

Why Do Small Firms Choose Quasi-Integration? The Case of The Homebuilding Industry

A working paper by

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ABSTRACT

This article explores the variables that drive small firms to choose quasi-integration as an alternative to vertical integration in situations of high asset frequency. Our study provides new insights by focusing on (1) the preferences of small, vulnerable firms, and (2) an institutionalized form of quasi-integration. The findings indicate that the preference for quasi-integration is driven by asset specificity, bargaining power, and opportunistic expectations. The implications are that preferences for quasi-integration go beyond simple efficiency considerations.

INTRODUCTION

Due to asymmetric bargaining power, situations often arise where some firms are able to dominate their vulnerable suppliers or buyers (Subramani and Venkatraman, 2003). In such situations dominant firms may choose quasi-integration, which allows them a degree of managerial control over aspects of the activities of their suppliers or buyers without taking an ownership position in these firms (Blois, 1972). However, while the advantage for dominant firms is clear, under what circumstances will a vulnerable firm also prefer quasi-integration? This question is particularly important in the study of new ventures and small businesses because such firms frequently find themselves in a position of weakness vis-à-vis their suppliers or buyers (cf. Zacharakis, 1997). Furthermore, small and new ventures often do not have the resources necessary to make integration a viable option, and must develop cooperative relationships with other firms in order to gain access to resources they cannot control (Golden and Dollinger, 1993; Jarillo, 1989; Lorenzoni and Ornatì, 1988).

Whether the objective is to maximize transaction cost efficiency or to manage asymmetric bargaining power, the adoption of a new governance structure in an industry represents an innovation that can lead to entrepreneurial profits that will be imitated by other entrepreneurs over time (Schumpeter, 1934). Multiple cycles of interaction leads key suppliers, consumers, regulators and competitors to conform to the norms and behaviors prevalent in an industry (DiMaggio & Powell, 1983). Evolutionary approaches such as those proposed by Schumpeter (1934) and Teece, Pisano, and Shuen (1997) thus argue that differences lead to competitive advantage, whereas institutional approaches (e.g., DiMaggio & Powell, 1983) argue that institutional pressures lead to similarities. A vulnerable firm faces a dilemma in balancing these competing pressures with respect to governance choice.

This article analyses the determinants of the preferences of small, vulnerable firms for quasi-integration in an industry where institutional pressures have made that governance structure the norm. We develop and test hypotheses on the influences of asset specificity, bargaining power, and opportunistic expectations on the choice of quasi-integration in the homebuilding industry in Calgary, Alberta, Canada. In this industry setting, land developers

tend to possess asymmetric bargaining power over homebuilders, and quasi-integration has been actively functioning as a governance structure for over 20 years.

Transaction Cost Theory and Asymmetric Bargaining Power

From an efficiency perspective, transaction cost theory (Williamson, 1985) provides a simple yet powerful analytical framework for determining governance structures. More recently, the dichotomy between market and integration has been bridged with the 'hybrid' governance option, typified by 'long term contractual relations into which security features have been crafted' (Williamson, 1999, p. 1091). Asset specificity, the most important governance parameter in transaction cost theory, refers to unique assets that are not easy to redeploy (Williamson, 1985). Williamson argues, "market contracting gives way to bilateral contracting, which in turn is supplanted by unified contracting (internal organization) as asset specificity progressively deepens" (1985, p.78). In the case of the homebuilding industry, land is highly specific since once developed and zoned it is difficult to 'redeploy' into other uses. Furthermore, since vertical integration is not a viable option for many small firms, which may have limited resources, we predict that there will be a positive relationship between asset specificity and preferences for quasi-integration among small, vulnerable firms in the homebuilding industry.

Hypothesis 1 – There is a positive relationship between asset specificity and the preference of small vulnerable firms for quasi-integration.

Opportunism

From a transaction cost perspective, opportunistic behavior is unpredictable *ex ante*, and therefore must be safeguarded against in transactions involving high asset specificity and recurring frequency. Subramani and Venkatraman (2003) study of vulnerable suppliers of a major retailer found that, while vulnerable suppliers did not have the bargaining power to extract safeguards against opportunism, they "craft governance mechanisms that have the effect of safeguarding them *ex post*, through quasi-integration" (2003, p. 58). Another form of safeguarding is trust, wherein "trust acts to reduce transaction costs by reducing or eliminating both *ex ante* and *ex post* opportunism" (Zaheer & Venkatraman, 1995, p. 379). From the vantage point of a small, vulnerable firm, trust may make the choice of quasi-integration superfluous since with trust the need for hierarchical control to protect against opportunism is diminished. Conversely, in the absence of trust the need for safeguards against opportunism becomes more acute. Furthermore, in the case of the homebuilding industry that we study, quasi-integration has become a structural norm in response to a given industrial configuration (DiMaggio & Powell, 1983). Consequently, we expect that in the absence of trust, firms will seek safeguards against opportunistic behavior, and if quasi-integration is the norm for both suppliers and buyers it will reduce the need for costly contracts to guard against opportunistic behavior because the specifics of the relationships between the two parties will be understood and accepted. Therefore, we propose that there will be a negative relationship between trust and quasi-integration.

Hypothesis 2 – There will be a negative relationship between trust and the preference of small vulnerable firms for quasi-integration.

Bargaining Power

Somewhat contrary to the transaction efficiency approach, resource dependence theory (Pfeffer & Salancik, 1978) and industrial organization economics (Porter, 1980) both identify bargaining power as a significant environmental influence on strategic decisions such as governance mode. While Williamson insist that power is at best “relegated to a secondary role” (1985, p. 125), bargaining power can have a material impact on overall industry profitability and the ability of individual firms to appropriate rents accruing from sustainable competitive advantages (Porter, 1980). Within the scope of this study, bargaining power is defined at the firm level as the relative costs and ability of each party to remove itself from the current transaction relationship (Porter, 1980; Pfeffer & Salancik, 1978; Harrigan, 1985).

Quasi-integration benefits dominant firms. However the preferences of vulnerable firms and how changes or differences in their relative power will influence those preferences are unknown. Blois (1972) argued that quasi-integration could also provide benefits to vulnerable firms such as access to expertise, advice, and economies of scale, and that vulnerable firms can resist excessive intrusions by a powerful customer or supplier by spreading purchases or sales, diversification, and developing switching costs. Furthermore, Subramani and Venkatraman (2003) conclude that vulnerable firms go along with quasi-integration allows them a voice in decision-making. On the other hand, the implication of Blois’ (1972) work remains: as the power imbalance between buyer and seller becomes greater, the vulnerable firm will benefit less by quasi-integration and the dominant firm more. Thus, the preference of vulnerable firms for quasi-integration will be lower than that of dominant firms.

The question then becomes vulnerable firms would attempt to shift to other governance structures such as vertical integration or market contracting as their bargaining power increases. There are two ways to view the issue. Vulnerable firms may seek other forms of governance as their ability to extract themselves from less desirable quasi-integration relationships increases. However, as their bargaining power increases the likelihood of obtaining more favorable terms from quasi-integration also increases. The possibility of quasi-integration becoming more attractive from the viewpoint of a vulnerable firm as asymmetries in power lessen is augmented if that governance structure has become an industry norm. Meyer and Rowan (1977) argue that maintaining or working within the status quo increases the firm’s chances of survival, and increases legitimacy and credibility. Thus, we expect to find a positive relationship between the bargaining power of vulnerable firms and their preferences for quasi-integration.

Hypothesis 3 – As the bargaining power of vulnerable firms increase, so will their preference for quasi-integration.

METHODOLOGY

In a general sense, homebuilding is a mature, fragmented industry characterized by a large number of small firms that compete within a limited geographic scope. The setting chosen for this study – the homebuilding industry in Calgary, Alberta, Canada – exhibits high market activity and firm diversity. In the Calgary industry land developers, who are also generally small

but fewer in numbers, dominate small homebuilders. Therefore, that industry setting fits our need to study an industry composed of small firms that are dominated by their suppliers.

The research methodology included two phases. The first involved qualitative interviews with industry experts and senior managers to get a better understanding of the industry context and develop an appropriate questionnaire. The second involved data collection through the use of a mail-in survey instrument sent out to the members of the Calgary Region Homebuilders Association ('CRHBA'). The questionnaire was sent to representatives of member firms by use of the official mailing list (typically sent directly to each member's most senior officer). A memorandum from the President of the CRHBA was faxed to members prior to the mail-out, to confirm the association's support. The focus of this study is single-family homebuilders, representing the largest proportion of homebuilding firms in the marketplace. The CRHBA includes 140 homebuilder firms, generally responsible for over 95% of the single-family home building permits issued within the City of Calgary to homebuilder firms. Since almost all homebuilders, and in particular the most active homebuilders are members of the CRHBA, it is reasonable and appropriate to consider the member firms as representative of the industry, thereby addressing selection sampling concerns.

Of the 140 firms, 17 declined to participate because they were not operating in the Calgary area, did not build single-family homes, built only out of town, or simply declined to take part. This reduced the target sample to 123 firms. Preparation of the mail-in survey was undertaken with the assistance of in-depth interviews with the CEOs of two of the top 20 homebuilders. To address a potential bias, the firms represented by the interviewed CEOs were eliminated from the target sample, bringing the total down to 121 firms. The instrument was reviewed and pre-tested by two former homebuilder executives and academic colleagues. Follow-up reminder phone calls were made two and four weeks after the mailing of the instrument. A total of 50 responses were received (41%), although one was later discarded due to missing data. These firms collectively reported that they had purchased developed land for almost 5,000 homes in 2001, which was 75% of the total single-family building permits issued by the City of Calgary (Horizon, 2002). The questionnaires were completed by top managers in the responding firms.

Variables and Statistical Techniques

Dependent Variable. The dependent variable, quasi-integration, was measured by asking managers to indicate their preference "to purchase lots as part of a showhome parade, with closed inventory and presale requirements" on a 7-point Likert type scale.

Independent Variables. We employed multiple measures for all of the independent variables using 7-point Likert type scales. The measures were reasonably reliable with alphas ranging from .62 to .78. The measures used for each variable added together to obtain the values of the variables used to test the hypotheses. Two questions were used to measure asset specificity. We asked managers the extent to which geographic location drives their company's decision to enter into new homebuilding opportunities. We also asked them the extent to which an amenity-based community drives their company's decision. Trust was measured using two variables. We asked respondents to assess: (1) the reputation of their developers, and (2) their

company's experience with their developers. To ensure that the study captured the responses of vulnerable firms, bargaining power was first measured on an industry-wide basis, using a paired t-test to assess the significance of the differences between the respondents' perceptions of the costs for themselves and developers to abandon the current supply arrangements. Homebuilders' view their switching costs as significantly higher than developers' ($t=10.045$, $df=43$, $p < 0.001$). To measure individual firms' bargaining power for the analysis we used homebuilders' perceptions of both their ability to replace developers, and the cost of doing so.

Control variables. Control variables were included to assess rival theories that older firms may have a more 'institutionalized' culture than younger firms, and that larger firms would have greater autonomy of choice than smaller firms. Age was measured by the number of years the in the local homebuilding industry, and size by the number of employees.

Hierarchical regression was used to test hypotheses. Table 1 provides descriptive statistics and Pearson correlations for each the variables.

Results

The results of the hierarchical regression analysis are shown in Table 2. Model 1 is significant at the .05 level. The adjusted R^2 is .163. Furthermore, both Hypotheses 1 and 2 are supported. Thus, as specified in Hypothesis 1, asset specificity is positively related to quasi-integration ($p < .01$). Likewise, trust is negatively related to quasi-integration ($p < .05$), as predicted by Hypothesis 2. In model 2 we add bargaining power to the regression equation. The addition of this variable significantly contributes to the explanatory power of the regression ($p < .05$). The adjusted R^2 improved to .227 and the entire model was significant at the .01 level. Asset specificity and trust remain significant in the directions expected. Most importantly, bargaining power is positively related to quasi-integration, testing at the 5% level of significance. Thus, our third hypothesis is supported.

DISCUSSION AND CONCLUSIONS

The results of this empirical investigation show that the precepts of the theories of transaction costs and asymmetric bargaining power appear to operate among small, vulnerable firms in the industry examined. Asset specificity and bargaining power are both positively related to quasi-integration indicating that concerns with efficiency and access to resources both influence the governance choices of small, vulnerable firms. This finding is consistent with the arguments of Blois (1972). It is also important to note that the strategic behaviors of small firms in this regard are similar to the behavior of large firms. This is important since few studies have examined the determinants of governance choices in small or new businesses.

Furthermore, trust is negatively associated with quasi-integration. This suggests that quasi-integration can be an effective response to opportunistic behaviors. However, the context of this study provides a reason for this relationship that goes beyond those previously offered. Thus, holding all else equal, when there is trust homebuilders may seek different governance relationships, perhaps those more akin to pure market contracting, presumably to decrease transaction costs or increase flexibility. When there is a lack of trust they opt for quasi-

integration, which represents another, albeit expensive, method to structure transactions that minimizes the likelihood of opportunistic behavior. Likewise, holding all else equal, homebuilders that are in particularly vulnerable bargaining positions do not appear to have a strong preference for quasi-integration because of the higher cost of transactions connected with this mechanism. However, as bargaining power increases the attractiveness of quasi-integration increases due to the lower costs of transactions associated with higher bargaining power.

The unique contribution of this study is the implication that firms may choose innovative governance structures both for efficiency and institutional socialization reasons. This provides a paradoxical view of the dichotomy between efficiency as the best strategy (Williamson, 1991) and strategy as legitimacy through institutionalized homogeneity (DiMaggio & Powell, 1983). Could it be that both efficiency and institutional legitimacy play a role in governance decisions? Researchers should pursue this field of pluralistic theoretical and empirical study.

Future studies should also seek to investigate other industries in other sectors of the economy. Our analysis was somewhat constrained by the size of our sample; future researchers may want to select industries with larger populations. Our study was also limited in its generalizability because we studied a single, localized industry environment. Future research should therefore consider comparative studies across industries, or extending the study of fragmented industries across geographic boundaries. In addition, our study was a cross-sectional analysis, which prevented a more in-depth investigation of the relationship and development of industry norms and governance structures. Longitudinal studies would contribute to the literature by providing important observations respecting the evolution of quasi-integration over time. Policy-capturing approaches may also provide a greater opportunity to understand the paradoxical relationship between governance choice for efficiency purposes, and choice based on institutional forces (Pablo, 1994). Lastly, a comparison of emerging industries would provide a comparative perspective respecting the importance and evolution of knowledge sharing for small and new firms in vulnerable bargaining positions (Dyer & Singh, 1998; Jarillo, 1989).

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Table 1 – Descriptive Statistics and Pearson Correlations

| | Mean | Std. Deviation | QUASI | SPECIFICITY | TRUST | POWER | AGE | SIZE |
|--------------------|---------|----------------|--------|-------------|-------|-------|-------|-------|
| QUASI | 4.447 | 1.858 | 1.000 | | | | | |
| SPECIFICITY | 10.1224 | 2.7129 | .357* | 1.000 | | | | |
| TRUST | 10.6590 | 2.5446 | -.071 | .518** | 1.000 | | | |
| POWER | 5.1904 | 2.4766 | .370** | .417** | .203 | 1.000 | | |
| AGE | 14.076 | 9.243 | -.087 | .100 | .164 | .337* | 1.000 | |
| SIZE | 20.310 | 24.789 | .121 | .084 | -.060 | .214 | .307* | 1.000 |

* p<0.05 (2-tailed).

** p<0.01 (2-tailed).

Table 2 – Regression Results

| Independent Variable | Hypothesis | Model 1 | | Model 2 | |
|---|-------------------|----------------|---------|----------------|---------|
| | | Std. Beta | t-value | Std. Beta | t-value |
| Age | Control | -.116 | -.821 | -.205 | -1.444 |
| Size | Control | .093 | .661 | .063 | .465 |
| Asset Specificity | 1 | .527 | 3.377** | .396 | 2.451* |
| Inter-firm Trust | 2 | -.319 | -2.020* | -.304 | -2.002* |
| Bargaining Power | 3 | | | .322 | 2.167* |
| Model R² | | .232 | | .308 | |
| Adjusted R² | | .163 | | .227 | |
| F Value respecting R² Change (df – 1, 43) | | | | 4.695* | |

* p < .05

** p<.01