

Business Relationships and Structural Bonding: A Study of American Metal Industry

Han, Sang-Lin* · Yun Tae Kim** · Chang Yeob Oh** · Jae Moon Chung**

〈Abstract〉

Metal industry is one of the most representative heavy industries and the median sales volume of steel and nonferrous metal companies is over one billion dollars in the case America [Forbes 2006]. As seen in the recent business market situation, an increasing number of industrial manufacturers and suppliers are moving from adversarial to cooperative exchange attitudes that support the long-term relationships with their customers. This article presents the results of an empirical study of the antecedent factors of business relationships in metal industry of the United States.

Commitment has been reviewed as a significant and critical variable in research on inter-organizational relationships (Hong et al. 2007, Kim et al. 2007). The future stability of any buyer-seller relationship depends upon the commitment made by the interactants to their relationship. Commitment, according to Dwyer et al. [1987], refers to “an implicit or explicit pledge of relational continuity between exchange partners” and they consider commitment to be the most advanced phase of buyer-seller exchange relationship.

Bonds are made because the members need their partners in order to do something and this integration on a task basis can be either symbiotic or cooperative (Svensson 2008). To the extent that members seek the same or mutually supporting ends, there will be strong bonds among them. In other words, the principle that affects the strength of bonds is ‘economy of decision making’ [Turner 1970]. These bonds provide an important idea to study the causes of business long-term relationships in a sense that organizations can be mutually bonded by a common interest in the economic matters. Recently, the framework of structural bonding has been used to study the buyer-seller relationships in

* Professor of Marketing, School of Business, Hanyang University, 02-2220-1071 / e-mail: slhan@hanyang.ac.kr

** Doctoral Candidate, School of Business, Hanyang University

industrial marketing [Han and Sung 2008, Williams et al. 1998, Wilson 1995] in that this structural bonding is a crucial part of the theoretical justification for distinguishing discrete transactions from ongoing long-term relationships.

The major antecedent factors of buyer commitment such as technology, CLalt, transaction-specific assets, and importance were identified and explored from the perspective of structural bonding. Research hypotheses were developed and tested by using survey data from the middle managers in the metal industry.

- H1: Level of technology of the relationship partner is positively related to the level of structural bonding between the buyer and the seller.
- H2: Comparison level of alternatives is negatively related to the level of structural bonding between the buyer and the seller.
- H3: Amount of the transaction-specific assets is positively related to the level of structural bonding between the buyer and the seller.
- H4: Importance of the relationship partner is positively related to the level of structural bonding between the buyer and the seller.
- H5: Level of structural bonding is positively related to the level of commitment to the relationship.

To examine the major antecedent factors of industrial buyer's structural bonding and long-term relationship, questionnaire was prepared, mailed out to the sample of 400 purchasing managers of the US metal industry (SIC codes 33 and 34). After a follow-up request, 139 informants returned the questionnaires, resulting in a response rate of 35 percent. 134 responses were used in the final analysis after dropping 5 incomplete questionnaires. All measures were analyzed for reliability and validity following the guidelines offered by Churchill [1979] and Anderson and Gerbing [1988]., the results of fitting the model to the data indicated that the hypothesized model provides a good fit to the data. Goodness-of-fit index (GFI = 0.94) and other indices (chi-square = 78.02 with p-value = 0.13, Adjusted GFI = 0.90, Normed Fit Index = 0.92) indicated that a major proportion of variances and covariances in the data was accounted for by the model as a whole, and all the parameter estimates showed statistical significance as evidenced by large t-values. All the factor loadings were significantly different from zero. On these

grounds we judged the hypothesized model to be a reasonable representation of the data.

The results from the present study suggest several implications for buyer-seller relationships. Theoretically, we attempted to conceptualize the antecedent factors of buyer-seller long-term relationships from the perspective of structural bonding in metal industry. The four underlying determinants (i.e. technology, CLalt, transaction-specific assets, and importance) of structural bonding are very critical variables of buyer-seller long-term business relationships. Our model of structural bonding makes an attempt to systematically examine the relationship between the antecedent factors of structural bonding and long-term commitment. Managerially, this research provides industrial purchasing managers with a good framework to assess the interaction processes with their partners and, ability to position their business relationships from the perspective of structural bonding. In other words, based on those underlying variables, industrial purchasing managers can determine the strength of the company's relationships with the key suppliers and its state of preparation to be a successful partner with those suppliers. Both the supplying and customer companies can also benefit by using the concept of 'structural bonding' and evaluating their relationships with key business partners from the structural point of view.

In general, the results indicate that structural bonding gives a critical impact on the level of relationship commitment. Managerial implications and limitations of the study are also discussed.

Key words: metal industry, buyer, bonding, comparison level of alternatives, transaction-specific assets

业务关系和结构联合国业研

韩相璘* · 金允泰** · 吴昌烨** · 郑在纹**

<摘要>

冶金工业是最具代表性的重工业之一,根据《富布斯》2006年统计,美国的钢材和非黑色金属冶金公司的平均销售量超过了十亿美元。就近期的市场状况来说,制造商和供应商的态度正在从对抗转为合作,这一转变有助于与客户保持长期关系。本文展示了的美国冶金工业业务关系的先行因子的研究结果。

在组织内部关系研究中,承诺被认为是显著决定性的变量(Hong, 2007, Kim, 2007)。未来买卖双方关系的稳定性依赖于对互动关系的承诺。根据Dwyer的研究,承诺是指“对交易伙伴关系持续性的暗示或明示性的约定”。他们认为承诺是买卖交易关系的最高级阶段。

联系因为成员需要伙伴而产生。这种基于任务的集合是共生与合作的(Svensson 2008)。影响联系强度的基本条件是“决策的经济性”,这些联系为研究长期业务关系成因提供了思路,此类研究认为各组织可以通过共同的利益稳定地联系。目前,结构联系的框架用于研究产业营销的买卖关系。在此,结构联系是区分零散交易与长期关系的重要标准。

本文从结构联系的角度识别和探索卖方承诺的主要先行因子,如技术、可替代性、交易专用性资产和重要性。通过调查冶金业的中级经理搜集数据,提出和验证假设。

假设1:关系伙伴的技术水平与买卖双方的结构联系有正向关系;

假设2:可替代程度与买卖双方的结构联系有负向关系;

假设3:交易专用性资产与买卖双方的结构联系有正向关系;

假设4:关系伙伴重要性与买卖双方的结构联系有正向关系;

假设5:结构联系水平与关系承诺有正向关系;

向美国冶金行业的400位采购经理邮寄我们设计的问卷。共有139位返回了问卷,回复率35%,134份用于信度和效度分析,模型拟和的结果表明,假设模型很好地拟合

* Professor of Marketing, School of Business, Hanyang University, 02-2220-1071 / e-mail: slhan@hanyang.ac.kr

** Doctoral Candidate, School of Business, Hanyang University

了数据(GFI = 0.94, chi-square = 78.02 with p-value = 0.13, Adjusted GFI = 0.90, Normed Fit Index = 0.92), 模型解释了大部分的方差和协方差, 参数估计显示统计显著。全部因子载荷显著不为零。基于上述结果, 我们可以断定, 假设模型能有效拟合数据。

研究结果对买卖双方的关系有一些启示。理论上我们从冶金业结构联系的角度概念化买卖双方长期关系的先行因子。四个重要的结构联系的决定要素(技术、可替代水平、交易资产专用性、重要性)是买卖双方业务关系的重要变量。本研究的结构联系模型尝试系统性地检验机构联系先行因子与长期承诺的关系。从管理实践上, 本研究为采购经理提供了与其伙伴们建立互动联系和定位他们业务关系的框架。根据这些重要变量, 采购经理能确定公司与关键供应商的关系强度, 以及如何同那些供应商结成成功的合作伙伴。供应商和客户也能从使用“结构模型”受益, 他们可以用这一模型评估其与业务伙伴的关系。总之, 研究结果显示, 结构联系对关系承诺水平有重要影响。对管理建议和研究局限性也进行了讨论

关键词 : 冶金工业, 购买者, 联系, 可替代程度, 交易专用性资产

산업재 거래관계와 구조적 결합: 미국 금속산업의 분석 연구

한상린* · 김윤태** · 오창엽** · 정재문**

〈한글 요약〉

산업재 거래관계에서 구매자와 공급업체간의 장기 거래관계의 형성은 전형적인 현상이며 그동안 많은 연구들이 이러한 장기관계의 결정 요인과 그로 인한 결과에 관해 다양한 연구들을 수행해 왔다고 할 수 있다. 특히 금속산업은 산업재의 대표적인 산업 분야로 미국 금속산업 시장의 경우 기업당 평균 매출이 최소 10억 달러가 넘는 중요한 시장이라고 볼 수 있다. 본 연구에서는 이러한 중요한 의미를 갖는 미국 금속산업 시장에서 구매기업과 공급기업간의 거래관계를 형성하는 대표적인 요인으로 구조적 결합이라는 개념을 정립하고 이러한 구조적 결합을 결정하는 네가지 주요 변수(기술, 대체안 비교수준, 거래특유자산, 거래 중요성)들을 찾아내 이를 연구모형화하고 각각의 변수에 대한 연구가설을 다음과 같이 설정하였다.

- H1: 기술수준은 구조적 결합에 정의 영향을 미칠 것이다.
- H2: 대체안 비교수준은 구조적 결합에 정의 영향을 미칠 것이다.
- H3: 거래특유자산은 구조적 결합에 정의 영향을 미칠 것이다.
- H4: 거래의 중요성은 구조적 결합에 정의 영향을 미칠 것이다.
- H5: 구조적 결합은 몰입의 수준에 정의 영향을 미칠 것이다.

연구 가설의 검증을 위해 미국 금속산업에서 400개 기업을 선정해 설문조사를 실시하였고 총 139개의 설문지를 회수하여 최종 분석에 사용하였다. 연구 가설과 연구 모형의 검증을 위해 구조방정식 모형과 LISREL을 사용하였고 최종 분석 결과 모든 가설이 채택되었다. 마지막으로 본 연구결과를 통한 마케팅전략적 시사점과 연구가 갖는 한계점에 대하여도 결론 부분에서 토론하였다.

* 한양대학교 경영대학 교수

** 한양대학교 박사과정

Business Relationships and Structural Bonding: A Study of American Metal Industry

Han, Sang-Lin* · Yun Tae Kim** · Chang Yeob Oh** · Jae Moon Chung**

Introduction

Metal industry is one of the most representative heavy industries and the median sales volume of steel and nonferrous metal companies is over one billion dollars in the case America [Forbes 2006]. As seen in the recent business market situation, an increasing number of industrial manufacturers and suppliers are moving from adversarial to cooperative exchange attitudes that support the long-term relationships with their customers. The Just-In-Time (JIT) supplier-customer exchange concept [O'Neal 1989] is a good example of the current operational philosophy thought to epitomize the buyer-seller long-term relationships.

Despite their obvious importance, the antecedent factors of business relationships have not received adequate attention in past research. As Dwyer et al. argued, "the lack of attention to antecedent

conditions and processes for buyer-seller exchange relationships is a serious omission in the development of marketing knowledge" [Dwyer et al. 1987, p.11]. This study identifies the major antecedent factors of business relationships and explores the relative impacts of those factors on industrial buyer-seller long-term relationships in metal industry

Commitment as an Indicator of a Long-Term Relationship

Commitment has been reviewed as a significant and critical variable in research on inter-organizational relationships (Hong et al. 2007, Kim et al. 2007). The future stability of any buyer-seller relationship depends upon the commitment made by the interactants to their relationship. Commitment, according to Dwyer et al. [1987], refers to "an implicit or explicit

* Professor of Marketing, School of Business, Hanyang University, 02-2220-1071 / e-mail: slhan@hanyang.ac.kr

** Doctoral Candidate, School of Business, Hanyang University

pledge of relational continuity between exchange partners” and they consider commitment to be the most advanced phase of buyer-seller exchange relationship. Wilson and Mummalaneni [1988] and Han and Sung (2008) argue that the greater the commitment of the organization to a specific relationship, the greater the stability of that relationship. In turn, this increased stability will lead to longer duration of the relationship. Consequently, the characteristics of commitment have led to the use of this variable as a predictor of the continued stability of a relationship [Morgan and Hunt 1994]. In other words, continuity or durability of a relationship depends upon the degree of commitment of participants to the relationship and in that sense, commitment could be an indicating variable of buyer-seller long-term relationships. Therefore, in this study, long-term relationship is operationalized and measured as a degree of commitment of the participant to the relationship.

Antecedent of Buyer Commitment: Structural Bonding

As the dyadic relationship intensifies and the interaction increases over a period

of time, a transformation occurs in the nature of the relationship that binds the buyer and seller together. What brings and holds organizations together in general? To answer this question, we may think of ‘bonds,’ or ties, which link and unite organizations together. In other words, there exist certain ties that bind the supplier and customer organizations under a relational exchange, and the process whereby such ties or bonds emerge is termed bonding [Mummalaneni and Wilson 1989, Turner 1970]. It is useful to think of bonds as bringing the members together, keeping them together, and causing them to interact in a relationship.

Bonds are made because the members need their partners in order to do something and this integration on a task basis can be either symbiotic or cooperative (Svensson 2008). To the extent that members seek the same or mutually supporting ends, there will be strong bonds among them. In other words, the principle that affects the strength of bonds is ‘economy of decision making’ [Turner 1970]. These bonds provide an important idea to study the causes of business long-term relationships in a sense that organizations can be mutually bonded by

a common interest in the economic matters. Recently, the framework of structural bonding has been used to study the buyer-seller relationships in industrial marketing [Han and Sung 2008, Williams et al. 1998, Wilson 1995] in that this structural bonding is a crucial part of the theoretical justification for distinguishing discrete transactions from ongoing long-term relationships. In this paper, structural bonding is defined as the degree to which certain ties link and hold a buyer and seller closely together in an economic, strategic, and organizational sense.

Determinants of Structural Bonding and Research Hypotheses

Several dimensions are related to the construct of structural bonding. In this study, we identify four major factors that determine the level of structural bonding and develop the research hypotheses for those underlying factors.

Technology

As new technologies and new processes are adopted by firms, the technology level of the firm is emerging as an important

variable in interorganizational relationships [Han 1998]. The recent prevalence of new techniques such as Just-In-Time (JIT), Concurrent Engineering, Early Supplier Involvement (ESI), and acceptance of high-technology production systems influence the current interactions between organizations. Technology is a major factor in determining the overall structural conditions of the relationship. In the study of technology-organizational structure relationship, Woodward [Woodward 1965] found that each technology has its typical organizational structure. This finding was interpreted as an indication that a particular production process imposes economic constraints on the managements such that they must adapt their organizational structure to the specific technology.

In this study, technology refers to the company's technical characteristics in terms of the supplier's production process and delivery system. If a supplier's technology level is high, the buyer would be somewhat reluctant to terminate the current relationship due to the satisfaction with the supplier's high level of technology. This difficult termination procedure would make the buyer tied (i.e. structurally bonded) to the supplier and thus committed to the relationship. In that

sense, we have the following hypothesis.

H1: Level of technology of the relationship partner is positively related to the level of structural bonding between the buyer and the seller.

Comparison Level of Alternatives (CLalt)

Grounded in social exchange theory (Kelley and Thibaut 1978), the comparison level of alternatives (CLalt) is defined as the quality of outcome that is available from the other better alternative exchange relationship [Anderson and Narus 1984]. The availability of alternatives has a strong impact on the level of bonding to an existing relationship in that, if there are better alternatives available, buyer (or seller) would be more concerned with those alternatives and want to change the current partner and therefore, the current relationship might be ended as a short-term one. Therefore, as Rusbult [1983] indicates, attractiveness of alternatives has a negative impact on the level of structural bonding and any increase in such attractiveness should decrease the level of bonding. In other words, as the available outcome from the other

alternative supplier exceeds the outcome obtained by the current supplier, the customer will be more loosely bonded to the current relationship. This looseness of structural bonding will eventually lead to a decrease in commitment to the relationship. Accordingly, we have the following hypothesis.

H2: Comparison level of alternatives is negatively related to the level of structural bonding between the buyer and the seller.

Transaction-specific Assets

In industrial markets, buyer-supplier interaction usually means that the interacting parties invest resources in their relationship that can not be put to use elsewhere. Rusbult [1983] considers investments as increasing commitment to a relationship because they are relationship specific, can not be transferred from one relationship to another, and are lost on dissolution of the relationship. Such non-transferable, irretrievable investments are conceptualized as “idiosyncratic, transaction-specific investments” by Williamson [1979, 1986]. These investments keep increasing with subsequent transactions and tend to accumulate over time. These

irretrievable, idiosyncratic, transaction-specific investments lead to interfirm adaptation [Johanson et al. 1991] that includes various kinds of relationship-specific assets.

There are many examples of such transaction-specific assets. For example, a supplier may use a specific customer-oriented delivery system, while a buyer may organize the stock-keeping and production planning system to accommodate the supplier's delivery system. In addition, a buyer might purchase machinery or design his product to accommodate the capabilities of certain suppliers [Johanson et al. 1991]. In fact, as the parties adapt to each other - unilaterally or mutually they become increasingly tied to each other. In other words, transaction-specific assets tie both the parties together and this close tie leads to the solidification of structural bonding between them.

H3: Amount of the transaction-specific assets is positively related to the level of structural bonding between the buyer and the seller.

Importance

The extent to which an organization

comes to depend on certain types of exchanges is defined as the importance the former attaches to the other organization [Pfeffer and Salancik 1978]. The importance of an exchange relationship is reflected by the size of the exchange or by the criticality of the resource exchange [Heide and John 1990, Pfeffer and Salancik 1978]. In an industrial market, the relative importance of an exchange relationship can be measured by estimating the proportion of the total resource inputs by the exchange. As Pfeffer and Salancik [1978] indicate, the criticality of the inputs of the organization is also related to the importance of an exchange relationship, where criticality measures the ability of the organization to continue its functioning in the absence of the resource. In a buyer-seller relationship, the greater the magnitude of exchange with a particular supplier, and the greater the criticality of the resources purchased from the supplier, the buyer would be more likely to cling to the supplier. These would lead to the development of certain ties or structural bonds between them.

H4: Importance of the relationship partner is positively related to the level of structural bonding between the

buyer and the seller.

Finally the higher level of structural bonding will lead to the higher level of commitment between the buyer and the seller. Therefore we have the following hypothesis.

H5: Level of structural bonding is positively related to the level of commitment to the relationship.

Research Methodology

To examine the major antecedent factors of industrial buyer's structural bonding and long-term relationship, questionnaire was

prepared, mailed out to the sample of 400 purchasing managers of the US metal industry (SIC codes 33 and 34). After a follow-up request, 139 informants returned the questionnaires, resulting in a response rate of 35 percent. 134 responses were used in the final analysis after dropping 5 incomplete questionnaires. All measures were analyzed for reliability and validity following the guidelines offered by Churchill [1979] and Anderson and Gerbing [1988]. Table 1 shows the sample measurement items and reliability numbers.

The variance-covariance matrix was computed and the research hypotheses and the proposed model were tested by using LISREL 8 [Joreskog and Sorbom 1993].

Table 1 Characteristics of Measures

Measure	Scale Items	Composite Reliability
Technology	Production and processing technology Technology of distribution system	0.874
Clalt	Chance of finding a better supplier Goodness of alternatives	0.719
Transaction-specific Asset	General adaptation and investment Investment to the production system Relationship-specific investment to the delivery system	0.872
Importance	Proportion of resources Criticality of resources	0.723
Structural Bonding	Need for the relationship bondedness Difficulty of switching the relationship partner	0.799
Commitment	Willingness to have the long-term relationship Concentration on the maintenance of the relationship	0.732

The model was tested by maximum likelihood method and Table 2 contains the parameter estimates of the structural equation model.

In general, the results of fitting the model to the data indicated that the hypothesized model provides a good fit to the data. Goodness-of-fit index (GFI = 0.94) and other indices ($\chi^2=78.02$ with p-value = 0.13, Adjusted GFI = 0.90, Normed Fit Index = 0.92) indicated that a major proportion of variances and covariances in the data was accounted for by the model as a whole, and all the parameter estimates showed statistical significance as evidenced by large t-values. All the factor loadings were significantly different from zero. On these

grounds we judged the hypothesized model to be a reasonable representation of the data.

Test of Hypotheses

Having established a good fit, we examined the estimates of the structural parameters (β and γ 's) and tested the research hypotheses individually. As seen in Figure 1, all the parameters were in the same directions as the hypothesized effects.

(i) Hypothesis 1: H1 stated that the supplier's technology level will be positively related to structural bonding of the buying company to the supplier. As expected, the

Table 2 Analysis of Structural Equation Model

Path	Estimate*
Technology → Structural Bonding	0.16
Clalt → Structural Bonding	- 0.22
Transaction-specific Asset → Structural Bonding	0.19
Importance → Structural Bonding	0.61
Structural Bonding → Commitment	0.62

* All estimates are statistically significant at p<0.05 level.

Model Evaluation Indices;

$\chi^2 = 78.02$ (d.f.=65), p-value = 0.13

Standardized Root Mean Square Residual(RMSR) = 0.051

Goodness-of-Fit Index (GFI) = 0.94

Adjusted Goodness-of-Fit Index (AGFI) = 0.90

Normed Fit Index (NFI) = 0.92

Non-Normed Fit Index (NNFI) = 0.98

Incremental Fit Index (IFI) = 0.98

hypothesis was supported and it was statistically significant ($\gamma_1 = 0.16$ t-value = 2.28). This finding is consistent with Dowst [4] to a certain extent, in that he also found that product quality and delivery system were rated by purchasing managers as the most important factors in their long-term business relationships with suppliers.

(ii) Hypothesis 2: H2 predicted that the comparison level of alternatives (CLalt) will be negatively associated with structural bonding. As hypothesized, the effect of CLalt on structural bonding was negative ($\gamma_2 = -0.22$) and it was significant (t-value = -2.43).

(iii) Hypothesis 3: In H3, it was predicted that transaction-specific assets would be positively associated with structural bonding. This hypothesis was supported ($\gamma_3 = 0.19$) with statistical significance (t-value = 2.23).

(iv) Hypothesis 4: It was hypothesized in H4 that buyers would be more structurally bonded to the suppliers who provide a large proportion of resources and/or some critical resources. As hypothesized, the effect of organizational importance on structural bonding was positive ($\gamma_4 = 0.61$) and statistically significant (t-value = 3.80). Of those four factors, importance was the

most influential factor on structural bonding. This validates the earlier results of Pfeffer and Salancik [1978] and Spekman [1988] who suggested that organizations try to establish stable linkages with other important organizations and that organizational importance is a major criterion in the strategic selection of suppliers.

(v) Hypothesis 5: H5 stated that structural bonding will be positively related to the level of commitment. The result showed that the relationship of structural bonding on commitment was in the hypothesized direction ($\beta_1 = 0.62$) and it was statistically significant (t-value = 5.29). Accordingly, this research hypothesis was strongly supported. This confirms our belief that structurally bonded firms tend to maintain longer-term business relationships than other firms do.

In summary, the hypothesized model provided a good fit to the data and all the research hypotheses were strongly supported.

Implications and Limitations

The results from the present study suggest several implications for buyer-seller relationships. Theoretically, we attempted

to conceptualize the antecedent factors of buyer-seller long-term relationships from the perspective of structural bonding in metal industry. The four underlying determinants (i.e. technology, CLalt, transaction-specific assets, and importance) of structural bonding are very critical variables of buyer-seller long-term business relationships. Our model of structural bonding (Table 2) makes an attempt to systematically examine the relationship between the antecedent factors of structural bonding and long-term commitment. Managerially, this research provides industrial purchasing managers with a good framework to assess the interaction processes with their partners and, ability to position their business relationships from the perspective of structural bonding. In other words, based on those underlying variables, industrial purchasing managers can determine the strength of the company's relationships with the key suppliers and its state of preparation to be a successful partner with those suppliers. Both the supplying and customer companies can also benefit by using the concept of 'structural bonding' and evaluating their relationships with key business partners from the structural point of view.

Several limitations apply to the findings of our study. The first limitation is the cross-sectional design employed. In any model in which causality is suggested, longitudinal studies provide for stronger inferences. Thus, the model developed and tested in this study could benefit from being tested in a longitudinal research design. Second, we identified four antecedent factors of structural bonding. However, there could be other important factors that determine the level of structural bonding. For example, structure of market competition could influence the level of structural bonding between companies in metal industry and future studies that can find other important antecedent factors of structural bonding and commitment will make an additional contribution to the field. The present study offers a buyers' view of the business relationships they are engaged in. Even though the model was assumed to be equally applicable in the supplier side of the buyer-supplier dyad as well as the buyer side, future research must explore the supplier side of the dyad too.

(Received: 27 July 2008)

(Accepted: 16 September 2008)

References

- Anderson, James C. and Narus, James A., A Model of the Distributor's Perspective of Distributor-Manufacturer Working Relationships. *Journal of Marketing* 48 (Fall 1984): 62-74.
- Anderson, J. and Gerbing, Structural Modeling in Practice: A Review and Recommended Two-Step Approach, *Psychological Bulletin*, 103(3), 1988, 411-423.
- Churchill, G., A Paradigm for Developing Better Measures of Marketing Constructs, *Journal of Marketing Research*, 16 (February 1979), 64-73.
- Dowst, Somerby., Wanted: Suppliers Adept at Turning Corners. *Purchasing* 101 (January 29, 1987): 73.
- Dwyer, F.R., Schurr, P.H., and Oh., S., Developing Buyer-Seller Relationships. *Journal of Marketing*. 51 (April 1987), 11-27.
- Forbes, January 4, 2006, Forbes Inc.
- Han, Sang-Lin., Hyung-Suk Sung, "Industrial Brand Value and Relationship Performance," *Industrial Marketing Management*, 2008, forthcoming.
- Han, Sang-Lin., "A Conceptual Framework of the Impact of Technology on Customer-Supplier Relationships," *Journal of Business and Industrial Marketing*, Vol.12, No.1, 1997. p.22-32.
- Heide J.B. and John, G., Alliances in Industrial Purchasing: The Determinants of Joint Action in Buyer-Supplier Relationships. *Journal of Marketing Research*, 27 (February 1990): 24-36.
- Hong, Heesook, Sungmin Ryu, and Chulwon Moon, "Relationship Between Usage Needs Satisfaction and Commitment to Apparel Brand Communities," *Journal of Korean Academy of Marketing Science*, vol.1 17, No.4, 2007, 51-90.
- IMP Group, *International Marketing and Purchasing of Industrial Goods: An Interaction Approach*, Hakansson, H., ed., Wiley, New York. 1982.
- Johanson, J., Hallen, L., and Seyed-Mohamed., N., Interfirm Adaptation in Business Relationships. *Journal of Marketing*. 55 (April 1991): 29-37.
- Joreskog, K.G. and Sorbom, D., *LISREL 8: Structural Equation Modeling with the SIMPLIS Command Language*, Scientific Software, Inc. 1993.
- Kelley, H. and J. Thibaut, *Interpersonal Relations: A Theory of Interdependence*, 1978, Wiley: New York.
- Kim, Yong Man, Seong Yong Kim, Jong Hwan Lee, and Gyn Yeol Shim,

- “The Relationship with Electronic Trust, Web site Commitment and Service Transaction Intention in Public Shipping B2B e-Marketplace,” *Journal of Korean Academy of Marketing Science*, vol. 17, No.4, 2007, 113-140.
- Lee, Soo-Hyung, Mi-Ryong Park, “The relationship between trust, Trustworthiness, and Repeat Purchase Intentions,” *Journal of Korean Academy of Marketing Science*, vol 18. No.1, 2008, 1-32.
- Morgan, R. and S. Hunt, The Commitment-Trust Theory of Relationship Marketing, *Journal of Marketing*, 58 (July 1994), 20-38.
- Mummalaneni, Venkat and Wilson., David.T., The Influence of a Close Personal Relationship Between a Buyer and A Seller on the Long-Term Future of Their Role Relationship. *Research Paper*, The Institute for the Study of Business Markets, 1989, The Pennsylvania State University, University Park: PA.
- O'Neal, Charles., JIT Procurement and Relationship Marketing. *Industrial Marketing Management*, 18 (February 1989): 55-63.
- Pfeffer, J. and Salancik, G., *The External Control of Organizations: A Resource Dependence Perspective*, Harper & Row, New York. 1978.
- Rusbult, C.E., A Longitudinal Test of the Investment Model: The Development (and Deterioration) of Satisfaction and Commitment in Heterosexual Involvement, *Journal of Personality and Social Psychology*, 65 (1983): 101-117.
- Spekman, Robert E., Strategic Supplier Selection: Understanding Long-Term Buyer Relationships. *Business Horizons*, (July-August 1988): 75-81.
- Svensson, Goran, “The Industrial/ Social Bullwhip Effects and Supply Chain Performance,” *Journal of Korean Academy of Marketing Science*, vol. 18, No.2, 2008, 1-18.
- Turner, R. H., *Family Interaction*, John Wiley. New York. 1970.
- Yu, Jong Pil, Dawn Thorndike Pysarchik, and Yu Kyung Kim, “Korean retailers’ Dependence Level: The Impact of Power Sources, Satisfaction, Conflict, and Long-term Orientation,” *Journal of Korean Academy of Marketing Science*, vol. 18, No.1, 81-114.
- Williams, J., S. Han, and W. Qualls, “A Conceptual Model and Study of Cross-Cultural Business Relationships,” *Journal of Business Research*, Vol.

- 42, Number 2, 1998.
- Williamson, O., Transaction Cost Economics: The Governance of Contractual Relations, *Journal of Law and Economics*, 22 (October 1979), 223-261.
- Williamson, O., *Economic Organization: Firms, Markets and Policy Control*, 1986, New York: Free Press.
- Wilson, David T., "An Integrated Model of Buyer-Seller Relationships," *Journal of the Academy of Marketing Science* 23, 335-345 (1995).
- Wilson, David T. and Mummalaneni, V., Modeling and Measuring Buyer-Seller Relationships. *Research Paper*, ISBM, 1988, The Pennsylvania State University, University Park:PA.
- Woodward, J., *Industrial Organization: Theory and Practice*, Oxford University Press, London. 1965.