The role of relationship-specific investments in improving performance: Multiple mediating effects of opportunism and cooperation

Tugba Gurcaylilar-Yenidogan\textsuperscript{a*}, Sibel Duden\textsuperscript{b}, Fulya Sarvan\textsuperscript{c}

\textsuperscript{a,b,c} Akdeniz University, Antalya, 07058, Turkey

Abstract

This paper investigates the multiple mediating effects of opportunism and cooperation on the relationship between relationship-specific investments and partnership performance in the Turkish automotive distribution channel. The theoretical view of this study is based on the relational view of inter-organizational competitive advantage that provides an alternative perspective for expropriation effect of specific investments. In order to test the effect of multiple mediators on partnership performance, the empirical data were collected from the vehicle dealers in the Turkish automotive distribution channel. The findings show that relationship-specific investments mediated by opportunistic behavior and cooperative behavior have a greater positive effect on partnership performance.

Keywords: Automotive distribution channels; Relationship-specific investments; Opportunistic behavior; Cooperative behavior; Partnership performance

1. Introduction

This paper aims to examine the effects of relationship-specific investments on the performance of inter-organizational partnerships. Transaction cost theory and relational governance view provide alternative theoretical perspectives for explaining the influence of relationship-specific investments on partnership performance. According to the transaction cost theory, relationship-specific investments increase the risk of opportunism and hence transaction costs (Williamson, 1985; Heide and Stump, 1995; Lui et al., 2009). When one of the parties to the relationship may opportunistically expropriate the value of the investment, a safeguarding problem arises due to the idiosyncratic nature of the assets (Heide, 1994; Rindfleisch and Heide, 1997). Although contractual agreements as safeguarding mechanisms can be used to minimize the risk of opportunistic exploitation (Williamson, 1983), residual opportunism risk continues to exist when the parties are able to write contracts which only differ in a degree of completeness (Artz and Brush, 2000; Wang, 2010). Relevantly, in an incomplete contract setting, relationship-specific investments give
rise to ex post quasi-rents that may be expropriated by the other parties who can impose renegotiation of the conditions or early termination of the contract (Klein, 1978; Williamson, 1985). The hold-up problems over the ex post division of returns from the specific investments induce the parties to underinvest in specific assets. In this case, the parties cannot generate the expected benefits from the relationship and hence unilateral gains from opportunistic behavior reduce the performance of inter-organizational partnerships (Parkhe, 1993; Pilling et al., 1994; Luo, 2007; Lui et al., 2009).

However, unlike the effect of unilateral investments, bilateral relationship-specific investments as self-enforcing safeguards create a reciprocal hostage effect against the quasi rent expropriation from the opportunistic actions of the parties (Williamson, 1983). The lock-in effect of reciprocal commitments promotes the behavior that ensures the continuance of the relationships by generating quasi-rent stream which would be lost in the event of termination (Katz, 1989; Heide, 1994; Sarkar et al., 2001). Accordingly, drawing on the resource-based view and the transaction cost theory, the relational view of inter-organizational competitive advantage (Dyer, 1997) suggests that high asset specificity does not necessarily lead to increased transaction costs. The efficiency criterion of this view is to maximize the joint transaction value from the relationship based on the long-term cooperation beyond the minimization of transaction costs (Zajac and Olsen, 1993; Skjøtt-Larsen et al., 2007). As network partners make symmetric investments dedicated to the relationship in order to establish cooperative relationships, they can realize competitive advantage (i.e., relational rents) through knowledge sharing and relational learning and hence reduce opportunism in practice (Dyer, 1996; Sawhney Celly et al., 1999; Ghosh and John, 1999; Rokkan et al., 2003; Wu et al., 2006; Mukherji and Francis, 2008). In conclusion, relationship-specific investments produce substantial positive impact on partnership performance by discouraging opportunism at relatively low cost and encouraging value creation through complementary coordinated actions in interdependent task environment (Anderson and Narus, 1990; Dyer, 1996; Dahlstrom and Nygaard, 1999; Lui et al., 2009).

On the basis of the above considerations, this study intends to explore the multiple mediating effects on the relationship between relationship-specific investments and partnership performance in the Turkish automotive distribution channel. Specifically, the authors suggest that relationship-specific investments will result in improved performance when they foster cooperative behavior with a decrease in opportunistic actions (bonding effect of specific investments). The main contribution of the paper is to present an alternative perspective to the expropriation effect of specific investments. By doing so, this paper shows that relationship-specific investments can also reduce opportunistic expropriation through the leverage effect of the potential gains from cooperation and hence leads to higher partnership performance. In addition, the most important meaning of the study for managers is that automakers and their dealers should follow a cooperative strategy to gain relational rents from specific investments, if they expect a high level of performance in inter-organizational relationship.

2. Literature Review And Hypotheses

2.1. Relationship-specific investments: opportunistic behavior vs. cooperative behavior

According to the transaction cost theory (Williamson, 1985) relationship-specific investments defined as the degree to which assets are dedicated to a particular relationship create a lock-in situation for the investing party in inter-organizational relationships. Switching to alternative relationships cannot be achieved without sacrifice of productive value because specific investments lead to small-number bargaining problems by reducing the number of potential trading partners. Whenever relationship-specific investments have lower value in alternative uses this situation results in a stream of potentially appropriable quasi-rents (Joskow, 2008). In this case, investment in specific assets may expose investing party to the risk of opportunistic behavior by the other party, who seeks to generate above-normal returns from the specific investments and hence maximize its own unilateral gains.

\[ H_{1a} \]: Relationship-specific investments are positively related with opportunistic behavior.

However, both partners may undertake high specific investments that increase bilateral dependency (Windsperger, 1994; Jap and Anderson, 2003). When the quasi-rent stream generated by bilateral investments exceeds the potential hold-up gains from opportunistic behavior, relationship-specific investments are likely to bond the parties and
discourage opportunistic behavior that is the reason of early termination (Klein et al., 1978; Rokkan et al., 2003; Hendrikse and Windsperger, 2011).

H1b: Relationship-specific investments are negatively related with opportunistic behavior.

In this second scenario, the bonding effect of specific investments motivates both partners to behave cooperatively in order to realize relational rents (Heide, 1994; Rokkan et al., 2003; Hendrikse and Windsperger, 2011). As the parties make bilateral specific investments to create competitive advantage, cooperation facilitates the coordination of activities between the partners (Lui et al., 2009).

H2: Relationship-specific investments are positively related with cooperative behavior.

2.2. Opportunistic behavior and partnership performance

In an incomplete contract setting, bargaining over the appropriable ex post quasi-rents creates a negative effect on ex ante investment incentives (Joskow, 2008). When the success of a relationship depends on the collective efforts, opportunistic behavior decreases the parties’ willingness to invest in complementary resources. Thus partners cannot utilize the potential benefits of the relationship-specific knowledge creation (Luo, 2007; Lui et al., 2009).

H3: Opportunistic behavior is negatively related with partnership performance.

2.3. Cooperative behavior and partnership performance

Inter-organizational cooperation reduces the costs of transferring resources and knowledge by facilitating the coordination of activities between the partners (Grant, 1996). The effective integration of knowledge allows the partners to create competitive advantage through performance-enhancing innovation (Powell et al., 1996; Dyer and Singh, 1998; Dyer and Nobeoka, 2000). Accordingly, cooperation leads to better performance by decreasing knowledge transfer costs and creating joint transaction value (Luo, 2002; Lui et al., 2009).

H4: Cooperative behavior is positively related with partnership performance.

2.4. Relationship-specific investments and partnership performance: direct and indirect effects

If the partners make bilateral specific investments to provide customized distribution services, they become more likely to continue the relationship in order to gain joint value by long-term orientation (Heide and John, 1990; Ono and Kubo, 2009). In connection with this argument, relationship-specific investments may be a source of relational rents and competitive advantage that results in higher partnership performance (Dyer, 1996; Mucherji and Francis, 2008).

H5: Relationship-specific investments are positively related with partnership performance.

In addition to the direct effect of relationship-specific investments, relationship-specific investments mediated by opportunistic behavior and cooperative behavior also have an impact on partnership performance. Because relationship-specific investments are more likely to result in higher performance when (1) they can control opportunism at relatively low cost, and (2) promote cooperative behavior in achieving effective coordination (Dyer, 1996).

H6: The multiple mediators (opportunism and cooperation) strengthen the positive impact of relationship-specific investments on partnership performance.
3. Methodology

3.1. Research goal

The aim of this research is to investigate the multiple mediating effects of opportunism and cooperation on the relationship between relationship-specific investments and partnership performance in the Turkish automotive distribution channel. In this purpose, the data obtained from the Turkish automotive distribution channel were analyzed through SPSS (version 18) statistical package program. To test the effect of multiple mediators in SPSS the script of Preacher and Hayes was used (2008). Consistent with the research purpose, research model is presented as follows:

According to the multiple mediation model with two mediators (M1= opportunism and M2= cooperation) in the context of this study, path a(n) represents the direct effects of independent variable (IV: relationship-specific investments) on mediating variables (M(n): opportunism and cooperation), path b(n) represents the direct effects of M(n) on dependent variable (DV= partnership performance) and path c(n) represents the direct effect of IV on DV and the indirect effects of IV on DV through M(n). In the mediation analysis, the indirect effects of IV on DV through M(n) is defined as the product of path a and path b, that is, $a_1b_1$ and $a_2b_2$. In this case, the total indirect effect of IV on DV is the sum of the two specific indirect effects ($a_1b_1 + a_2b_2$). The total effect of IV on DV ($c$) is thus the sum of the direct effect of IV ($c'$-prime path: $c'$) and the total indirect effect of IV on DV $c = c' + a_1b_1 + a_2b_2$.

3.2. Sample and data collection

To test the hypotheses, the empirical data were collected through a questionnaire-based survey from the Turkish vehicle dealers of eleven different automotive brands (Tofas-Fiat, Dogus-Volkswagen, Ford Otosan-Ford, Oyak
Renault-Renault, Peugeot, Toyota, General Motors-Opel, Honda, Nissan, Hyundai Assan-Hyundai and Temsa-Mitsubishi) that have a total of 78.70% market share in the categories of passenger vehicles and light commercial vehicles. After determining the automotive brands to be covered in the research, the scope of the research was limited with six provinces (Istanbul, Izmir, Ankara, Antalya, Bursa and Konya) that approximately represent 64 percent of market share in the related vehicle categories. The statistics obtained from the internet sites of the selected dealers indicate that there are a total of 101 dealers that operate in the selected six provinces. Table 1 represents the sample structure of this research.

<table>
<thead>
<tr>
<th>Automotive brand</th>
<th>Market share in the categories of passenger vehicles and light commercial vehicles* (%)</th>
<th>Number of dealers in the selected provinces</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tofas (Fiat)</td>
<td>14.45</td>
<td>14</td>
</tr>
<tr>
<td>Dogus Oto (Volkswagen)</td>
<td>8.39</td>
<td>9</td>
</tr>
<tr>
<td>Ford Otosan (Ford)</td>
<td>10.83</td>
<td>10</td>
</tr>
<tr>
<td>Oyak Renault (Renault)</td>
<td>12.48</td>
<td>13</td>
</tr>
<tr>
<td>Peugeot</td>
<td>5.70</td>
<td>9</td>
</tr>
<tr>
<td>Toyota</td>
<td>5.26</td>
<td>8</td>
</tr>
<tr>
<td>General Motors (Opel)</td>
<td>5.46</td>
<td>10</td>
</tr>
<tr>
<td>Honda</td>
<td>2.14</td>
<td>7</td>
</tr>
<tr>
<td>Nissan</td>
<td>1.74</td>
<td>8</td>
</tr>
<tr>
<td>Temsa (Mitsubishi)</td>
<td>0.85</td>
<td>5</td>
</tr>
<tr>
<td>Hyundai Assan (Hyundai)</td>
<td>6.56</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>78.70</td>
<td>101</td>
</tr>
</tbody>
</table>

*Annual assessment report of OSD (Automotive Manufacturers Association in Turkey), 2010

Based on this sample the questionnaire was sent out electronically to 101 executives of the Turkish automotive dealers. Data collection process was completed in three phases. Only 22 questionnaires were returned in response to the first call of the survey. In the second call the number of completed questionnaires raised to 50. After the third call the process was terminated because only 4 questionnaire forms were returned. Thus a total of 54 completed questionnaires were received. The effective response rate is 53.47%. Figure 2 depicts the questionnaire distribution according to the dealer brand.
3.3. Measurement

Relationship-specific investments. Relationship-specific investments refer to the non-redeployable tangible and intangible investments that are specialized to a relationship (Williamson, 1975, 1985). If the relationship were terminated, the value of the investments in relationship-specific assets would be largely lost because they have much lower value in other relationships (Heide and John, 1988). For instance, in relationships between automakers and their dealers, dealers may need unique physical facilities (i.e., dedicated equipment) with a set of professional know-how and skills to provide sales and marketing services specialized to an automaker’s product line. Accordingly, the authors built on Heide and John’s (1988) construct of specific investments as the extent to which a dealer has invested in specific assets in its relationship with the automaker and measured this construct with six items. These items are: (1) we have specific know-how of products and services of the automaker, (2) we spend a lot of time and effort to learn specific methods in order to market the automaker’s products and services effectively, (3) we spend a lot of time and effort to learn the characteristics of the automaker’s products and services, (4) we spend a lot of time and effort to learn the special selling techniques for products and services of the automaker, (5) we make investments to the specialized equipment and technology in order to sell the products and services of the automaker, (6) we spend a lot of time and effort to generate a sales district for products and services of the automaker (Cronbach’s alpha = 0.86).

Opportunistic behavior. Opportunism refers to the self-interest seeking behavior characterized by calculated efforts in the form of breaching of the contract, withholding or distorting of information, shirking from the obligations, appropriating the returns from joint investments and etc. (John, 1984; Williamson, 1985; Anderson, 1988; Dahlstrom and Nygaard, 1999; Lui et al., 2009). In this study, a four-item scale was constructed by utilizing the prior operationalization of Dahlstrom and Nygaard (1999) and Jap and Anderson (2003). The items of the scale for opportunism are: (1) the automaker has kept its promises made when we entered the relationship (R), (2) the automaker does not make commitments that it would be unable to fulfill (R), (3) the automaker always gives correct information about the market and sector (R), (4) there is regular flow of information from the automaker to us (R) (Cronbach’s alpha = 0.94).

Cooperative behavior. Automakers and their dealers interact to make decisions regarding marketing, local sales and service campaigns, advertising, promotional activities, showroom modernization and future growth plans. In connection with the degree of interaction between the partners, inter-firm cooperation refers to the extent to which the automaker and its dealer coordinate strategies for selling and marketing services specialized to the automaker’s product line (Reve, 1986; Dahlstrom and Nygaard, 1999). To measure the construct of cooperation a six-item scale was adapted from the studies of Reve and Stern (1986) and Dahlstrom and Nygaard (1999). These items are: (1) we cooperate with the automaker to make future growth plans, (2) we cooperate with the automaker in local sales and service campaigns, (3) we cooperate with the automaker to design market plans, (4) we cooperate with the automaker to design advertisement and promotion activities, (5) we cooperate with the automaker in modernization of showroom & services, (6) most of our activities require close cooperation with the automaker (Cronbach’s alpha = 0.91).

Partnership performance. Following Dwyer et al. (1987), Saxton (1997) and Lui et al. (2009) the authors used a single-item measure for partnership performance that reflects the satisfaction level of relationship. This item is that we generally have a satisfactory relationship with the automaker.

All the indicators of each construct were measured on a 7-point Likert scale ranging from 1= strongly disagree to 7= strongly agree. Reliability analysis was performed to assess the internal consistency of measures of the constructs. Cronbach’s alpha values of all constructs exceed the recommended threshold level of 0.70 (Hair et al., 1998). In addition the potential for response bias was examined by comparing early versus late responses. The test of multivariate analysis of variance (MANOVA) shows no significant differences for the measures between early and late respondents (Wilk’s Lambda = 0.764, F = 1.733, df = 8, p = 0.101). The comparison provides an evidence for the external validity of the study. However, relatively small size of the sample is the main limitation of this research that provides future research opportunities to improve the validity of the measures.

3.4. Analyses and results

Descriptive statistics are summarized in Table 2. The mean ± s.d. of partnership performance is 5.65±1.53 and of relationship-specific investments is 5.65±1.28. While the mean value (5.55±1.41) of cooperation is relatively high, the variable of opportunism has a relatively low mean value (2.24±1.46).
Table 2. Descriptive statistics

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Partnership performance</td>
<td>54</td>
<td>1.00</td>
<td>7.00</td>
<td>5.65</td>
<td>1.53</td>
</tr>
<tr>
<td>2. Opportunism</td>
<td>54</td>
<td>1.00</td>
<td>7.00</td>
<td>2.24</td>
<td>1.46</td>
</tr>
<tr>
<td>3. Cooperation</td>
<td>54</td>
<td>1.17</td>
<td>7.00</td>
<td>5.55</td>
<td>1.41</td>
</tr>
<tr>
<td>4. Relationship-specific investments</td>
<td>54</td>
<td>1.40</td>
<td>7.00</td>
<td>5.65</td>
<td>1.28</td>
</tr>
</tbody>
</table>

Table 3 reports the results of multiple mediation model. In this model, all the paths were typically quantified with regression coefficients calculated by multiple linear regression analyses. The mediation analyses were carried out for variables when all the paths a(n), b(n) and c(n) are statistically significant.

![Diagram of mediation model and coefficients](image-url)
Consistent with the prediction of $H_{1b}$, the results indicate that the relationship between relationship-specific investments and opportunism are negative and significant ($b = -0.832, p<0.01$) based on the bonding effect of relationship-specific investments. On the other hand, the relationship between relationship-specific investments and cooperation is positive and significant, in support of $H_2$ ($b = +0.852, p<0.01$). Therefore the results provide support for the direct effects of independent variable on mediators when $a_1$ and $a_2$ are significant. As to the direct effects of mediators on dependent variable, opportunism has a significantly negative relationship with partnership performance ($b = -0.398, p<0.01$) while cooperation has a significantly positive relationship with the same dependent variable ($b = +0.349, p<0.05$). These findings support $H_3$ and $H_4$. In addition to the direct effects, the results also indicate that each of the separate indirect effects as well as the total indirect effect of mediators on partnership performance is significant (see normality tests for indirect effects). Furthermore, based on $H_5$, the positive direct effect of relationship-specific investments on partnership performance ($b = +0.278$) is acceptable at the significance level of 0.057. At last, the finding reflecting the total effect of relationship-specific investments on partnership performance ($b = +0.907, p<0.01$) shows that the relationship-specific investments mediated by opportunism and cooperation have a greater positive effect on partnership performance, in support of $H_6$.

4. Conclusion

The aim of this study is to examine the effects of relationship-specific investments on the performance of inter-organizational partnerships. This study contributes to the literature by considering the indirect effects of relationship-specific investments on the partnership performance through multiple mediators (opportunism and cooperation) as well as their direct effect. The results obtained from the Turkish automotive distribution channel indicate that relationship-specific investments mediated by opportunism and cooperation have a greater positive effect on partnership performance. It means that relationship-specific investments result in higher performance by decreasing opportunistic expropriation through the leverage effect of the potential gains from cooperation. Thus this study is supported by the predictions of relational governance view that offers an alternative explanation to the transaction cost theory, which is mainly based on the bonding effect of specific investments. According to the reasoning of the relational view, the bonding effect of specific investments motivates both partners to behave cooperatively by facilitating the coordination of operations because competitive advantage generated by bilateral investments exceeds the potential hold-up gains from opportunistic behavior.

The results also have some practical implications for managers doing business in Turkey. Investing in relationship-specific assets increases competitive advantage of the network, since it provides a relational safeguard against opportunism and hence facilitates cooperative orientation to achieve common goals. Accordingly, this study suggests that managers should follow a cooperative strategy supported by relationship-specific investments in order to improve partnership performance.

Although this study has some important theoretical and managerial implications as mentioned above, it includes some limitations that create opportunities for future research. First, the research design of the study uses a single source of respondents. Future studies are needed to explore the relationships between the variables using multiple sources of respondents from both automakers and dealers in order to obtain a more holistic view for explaining the role of relationship-specific investments in improving performance. Second, the sample of this study is relatively small as it only includes 54 dealers operating in the Turkish automotive distribution channel. Therefore the validity of the measures must be improved by using a larger sample. In addition to this, future studies should pay attention to collect data from different inter-organizational relationships in order to increase the generalizability of the results.

References


