1

Social Bonds and Supplier Allocation of Resources to Business Customers

Roger Baxter¹, Arch G. Woodside² ¹AUT University, New Zealand ²Boston College, USA

ABSTRACT

Purpose of the paper and literature addressed

This paper addresses questions about the effect that social bonds between relationship partners have on the way in which a supplier allocates resources to its relationship with a buyer. Two key questions the paper addresses are the following. In business markets, does strength of social bonds that a supplier perceives with a specific customer influence the supplier's allocations of financial, physical, time, and intangible resources to this customer relative to other customers? If social bonding does uniquely impact supplier allocation of resources to customers, does the impact vary by length of the supplier-customer relationship? The paper proposes and empirically examines three alternative theories (honeymoon, maturity, and imprinting theories) that indicate how suppliers' perceptions of social bonds with customers influence the suppliers' allocations of resources and also examines the proposition that social bonding contributes uniquely to supplier allocations. Honeymoon theory is the proposal that the positive influence of social bonding on supplier resource allocation is greatest in relatively new supplier-customer relationships versus long-term relationships. Maturity theory proposes the opposite-the positive influence of social bonding on supplier resources allocation is greatest in long-term versus new relationships. Imprinting theory proposes that no interaction occurs between the effects of social bonding and length of supplier-customer relationship on supplier resource allocations. The theoretical grounding for the study extends the IMP stream of research, using ideas including the concepts of relationship marketing theory and Homans' framework for social behavior.

Research method

The study collects data on seven-point scales from 314 sales and marketing managers in New Zealand manufacturers. The study then analyzes relationships between variables using correlations, including partial correlations to separate the effects of financial bonding from social bonding; path analysis; and tipping point analysis.

Research findings

Analyses of data from a national survey of marketing and sales managers in New Zealand manufacturing firms support the view that social bonding does impact supplier allocation of resources to customers beyond the impact expectations of customer profitability. The findings confirm that both the imprinting theory model and the maturity theory model of the impact of social bonding on supplier resource allocation are relevant, depending on the specific resource that the analysis considers.

Main contribution

The findings indicate that relationship managers need to take into account the clear effect that creation of strong social bonds in buyer-seller relationships has on the way in which suppliers allocate resources to those relationships. This is an important consideration, given the effect that the allocation of resources such as money, time, and knowledge has on the success of relationships.

Keywords

Relationships; resource allocation; social bonds

SOCIAL BONDS AND SUPPLIER ALLOCATION OF RESOURCES TO BUSINESS CUSTOMERS

INTRODUCTION

The IMP literature (Hakansson, 1982; Hakansson & Snehota, 1995) has a strong focus on the issues of interaction between firms and on the actors in relationships, the resource links between actors, and the activities that take place within the relationship. Amongst the resources that actors work with are their firms' inputs into the relationship of dollars, physical items, time, and intangibles such as knowledge. These inputs relate to the bonds, including the financial and social bonds, which form between the firms, but what are these relationships in detail? This article provides some answers to that question by empirically investigating social behavior influences in the context of buyer-seller relationships. It specifically investigates the following questions. In business markets, does strength of social bonds that a supplier perceives with a specific customer influence the supplier's allocations of financial, physical, time, and intangible resources to this customer relative to other customers? If social bonding does uniquely impact supplier allocation of resources to customers, does the impact vary by length of the supplier-customer relationship?

Homans (1961, p. 390) reviews substantial evidence supporting his assertion, "As the institutions of civilization depart further and further from elementary social behavior, the latter does not disappear in proportion. Far from it, it persists obviously and everywhere, ready to take its revenge." The present article considers a tenet that builds from Homans' (1961, p. 75) general rule of distributive justice: a person in an exchange relation with another will expect that the rewards of each be proportional to her/his costs—the greater the rewards, the greater the costs—and the net rewards, or profits, of each person be proportional to her/his investments—the greater the investments, the greater the profit. This general rule of distributive justice may be extendable to a view that strong social bonds, in contrast to weak bonds, are investments by both parties in the relationship that result in greater allocation of resources by each party to the other.

This article examines this tenet from the perspective of manufacturer suppliers in business markets. The findings in this report do support the perspective that a supplier's perception of comparatively strong social bond with one customer (say, customer X) versus other customers (customers Y and Z) increases the supplier's allocation of resources into the relationship with customer X relative to Y or Z. The article also investigates how the level of social bonding in a relationship, whether high, medium, has a negative, positive or neutral interaction effect on social bonding and length of the relationship. The study considers three models of resource allocation: the "honeymoon theory"; the "maturity theory"; and the "imprinting theory".

The relevant strategic management literature (Barney, 1986, 1991; Dierickx & Cool, 1989) advocates analyzing firms and "interfirms" (Baum & Ingram, 2002) from the resource as well as the product perspective: "If a privileged product market position is achieved or protected by the deployment of scarce assets, it is necessary to account for the *opportunity cost* of those assets" (Dierickx & Cool, 1989, p. 1509). Barney (1986, p. 1231) introduces the concept of a

"strategic factor market" as "a market where the resources necessary to implement a strategy are acquired."

The implementation of a strategy may require assets that are usually nonappropriable. Social bonding among managers in interfirm relationships is usefully viewable as one process of acquiring such nonappropriable assets, which are unique and inimitable and hence provide competitive advantage (Barney, 1991). Dierickx and Cool (1989) stress that nonappropriability may stem from various sources, such as the absence of well-defined property rights, or "bookkeeping feasibility" problems (see, e.g., Bator, 1958; Meade, 1952). Clearly, markets for such assets do not exist. Loyalty of one's dealers or the trust of one's customers cannot be bought. Dealer loyalty must be cultivated, and customers' trust must be earned through a history of honest dealings.

As Arrow (1974, p. 23) points out: "Unfortunately, [trust] is not a commodity which can be bought very easily. If you have to buy it, you already have some doubts about what you've bought. Trust and similar values, loyalty or truth telling, are examples of what the economist would call "externalities". They are goods, they are commodities; they have real, practical economic value; (...) But they are not commodities for which trade on the open market is technically possible or even meaningful." (Dierickx & Cool, 1989, p. 1505)

In the marketing literature, Hunt & Morgan (1995) offer a "comparative advantage theory of competition" in which "resources are the tangible and intangible entities available to the firm that enable it to produce efficiently and/or effectively a market offering that has value for some market segment or segments (cf. Barney, 1991; Wernerfelt, 1984)."

For example, a firm's core competencies (Prahalad & Hamel, 1990) are intangible, higher order resources that enable it to perform—better perhaps than its competitors—the activities in Porter's (1985) "value chain." Drawing on Barney (1991), Day, and Wensley (1988), and Hofer and Schendel (1978), we propose that the multitude of potential resources can be most usefully categorized as financial (e.g., cash reserves, access to financial markets), physical (e.g., plant, equipment), legal (e.g., trademarks, licenses), human (e.g., the skills and knowledge of individual employees), organizational (e.g., competencies, controls, policies, culture), informational (e.g., knowledge resulting from consumer and competitor intelligence), and relational (e.g., relationships with suppliers and customers). (Hunt & Morgan, 1995, pp. 5-6)

In proposing their comparative advantage theory of competition, Hunt and Morgan call for testing all propositions they set forth in the theory. "Specifically, because we adopt the epistemology of scientific realism (Hunt, 1991), each premise is offered as a proposition that can and should be subjected to empirical testing." The present article reports empirical testing of a tenet that is viewable as part of comparative advantage theory--the tenet is that interfirm relationships (social and financial) affect how suppliers allocate their resources to customers. The present article is unique and valuable in its consideration of alternative theories of how social bonding may affect interfirm allocation of resources, in empirically testing these alternative theories, and in the article's implications for advancing theory and marketing management practice.

Following this introduction, section two of the article presents a review of relevant literature. Section three includes formal statements of alternative theories of the impact of social

bonds on supplier (or customer) allocations of resources. Section four describes the method for examining the theories empirically. Section five presents the findings from the study. Section six discusses implications for theory and managing relationships among suppliers and business customers. Section seven discusses limitations. Section eight offers conclusions and suggestions for future research.

THEORY AND RESEARCH ON SOCIAL BONDS AMONG SUPPLIERS AND BUSINESS CUSTOMERS

Theory in business relationship marketing includes the proposition that buyers and sellers having strong personal relationships are more committed to maintaining the relationship than less socially bonded partners (Wilson, 1995). Survey research by Wilson and Mummalaneni (1986) and Mummalaneni and Wilson (1991) supports this proposition; however, Han and Wilson (1993) find that social bonding did not contribute to buyer-seller commitment in a relatively complex buying context. Rodríguez and Wilson (2002) propose that perceived strength of social bonds affects trust in the business partner positively and that both social bond and trust influence commitment to the relationship; they support these two propositions in analyses of survey data on U.S. and Mexican strategic alliances.

Relevant theory includes the perspective that psychological antecedents include "personal bonding" or "social bonding" (Han, 1991; Wilson & Mummalaneni, 1986) and social bonds "encompass resources that are emotional or affective in nature. As such, social bonding entails familiarity, friendship, and personal confidence built through interpersonal exchange. It measures the strength of a personal relationship and may range from business to close, personal ties" (Rodríguez & Wilson, 2002, p. 55). Thus, the concept of social bonding as a resource antecedent in business marketing-customer relationships provides theoretical ground for the proposal that social bonding as a resource associates with the investment of other resources in the relationships. While not referring to social bonding specifically, Anderson (1995) and Anderson and Narus (1991) express the view that the prosperity of firms depends on having "close, collaborative, relationships with selected suppliers, customers, and value-added retailers. Thus, management thinking has advanced to gaining a better understanding of *which* firms they ought to engage in these collaborative relationships and *how* to make these relationships work in practice" (Anderson, 1995, p. 346, italics in the original).

Favorable versus unfavorable social bonding is viewable as one component of "close, collaborative, relationships with selected suppliers, customers, and value-added retailers." Does such social bonding really make a unique contribution in influencing the allocation of financial, physical, time, and intangible inputs (knowledge, skills, ingenuity, and business contacts) in a supplier and business customer relationship? If yes, does this unique contribution affect the prosperity of the supplier and/or the customer firm in the relationship? While research on the impact of social bonding on trust and commitment supports such relationships, the propositions relating to the association of social bonding with the allocation of other resources and social bonding's unique influence on the prosperity of the firm are topics for empirical investigation.

ALTERNATIVE THEORIES OF SOCIAL BONDING'S INFLUENCE

ON SUPPLIER ALLOCATIONS OF OTHER RESOURCES

Figure 1 shows three alternative theories of social bonding's relationships with supplier resource allocation. "Honeymoon theory" (Panel A in Figure 1) is a descriptive term that suggests that a negative interaction effect occurs for social bonding and length of the relationship on resource allocation (cf. Deeds & Rothaermel, 2003; Fichman & Levinthal, 1991). According to the honeymoon theory, the highest level of social bonding occurs early in supplier-customer relationships and this bonding results in the highest level of supplier resource allocations to customers having such early high levels of social bonding. Rationale: all relationships eventually include problems and misunderstandings that result in declines in social bonding levels between suppliers and customers so that even though a supplier allocates greater resources to customers with high versus low social bond levels in late, well-established, relationships, the differences in resources allocation is substantially less in comparison to the respective allocations made in early-stage relationships.





Fichman and Levinthal (1991) inform the theoretical model for the occurrence of honeymoon relationships:

In contrast to the emphasis in the literature on the liabilities of newness, we suggest that relationships can start with some initial stock of assets, which (depending on the particular context) can include favorable prior beliefs, trust, goodwill, financial resources, or psychological commitment. We propose that if a relationship starts with an initial stock of assets, the risk of the relationship dissolving at its inception is reduced, even if the initial outcomes of the relationship are unfavorable. These unfavorable outcomes can take the

form of poor performance evaluations in the context of employment relations or unsatisfactory service in an inter-organizational relationship. We also propose that the duration of this honeymoon period is likely to vary with the magnitude of these initial assets. (Fichman & Levinthal, 1991, pp. 443-444)

However, Fichman and Levinthal's (1991) review of the empirical literature supporting the existence of such relationships does not examine the roles of specific assets (e.g., social bonding and financial bonding) supporting or refuting their main proposition that relationships are unlikely to terminate early in a relationship. Also, the Fichman and Levinthal review does not examine how the stock of assets in a relationship affects dollar, physical, time, and intangible resource allocations into the relationships. Considering the shape of association of length-of-time in relationships and the dissolution of the relationships as Fichman and Levinthal report does not indicate how asset stocks are influencing resource allocations for new, adolescent, and mature relationships. Support or refutation of the honeymoon model and alternative models of relationship stock assets on relationship-behavior outcomes such as resource allocations by one or both parties in the relationship, as the current study does.

In comparison to the honeymoon model, the maturity theory suggests the opposite view. The impact of strong versus weak social bonds grows stronger over the years (Panel B in Figure 1). Over time some business-to-business relationships build up high versus low levels of interdependency, trust, and comfort in comparison to others. High levels of these assets serve to increase the relative allocations of resources by firms in the relationship. Baum and Ingram (2002, p. 193) suggest that interdependencies and relational embeddedness in "interfirm" organizational groups build from resource procurements and allocations, uncertainty reduction, and the creation of stable, preferential, relationships:

We argue that interfirms are structured around a broad set of economic and non-economic interdependencies, facilitating organizational cooperation in pursuit of many different interests.... In broad terms, interdependence focuses on two considerations: resource procurement and uncertainty reduction (Pfeffer & Salancik, 1978). Organizations form inter-organizational relations to access resources that are essential to pursuing their goals but are at least in part controlled by other organizations.

Baum and Ingram (2002) and Baum, Shipilov, and Rowley (2003) stress the role of relational embeddedness in deepening and strengthening interfirm relationships. Relational embeddedness highlights effects of dyadic ties between firms on subsequent cooperation between them (Gulati & Gargiulo, 1999). To reduce search costs and alleviate risks of opportunism that might occur with interfirm relationships, firms tend to create stable, preferential relationships characterized by trust and rich information exchange with specific partners. Prior direct ties provide channels through which each partner can learn about the competencies and reliability of the other, amplifying trust and diminishing uncertainty associating with future ties (Chung, Singh, & Lee, 2000; Gulati, 1995). Baum et al. (2003) offer an empirical study showing that the working ties among banks expand with the maturing of relationships. Such empirical research on maturity theory in interfirm relationships is inherently appealing but does not address

directly the following question. Is the higher allocation of resources by a partner in contexts where social and financial bonds are strong, versus weak, more pronounced in mature interfirm relationships than in new interfirm relationships? This question is the focal issue in the present study.

Imprinting theory, or consistent growth theory, predicts no interaction effect for social bonding and length of the relationship on supplier allocation of resources (Panel C in Figure 1). The old saw, "You don't get a second chance to make a first impression," reflects thinking that supports consistent growth theory. Consistent growth theory recognizes that no relationship starts out as a strong tie, but interfirm embeddedness works as a priming mechanism through which small initial offers of trust and assistance strengthen into a resilient tie, provided that they are reciprocated (Heugens & Zyglidopoulos, 2008). Pursey et al. (2008, p. 332) stress that the interfirm "relationship acquires a social character above and beyond the technical characteristics of the exchange at hand (Granovetter, 1985). As the exchange loses its anonymity, partners start building relationships in which trust and mutual reliance rise to the fore (Uzzi, 1999)."

The proposition is that interfirm imprinting provides an advantage for a customer (or supplier) in an interfirm relationship that consistently carries across many exchange occasions and many years of the relationship. This micro view of interfirm relationships is viewable as an extension of Stinchcombe's (1965) proposal concerning macro economic and technical conditions, as the imprinting forces, affecting appropriate organizational form in terms of social structure. "Subsequent research suggests that imprinting may have long lasting effects upon the strategies, strategic choices, and operating practices of firms (Bamford, Dean, & McDougall, 2000; Boeker, 1989; Kimberly, 1979; Kriauciunas & Kale, 2006; Schein, 1983)" (Kriauciunas & Shinkle, 2008, p. 4).

We consider Organizational Imprinting the forgotten theory, since the impact of imprinting has been understudied, under recognized, or both. We believe this has occurred due to two reasons: (1) research that reflects organizational imprinting has been misclassified as something other than imprinting, and (2) research related to firms has not fully addressed the initial point of firm behavior which is a topic that can be enhanced by imprinting theory. (Kriauciunas & Shinkle, 2008, p. 10)

The above discussion informs the following hypotheses. H_1 : Social bonding in interfirm relationships has a positive influence on suppliers' allocation of resources to customers. H_2 : To some meaningful extent, the positive social-bonding influence in interfirm relationships on suppliers' relative allocation of resources is independent from the impact of financial bonds between customers and suppliers.

The honeymoon model, H_3 : social bonding and length of the relationship with a business-to-business customer has a negative interaction effect on the supplier's relative allocation of resources to the customer. The maturity model, H_4 : social bonding and length of the relationship with a business-to-business customer has a positive interaction effect on the supplier's relative allocation of resources to the customer. The imprinting model, H_5 : no interaction effect occurs for social bonding and length of the relationship with a business-to-business customer on the supplier's relative allocation of resources to the customer.

METHOD

The method for empirically testing the hypotheses included completing several steps: exploratory interviews with managers, measurement development and pretesting, pretesting the instrument, survey data collection, and data analysis. The study conducted and analyzed seven exploratory interviews with managers to check face validity of the constructs. The following sections give more detail of this process.

Measurement Instrument Development and Testing

A mail survey collected data to test the hypotheses. Prior to the main survey, the study included the development of the single-item scales (Rossiter, 2002, p. 313) for the focal concepts in the hypotheses. The questionnaire used seven-point Likert-type statements, with only the end points of the scales labeled. The anchor points for supplier allocation of resources relative to other relationships were "Very much lower" to "Very much higher". For social and financial bonding the anchor points were "I do not agree at all: to "I fully agree". The survey asked sample frame members to write in the number of years their firm has had a relationship with the focal customer.

Academics with knowledge of the relationship field and others with expertise in questionnaire design worked through the draft questionnaire and made comments. After appropriate modification to the questionnaire, five practitioners then worked through it. These processes resulted in minor additional modifications. The researchers then mailed out 200 pilot questionnaires. The 28 responses from this pilot survey indicated that there was a need to specify more exactly the selection criteria by the respondent for choice of subject for the questionnaire. The pilot study established that if respondents were left to choose for themselves which relationship they used as the subject for their questionnaire answers, they would tend to choose a customer that they perceived favorably on all items, thereby providing data that were skewed and did not have as much variance as desired for effective analysis. Substantial variance in the data was necessary for effective analysis; hence, based on an approach used by Anderson and Narus (1990), respondents to the main survey selected their fourth largest customer as the subject. This approach, reinforced by discussion of their fourth largest customer with several sales managers prior to mailing the main survey, helped to obtain a spread of relationship types. The received surveys include a wide range of relationship durations and standard deviations ranging from 1.1 to 1.6 on the 1–7 scale for the items used in the study.

The study includes a validation item "Our firm shares a lot of goals with this customer." to examine the nomological validity of the constructs. The observed pattern of relationships among constructs should match with theoretical expectations: see Peter (1981). Wilson (1995) proposes that establishing strong mutual goals has the widest range of associations in integrating relationship variables and in the relationship development processes. Meeting theoretical expectations, the responses to "sharing a lot of goals" more closely relate to the social and financial bonding items than to the resource allocation items or length of time in the relationship. The findings confirm these predictions; Table 2 in the results section reports the correlations of all items with the validation item.

The appendix includes the specific instructions and scale items in the survey for the four supplier resource allocations in the study: dollars, physical items, time, and intangible inputs. The appendix also includes the specific instructions and items for social and financial bonding relationships.

Sample and Data Collection

The researchers distributed the self-administered mail questionnaire to a randomly selected sample from a sample frame comprising managers in marketing or sales positions in New Zealand suppliers or distributors of manufactured goods on the database of a multinational directory company. After telephone verification of recipient names and addresses, 1407 questionnaires were mailed out and 318 responses received back after mailing of a postcard reminder, for a 23% response rate. Of the 318 responses, 314 were usable. Early and late responses were analyzed as Armstrong & Overton (1977) suggest for assessing nonresponse bias: significant differences were not found in *t*-tests on key items in the questionnaire.

The New Zealand economy is a small one, thus, the sample is a good representation of the size of companies in the sector and the distribution of sizes is similar to that in the sample frame. The respondents were mainly sales managers (45%), marketing managers (21%), sales and marketing managers (14%), or in a CEO/General Manager /Director position (9%). Others were in positions such as product manager or customer service manager, making them qualified to respond concerning relationships with buyers. The buyers used by respondents as the questionnaire subject came from a range of primary product, manufacturing, and service firms. Baxter and Matear (2004) provide additional details on the sample respondent characteristics.

Data Analyses

Analyses include individual level and group level examination of the data. Bivariate correlations assess relationships between social and financial bonds on one hand and four resource allocation constructs on the other hand. Partial correlation analysis assesses the effect of social bonds independent of financial bonds. Path models are used to illustrate the relationships between social bonding, financial bonding, years in relationship and their resource allocation outcomes. The examinations of relationships include tipping point analysis, as McClelland (1998) recommends and illustrates for psychological variables. McClelland (1998) observes that the changes in a psychological or societal variable make little difference until they reach a certain level. Relationships for the independent variable and outcome variables are often nonlinear and not well described by correlation coefficients. Instead, they are described accurately as tipping points (Gladwell, 1996). In his 1998 paper, McClelland divides scores for an independent construct to form five groups of respondents from very low to very high and reports each group's scores for a dependent construct. The present study also includes this data analysis method.

The analyses by the researchers include examining relationships using the full range of scores and also using summary measures of low (1-3), medium (4-5), and high (6-7) social and financial bonding scores. The findings using these alternative scoring procedures differed very little to not at all. Consequently, the findings in this article are for the summary measures of low, medium, and high social bonding scores (low = 1, medium = 2, and high = 3).

FINDINGS

Social Bonding and Supplier Resource Allocations

The findings of data analyses in Table 1 and Figure 2 support H_1 : Social bonding in interfirm relationships has a positive influence on suppliers' allocation of resources to customers. The findings show a consistent pattern for allocations across the four categories of resources: dollars, physical items, time, and intangibles.

The ANOVA findings are significant statistically (p < .000 for 3 of the 4 categories of resources) and the eta² values indicate modest but meaningful effects sizes for three resource categories. The patterns of resource allocation scores indicate an overall linear increasing impact of social bonding on supplier resource allocations: lowest allocations for the informants in the total low social bonding group in Figure 2 and highest allocations for the informants in the total high social bonding group.

Social Bonding's Influence on Resource Allocation Controlling for Financial Bonding

The findings support H_2 : To some meaningful extent, the positive social-bonding influence in interfirm relationships on suppliers' relative allocation of resources is independent from the impact of financial bonds between customers and suppliers. Table 2 includes the bivariate and partial correlations of social bonding and financial bonding influences with the four supplier resource allocations.

The bivariate correlations indicate statistically significant relationships for social bonding (and financial bonding) with all four resource allocation constructs. Three of the four partial correlations of social bonding with the four resource allocation constructs, controlling for financial bonding, are significant statistically.

Figure 2 is a visual of the mean scores for resource allocations in dollars for the three levels of social bonding controlling for the three levels of financial bonding. Focusing on the low versus high levels of social bonding by the low level versus the high level of financial bonding indicates modest increases in dollar resource allocations: 3.77 to 3.94 and 4.67 to 4.83, respectively. A consistent pattern is observable in Figure 2 for low to high social bonding for the medium level of financial bonding as well: 4.25 to 4.47. Such patterns of modest increase in resource allocations occur for 11 of the 12 possible comparisons for the other three resource allocations (physical items, time, and intangibles) for the low to high social bonding range, controlling for the three levels of financial bonding (p < .01 by a sign test).

Table 1
Resource Allocations by Supplier to Customers with Low, Medium, and High Social Bonds
with the Supplier by Years in the Relationship

Social	Years in Relationship	Resource								
Bonding		Dollars		Physical Items		Time		Intangibles (KSIB)		
		Μ	s.e.	M	s. e.	Μ	s.e.	M	s.e.	n
Low	1 – 5	3.50	.19	3.69	.27	4.58	.22	4.85	.25	26
	6 – 8	4.00	.21	3.94	.30	4.65	.31	5.29	.21	17
	9 – 10	3.63	.33	3.38	.30	4.56	.24	5.06	.27	16
	11 – 16	4.38	.31	3.62	.49	5.12	.25	5.08	.24	13
	17 +	4.00	.28	3.85	.24	4.50	.26	4.70	.19	20
	Total	3.85	.19	3.70	.14	4.65	.11	4.97	.11	92
Medium	1 – 5	4.63	.34	3.37	.36	4.89	.33	4.95	.28	19
	6 – 8	4.11	.28	3.64	.31	4.86	.18	4.86	.18	28
	9 – 10	4.20	.28	3.96	.31	4.92	.23	5.40	.21	25
	11 – 16	4.43	.30	3.48	.29	4.78	.25	5.30	.23	23
	17 +	4.47	.19	3.73	.21	5.13	.16	5.37	.17	30
	Total	4.35	.12	3.65	.13	4.93	.10	5.18	.09	125
High	1 – 5	4.12	.27	3.52	.30	4.96	1.06	5.52	.15	25
	6 – 8	5.11	.28	4.32	.41	5.42	1.39	5.84	.21	19
	9 – 10	4.43	.31	4.57	.33	5.14	.66	5.79	.24	14
	11 – 16	4.35	.24	4.17	.33	5.57	.95	5.70	.21	23
	17 +	5.25	.23	4.56	.37	5.38	.81	5.63	.26	16
	Total	4.60	.13	4.15	.16	5.30	1.03	5.68	.09	97
F-value		8.67		3.67		8.32		12.93		
DF = 2/331 (p <)		(.000)		(.027)		(.000)		(.000)		
η^2 (Eta ²)		.053		.023		.051		.077		

Relationships of Four Resource Allocations, Social, and Financial Bonding Variables: Double-Headed Arrows Show Bivariate Correlations of Resources with Social Bonding above the Diagonal and Partial Correlations of Resources with Social Bonding Controlling for Financial Bonding below the Diagonal

Table 2

Variable	1	2	3	4	5	6	7 ^b	8 ^e
1. Dollar your firm puts into the relationship		34	38	26	× ²³	13	11	21
2. Physical items such as equipment			28	20	1 2	12	07	16
3. Time that firm's personnel spend working				57 a	× ²³	20	08	30
4. Your intangible inputs, such as knowledge,					× ²⁷	28	05	24
5. Social : We have strong social bonds with people ^c	20	10	19	22		22	01	34
6. Financial: This relationship is very profitable for us ^d	09	10	15	23			03	39
7. Years: For how many years has your firm								- 02

8. Validation item: "Our firm shares a lot of goals with this customer" e

Note. Decimals omitted; r > .10, p < .05; r > .18, p < .01.

^a Highest correlation (r = .57) indicates that high intangible inputs into a relationship take a lot of time resources. ^b Years of relationship has significant relationship with only one resource, dollars; finding is suggestive that more versus less profitable relationships survive for longer periods.

- ^c Partial correlations of resources with social bonding controlling for financial bonding.
- ^d Partial correlations of resources with financial bonding controlling for social bonding.
- ^e Validation correlations matches pattern correlation predictions: highest for two bonding variables and nonsignificantly with years.



Figure 2Social Bonding Influence on Supplier Allocation of Dollar Resources. Controlling for Financial BondingNoteNumbers include the mean (standard error) sample sizeF = 8 -4, DF = 2/310, p = 000; $\eta^2 = 053$)

Findings Relevant for the Honeymoon Model

The findings do not support the honeymoon model, as Table 1 shows. Table 1 reports means, standard errors, and sample sizes for the relevant comparisons. Unlike the prediction of the honeymoon model, the resource allocation means for the informants reporting high social bonding with their fourth largest customers consistently are higher (not lower) for mature versus new relationships for all four resource allocation categories.

Illustrative of similar patterns observable for allocations of all four resources (Table 1), Figure 3 plots the means in Table 1 for dollar resource allocations for the five time periods controlling for the three levels of social bonding. Considering a tipping point analysis (McClelland,1998) of the extreme new-to-mature relationships for the low-to-high social bonding means, the findings for the two dotted-lines most resemble the imprinting model rather than the other two proposed models for the dollar resource allocations, because they have similar gradients. They therefore show no great difference in resource allocation across differing relationship durations.



Note. Dotted line indicates a modest positive interaction effect of social bonding and length of the relationship on

Note. Dotted the indicates a modest positive interaction effect of fortal bonding and length of the relationship on dollars supply firm puts into the relationship. The findings support the imprinting theory of social bonding influence on dollar resource allocation by suppliers.

Findings Relevant for the Maturity Model

The findings offer mixed support for the maturity model for two of the four resource allocation categories. Modest decreases in average resource allocation occur in the low social bonding group for "time that your personnel spend working on the relationship" and "intangible inputs, such as knowledge, skills, ingenuity, and your business contacts" across the relationships in the five time periods. In contrast, increases occur for these two resource allocation categories across the relationships in the five time periods for the high social bonding groups. See Table 1 for these findings.

The tipping-point observed patterns for the time and intangible resource allocations match with the maturity model. Customers in long-term sour relationships with suppliers are particularly likely to receive less time with supplier personnel and receive less intangible inputs of knowledge, skills, ingenuity, and business contacts (KSIB) in comparison to customers in long-term sweet relationships.

However, these observations only follow from examining the findings in Table 1. Path analyses of social bonding, years in the relationship, and their interactions to explain each of the four resource allocations do not support a social bonding-by-years in the relationship interaction effect.

Findings Relevant for the Imprinting Model

Examining the findings in Table 1 and Figure 2, the imprinting model receives modest support for two of the four resource allocations: dollar and physical items. A path model for dollar resource allocation supports the imprinting model. The findings of this path model and the path models for the other three resource allocations appear in Figure 4.



Figure 4 Path Models of Social Bonding, Financial Bonding, and Years in Relationship Predicting Resource Allocations Numbers on Arrows are betas, β (standardized partial regression coefficients)

A key point relevant to these findings is that the advantage in receiving relatively greater resource allocations from suppliers for customers having high versus low social bonding relationships is greater for mature than it is for new relationships. Time does not heal or nurture wounds that may exist in low social bond relationships.

For the path models in Figure 4, the presence of the interaction term for social bonding and financial bonding without the independent term for either bonding variable for three of the four resources, specifically physical items, time, and intangibles, supports Wilson's (1995, p. 339) proposition that the interaction of relationship bonds "may be greater than the sum of their

parts in creating a force to hold a relationship together" (and, as the present study indicates, to encourage the allocation of resources). The interaction terms alone in three of the four path models in Figure 5 indicate that the combination of high social bonding and high financial bonding usually results in higher levels of resource allocations than high-medium or high-low combinations of these two bonding processes. Examination of averages for the nine combinations of three social bonding levels by three financial bonding levels supports this conclusion for allocations across all four resources.

DISCUSSION: IMPLICATIONS FOR THEORY AND PRACTICE

The findings on the present study support important propositions. (1) High versus low social bonding positively affects the supplier allocations of tangible and intangible resources to customers. (2) The positive social bonding influence on resource allocations occurs independently to some meaningful extent from the impact of financial bonding on resource allocations. (3) Social bonding's influence on resource allocation occurs in mature as well as new relationships. (4) The maturity and imprinting models of social bonding's influence on supplier resource allocations are more germane than the honeymoon model--the particular model most relevant appears to be contingent on the particular resource under examination. (6) The highest levels of supplier resource allocations occur in conditions of high social bonding in conjunction with high financial bonding for three of the four resource allocations: allocation of physical items as resources is the exception. The comparison of this best conjunction with the opposite conjunction is striking, as the means of 4.83 versus 3.77 show in Figure 2 for "dollars your firm puts into the relationship".

These conclusions support both Homan's (1958) theoretical (and still radical) perspective in sociology and Wilson and Jantrania's (1994) rationale for practice in adopting a relationship versus a transactional mode of interfirm behavior. Homans (1958, p. 597) theoretically proposes that viewing "social behavior as an exchange of goods may clarify the relationships among four bodies of theory: behavioral psychology, economics, propositions about the dynamics of influence, and propositions about the structure of small groups." High social bonding serves as a foundation or lubricant for customers for gaining financial, physical, time, and important intangible (KSIB) allocations from suppliers. In his article Homans (1958, p. 606) implies such a view is anathema in sociology, "Of all our many 'approaches' to social behavior, the one that sees it as an economy is the most neglected, and yet is the one we use every moment of our livesexcept when we write sociology."

Wilson (1995) observes that one of the largest barriers to adoption of the relationship model is the organizational reward system, which encourages buyers to drive for lower prices and salespeople to sell, not manage a relationship, thus maintaining an adversarial environment.

Senior management often talk relationships while the managers charged with implementation operate in a transactional mode, which makes trust development and the achievement of mutual goals difficult if not impossible. Implementation of relationships requires changes in corporate culture and reward systems to reinforce the behaviors that generate trust, mutual goals and adaptation, and the other critical variables in the creation of a strong hybrid relationship. (Wilson, 1995, p. 344).

Theory development and advancing metrics that provide evidence supporting the tenets of the relationship model (such as the unique contribution of social bonding in influencing supplier allocation of tangible and intangible resources) are likely necessary precursors to the paradigm shifts in corporate culture and reward systems that Wilson (1995) advocates.

LIMITATIONS

The empirical study that this report describes involves cross-section, survey, self-report data using fixed-point responses from one manager per firm and one side of a supplier-customer relationship. While this profile of business-to-business research study may dominate the business-to-business research, each characteristic of the method possesses important limitations. Certainly the need for longitudinal research methods is relevant for the study of social bonding processes and their influence on suppliers' resource allocations to customers, and vice versa. Longitudinal methods are challenging to apply and generate the issue of generalizability because of the small number of interfirm relationships that such studies typically examine; however, the increase in nuance, relationship coverage, and accuracy that longitudinal studies provide justify the substantial effort in doing such studies.

Self-report surveys using fixed-point responses from one informant per firm invite discussion of several issues. Do other persons in the supplier firm have highly similar beliefs toward the same customer as the informant's beliefs? Certainly some variability in the responses would occur; and some of multi-person responses are likely to vary substantially for some share of suppliers if such research would include interviews with two or preferably more informants per firm. Similarly, substantial variability in customer responses versus the supplier's responses would occur for some share of customers--how does substantial variance in responses versus consistently the same responses between suppliers and customers influence the associations of the social bonding and resource allocations constructs?

Also, the use of only seven-point self-reports for relative resource allocations limits the value of the study. Do the respondents' beliefs about the level of relative resource allocations match independent assessments of these allocations? For example, do the reports about "the amount of time that your personnel spend working on the relationship" with this customer match with independent records of telephone calls, faxes, emails, and face-to-face visits with this customer and in-firm discussions about this customer? Relevant literature does include the use of different data sources to confirm self-reports versus observed behaviors in research on marketing-consumer relationships (Aurier & N'Goala, 2009); such research would be useful to emulate in business-to-business research contexts. In conjunction with this question is the value of seven-point scales requiring informants to transform knowledge about concepts, interactions, and beliefs about one customer into a number ranging from 1 to 7. Even though informants are able to do so, the collection of emic "thick-descriptions" (Geertz, 1973) of events and processes leading to the fixed-point responses would improve the value of such studies.

The findings relate to manufacturers and distributors of manufactured products in one developed country. Replications of the research and findings on an industry-by-industry level and for several nations might confirm the validity of the findings that this article describes.

Thus, while the findings in the present study appear to be informative, the limitations suggest the need for caution in considering the accuracy and generalizability of the findings.

The findings in this report are suggestive and may be appealing but confirmation of the findings using other methods in additional industries, and in other nations, is necessary.

Because the data permit only cross-sectional and not longitudinal analyses, these findings do not fully test the honeymoon model or the two other hypothesized social bonding models by time. Conceptualizing honeymoon versus post-honeymoon relationships implies that longitudinal analysis is more relevant than cross-sectional relationships. Relationships are more likely to terminate earlier when either party believes that low versus high social bonding describes the relationship. Examining the sustainability and termination of supplier-customer relationships at the interfirm level would be a challenging undertaking that this study leaves for future research.

CONCLUSIONS AND SUGGESTIONS FOR FUTURE RESEARCH

The present study theoretically extends the possibility that social behavior in its elementary form of social bonding affects supplier allocations of scarce resources--dollars, time, physical items, and intangibles (KSIB). Findings from a preliminary survey of suppliers in manufacturing and distribution firms in one economically developed country confirm this theoretical extension. Additional research within industries and across several nations that incorporates examining the social bonding beliefs for both suppliers and customers within specific interfirm relationships is worthy of consideration.

Wilson's (1995, p. 342) observation still appears accurate for 2010 and beyond, "Our knowledge about relationships is at an early stage." While the interaction model (Hakansson, 1982; Walter, Hölzle, & Ritter, 2002) by the Industrial Marketing and Purchasing (IMP) Group serves well in advancing relationship marketing theory, and in demonstrating research methods that include in-depth interviews of multiple informants among supplier and customer firms, research focusing on advancing theory and testing micro (elementary) social behavior within-the-same interfirm relationships still is at an early stage of development.

What are the important antecedents that affect social bonding processes? What are the specific mechanisms (processes) among these antecedent conditions that result in high versus medium and low social bonding outcomes? Research focusing on providing accurate answers to such issues is worthy of consideration.

REFERENCES

- Anderson, J. C. (1995). Relationships in business markets: Exchange episodes, value creation, and their empirical assessment. *Journal of the Academy of Marketing Science*, 23(4), 346-350.
- Anderson, J. C., & Narus, J. A. (1990). A model of distributor firm and manufacturer firm working partnerships. *Journal of Marketing*, 54(January), 42-58.
- Anderson, J. C., & Narus, J. A. (1991). Partnering as a focused market strategy. *California Management Review*, 33(3), 95-113.
- Armstrong, J. S., & Overton, T. S. (1977). Estimating nonresponse bias in mail surveys. *Journal* of Marketing Research, 14 (August), 396-402.

Arrow, K. J. (1974). The limits of organization. New York: Norton.

- Aurier, P., & N'Goala, G. (2009). The differing and mediating roles of trust and relationship commitment in service relationship maintenance and development. *Journal of the Academy of Marketing Science*, forthcoming (available http://www.springerlink.com.ezproxy.aut.ac.nz/content/u21uux317126g816/fulltext.pdf)
- Bamford, C. E., Dean, T. J., & McDougall, P. P. (2000). An examination of the impact of initial founding conditions and decisions upon the performance of new bank start-ups. *Journal of Business Venturing*, 15(3), 253-277.
- Barney, J. B. (1986). Strategic factor markets: Expectations, luck and business strategy. *Management Science*, 32, 1231-1241.
- Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120.
- Bator, F. M. (1958). The anatomy of market failure. *Quarterly Journal of Economics*, 72(3), 351-379.
- Baum, J. A. C., & Ingram, P. (2002). Interorganizational learning and network organization : Toward a behavioral theory of the interfirm In M. Augier & J. G. March (Eds.), *The economics of choice, change and organization : Essays in memory of Richard M. Cyert.* Cheltenham, U.K.: Edward Elgar.
- Baum, J. A. C., Shipilov, A. V., & Rowley, T. J. (2003). Where do small worlds come from? *Industrial & Corporate Change*, 12(4), 697-725.
- Baxter, R., & Matear, S. (2004). Measuring intangible value in business to business buyer-seller relationships: An intellectual capital perspective. *Industrial Marketing Management*, 33(6), 491-500.
- Boeker, W. (1989). Strategic change: The effects of founding and history. Academy of Management Journal, 32(3), 489-515.
- Chung, S., Singh, H., & Lee, K. (2000). Complementarity, status similarity and social capital as drivers of alliance formation. *Strategic Management Journal*, 21(1), 1.
- Day, G. S., & Wensley, R. (1988). Assessing advantage: A framework for diagnosing competitive superiority. *Journal of Marketing*, 52(2), 1-20.
- Deeds, D. L., & Rothaermel, F. T. (2003). Honeymoons and liabilities: The relationship between age and performance in research and development alliances. *Journal of Product Innovation Management*, 20(6), 468-484.
- Dierickx, I., & Cool, K. (1989). Asset stock accumulation and sustainability of competitive advantage. *Management Science*, 35(December), 1504-1511.
- Fichman, M., & Levinthal, D. A. (1991). Honeymoons and the liability of adolescence: A new perspective on duration dependence in social and organizational relationships. *Academy of Management Review*, *16*(2), 442-468.
- Geertz, C. (1973). Thick description: Toward an interpretive theory of culture. In *The interpretation of cultures: Selected essays* (pp. 3-30). New York: Basic Books.
- Gladwell, M. (1996). The tipping point: Why is the city suddenly so much safer could it be that crime really is an epidemic? *The New Yorker*, 72(14), 32-38.
- Granovetter, M. (1985). Economic action and social structure: The problem of embeddedness. *The American Journal of Sociology*, *91*(3), 481-510.
- Gulati, R. (1995). Social structure and alliance formation patterns: A longitudinal analysis. *Administrative Science Quarterly*, 40(4), 619-652.

- Gulati, R., & Gargiulo, M. (1999). Where do interorganizational networks come from? *American Journal of Sociology*, 104(5), 1439-1493.
- Hakansson, H. (Ed.). (1982). *International marketing and purchasing of industrial goods: An interaction approach*. Chichester: John Wiley and Sons.
- Hakansson, H., & Snehota, I. (Eds.). (1995). *Developing Relationships in Business Networks*. London: Routledge.
- Han, S.-L. (1991). Antecedents of buyer-seller long-term relationships: An exploratory model of *structural bonding and social bonding*. Unpublished Doctoral Dissertation, Pennsylvania State University, University Park: PA.
- Han, S.-L., & Wilson, D. T. (1993). Antecedents of buyer commitment to a supplier: A model of structural bonding and social bonding. Unpublished paper, Marketing Department, Pennsylvania State University.
- Heugens, P., & Zyglidopoulos, S. (2008). From social ties to embedded competencies: The case of business groups. *Journal of Management & Governance*, 12(4), 325-341.
- Hofer, C. W., & Schendel, D. (1978). *Strategy formulation: Analytical concepts*. St. Paul, MN: West Publishing Company.
- Homans, G. C. (1958). Social behavior as exchange. *The American Journal of Sociology*, 63(6), 597-606.
- Homans, G. C. (1961). *Social behaviour: Its elementary forms*. London: Routledge and Kegan Paul.
- Hunt, S. D. (1991). *Modern marketing theory : Critical issues in the philosophy of marketing science*. Cincinnati, OH: South-Western Publishing Co.
- Hunt, S. D., & Morgan, R. M. (1995). The comparative advantage theory of competition. *Journal of Marketing*, 59(2), 1-15.
- Kimberly, J. R. (1979). Issues in the creation of organizations: Initiation, innovation, and institutionalization. *Academy of Management Journal*, 22(3), 437-457.
- Kriauciunas, A., & Kale, P. (2006). The impact of socialist imprinting and search on resource change: A study of firms in Lithuania. *Strategic Management Journal*, 27(7), 659-679.
- Kriauciunas, A., & Shinkle, G. (2008). Organizational imprinting: Informing firm behavior in domestic and international contexts. Purdue University.
- McClelland, D. C. (1998). Identifying competencies with behavioral-event interviews. *Psychological Science*, *9*(5), 331.
- Meade, J. E. (1952). External economies and diseconomies in a competitive situation. *The Economic Journal*, 62(245), 54-67.
- Mummalaneni, V., & Wilson, D. T. (1991). The influence of a close personal relationship between a buyer and seller on the continued stability of their role relationship, *Working paper 4-1991*: The Institute for the Study of Business Markets, Pennsylvania State University.
- Peter, J. P. (1981). Construct validity: A review of basic issues and marketing practices. *Journal* of Marketing Research, XVIII(2), 133-145.
- Pfeffer, J., & Salancik, G. (1978). *The external control of organisations: A resource dependence perspective*. New York: Harper and Row.
- Porter, M. E. (1985). *Competitive advantage: Creating and sustaining superior performance*. New York: Free Press.

- Prahalad, C. K., & Hamel, G. (1990). The core competence of the corporation. *Harvard Business Review*, 68(May/June), 79-91.
- Rodríguez, C. M., & Wilson, D. T. (2002). Relationship bonding and trust as a foundation for commitment in U.S.-Mexican strategic alliances: A structural equation modeling approach. *Journal of International Marketing*, 10(4), 53-76.
- Rossiter, J. R. (2002). The C-OAR-SE procedure for scale development in marketing. *International Journal of Research in Marketing*, 19(4), 305.
- Schein, E. H. (1983). The role of the founder in creating organizational culture. *Organizational Dynamics*, *12*(1), 13-28.
- Stinchcombe, A. (1965). Social structure and organizations. In J. G. March (Ed.), *Handbook of organizations* (pp. 142-193). Chicago: Rand McNally.
- Uzzi, B. (1999). Embeddedness in the making of financial capital: How social relations and networks benefit firms seeking financing. *American Sociological Review*, 64(4), 481-505.
- Walter, A., Hölzle, K., & Ritter, T. (2002). Relationship functions and customer trust as value creators in relationships: A conceptual model and empirical findings for the creation of customer value. Paper presented at the 18th IMP-conference. From http://www.impgroup.org/uploads/papers/554.pdf
- Wernerfelt, B. (1984). A resource-based theory of the firm. *Strategic Management Journal*, *5*, 171-180.
- Wilson, D. T. (1995). An integrated model of buyer-seller relationships. *Journal of the Academy* of Marketing Science, 23(4), 335-345.
- Wilson, D. T., & Jantrania, S. (1994). Understanding the value of a relationship. *Asia-Australia Marketing Journal*, 2(1), 55-66.
- Wilson, D. T., & Mummalaneni, V. (1986). Bonding and commitment in supplier relationship: A preliminary conceptualization. *Industrial Marketing and Purchasing*, 1(3), 44-58.

Appendix

A. Instructions for the Resource Allocation Scale Items

"Please consider your firm's relationship with your chosen customer at present. How high is your organisation's level of input of the following resources into the relationship, compared with your other customers?" (1 - 7 scales from "Very much lower" to "Very much higher")

- Dollars your firm puts into the relationship
- Physical items such as equipment your firm puts into the relationship
- The amount of time that your personnel spend working on the relationship
- Your intangible inputs, such as knowledge, skills, ingenuity, and your business contacts (KSIB)

B. Instructions for the Relationship Bonding Scale Items

"How much do you agree with the following statements about your firm's relationship with the chosen customer, as compared with other customers?" (1 - 7 scales from "I do not agree at all" to "I fully agree")

- We have strong social bonds with people in the customer organisation
- The relationship is very profitable for us
- Our firm shares a lot of goals with this customer