor guanxi orientation on relationship specific investments.
DISCUSSION

This study went beyond manufacturer and distributor perceptions of the guanxi orientation and proposes an integrative model which helps to explain how manufacturer-distributor interactions influence manufacturer’s behaviors. The model shows that the congruence between manufacturer and distributor guanxi orientation impacts on the manufacturer’s RSIs. This research is conducted from manufacturer’s perspective, but data are collected from both sides. Results demonstrate that not only guanxi orientation influence manufacturer’s investment intention to the specific relationship with distributor, but value congruence between manufacturer and distributor has effect on manufacturer’s RSIs as well. The more aligned their guanxi orientation, the higher their guanxi orientation congruence, the more investments will manufacturer make. In addition, when manufacturer’s guanxi orientation is low but distributor’s is high, manufacturer’s RSIs still keep high. This does not mean that distributor’s guanxi orientation is not important, for the relationship needs the distributor to maintain. Therefore, value congruence in guanxi orientation plays a key role in inter-organizational relationships. In marketing channel, manufacturers and distributors should take value congruence into consideration to select the most appropriate cooperative partners.

Theoretical and managerial contributions

Firstly, this research highlights the importance of value congruence in channel members and its impact on behaviors of channel members. The more aligned values in guanxi orientation between manufacturer and distributor, the more investments will manufacturer make. Even when the manufacturer has low-level of values, it keeps investing due to potential interests. Secondly, as suggested by Wang and Zhang (2016), we also find the potential of value congruence functioning as a governance method. Thirdly, the research applies the response surface approach which gives a three-dimensional and visualized picture on how dependent variable changes with independent variables and explains a considerable proportion of hypothesized equation. Dyadic data were collected from two sides in the channel relationship for better capturing essence of value congruence, and analyzed to avoid self-reported bias and common method bias.

For managerial implications, values are internal forces driving and directing firm’s behaviors and attitudes, and the bedrock of organizational culture guiding firm’s decisions about business ethics (Schein, 2010; Wang and Zhang, 2016). Managers should pay more attention to the joint effects of manufacturer’s values and its counterpart distributor’s preferred values (from intra-firm to inter-firm). Common or shared values create mutual cooperation basis. For guanxi orientation values, firms with these values treat partners as friends and take care of partners’ social status, and help cope with problems encountered by their partners. So they are willing to do relationship specific investments in their partners to keep long-standing commitment.

Limitations and future research directions

The data were collected from only one industry, cellphone industry, so generality is a concern. It is suggested that further data collecting from multiple industries to draw an all-around conclusion. The research is based in China,
where investigated values belong to eastern culture. Additional tests are needed to generalize the conclusions to other cultures. Cross-sectional data limits casual inferences. Further longitudinal studies are needed. The relatively low R² of outcome variables suggests other significant drivers of relationship-specific investments beyond manufacturer and distributor values exist.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

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REFERENCES

Appendix Table 1. Construct reliability and validity.

<table>
<thead>
<tr>
<th>Constructs, measurement items, reliability, and validity</th>
<th>Factor loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Guanxi orientation</strong> ($\alpha=0.633$, $CR=0.771$, $AVE=0.461$); adopted from Su et al. (2009)</td>
<td></td>
</tr>
<tr>
<td>GO1 One tree doesn’t make a forest.</td>
<td>0.614</td>
</tr>
<tr>
<td>GO2 Network is important for business success.</td>
<td>0.836</td>
</tr>
<tr>
<td>GO3 To pay back favor is more urgent than debts.</td>
<td>0.628</td>
</tr>
<tr>
<td>GO4 Business dealings entail reciprocity.</td>
<td>0.612</td>
</tr>
</tbody>
</table>

| **Dependence on partner** ($\alpha=0.668$, $CR=0.800$, $AVE=0.500$); adopted from Jap and Ganesan (2000) | |
| DP1 If the relationship with our company is terminated, our local sales revenues will drop a lot. | 0.706 |
| DP2 If the relationship with our company is terminated, it is difficult for our company to find an alternative. | 0.728 |
| DP3 It is difficult for our company to replace the role the partner plays in the relationship. | 0.733 |
| DP4 Our company needs maintain the relationship with the partner. | 0.660 |

| **Relationship specific investment (M)** (Claro et al., 2003) | |
| RSI1 Our company has invested a lot of resources in the distributor to build good relationships. | N.A. |

**Relationship time (RelationT)**
How long have you been cooperating with the manufacturer/distributor? year(s) N.A.

**Yearly revenues (YearlyR)**
The distributor’s yearly revenues (RMB) $<$ 0.5 million ($<$ 0.5 million) $<$ 1 million $<$ 5 millions $<$ 10 millions $<$ 25 millions $<$ 50 millions $<$ 75 millions $<$ 100 millions $<$ 150 millions $<$ 300 millions and 300 millions or above N.A.

**Firm size (FirmS)**
How many employees in the distributor: $<$ 20 $<$ 50 $<$ 100 $<$ 200 $<$ 300 $<$ 500 $<$ 700 $<$ 1000 $<$ 1500 $<$ 2002 thousands or above N.A.

N.A.: Not applicable.