Gadjah Mada International Journal of Business
May 2003. Vol. 5. No. 2. pp. 167— 188

THE RELATIONSHIPS BETWEEN SUPPLIER PARTNERSHIP, ENVIRONMENTAL VARIABLES AND FIRM PERFORMANCE IN RETAIL INDUSTRY

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Partnership with suppliers is becoming a critical activity in retail industry to strengthen their competitive position. However, evidence suggested that partnership efforts do not reach their potential due to the effect of external factors. This article presents a comprehensive model that depicts the links among the supplier partnership, environmental variables and firm performance. Data for testing the model were collected by sending a questionnaire to a sample of retail industry in Indonesia. Hypothesized links depicted in the research model were tested using structural equation modeling. The findings show that supplier partnership affects positively firm performance in general term as well as across components of performance measurement. The empirical results suggest that the effect of environmental variables on supplier partnership is: market turbulence has a positive effect, competitive intensity and demand volatility have a negative effect.

Keywords: environmental variables; firm performance; retail industry; suppliers partnership

A major feature of retail channel evolution in recent decades is the growth of more integrated approaches by channel members as part of supply chain management. More integrated approaches have involved retailers' activities that have traditionally been the province of producers including manufacturers and farmers, such as product specification, quality control, and operation of physical distributions. Consequently, the importance of relational factors over transactional cost has grown, and longer-term relationships with fewer partners have emerged (cf. Shaw and Gibbs 1999: 93). As Carlisle and Parker (1989: 5) noted, "if customer and supplier firms can recognize their common ground is a shared interest in capturing the consumer sale, which actually nourishes them both, it should be possible for them to work creatively and effectively together to capture that sale for 'their' product."

In the retail context, Raphel (1996) found that suppliers and retailers have agreed to cooperate with each other to survive in the new business environment. A supplier-retailer partnership guarantees business survival and prosperity as customer needs and wants are better satisfied. However, partnership efforts also may bear significant risks (Harrigan 1985). The process of developing supplier partnership requires sharing of sensitive cost and process information and creating unique investments to support the efforts. This can reduce bargaining power and increase exposure to opportunism (Jap 1999). Therefore, these realities raise the questions of if and when such partnership efforts are effective. Do firms in such partnerships experience outcomes with a better performance, or are they affected by environmental situations? This study was motivated by these questions.

Apart from this, most of the studies on supplier partnership have been conducted in the western countries. This study has been undertaken to empirically examine the extent to which retail industry in Indonesia is faring with supplier partnership. Indonesia is chosen as the Asian country for the study of supplier partnership for the following reason: *first*, it is a country where the population is more than 200 millions. It has a land area that is larger than that of United States, has enormous natural resources and serves as a gateway to the Pacific Rim (Fortes 1998). *Second*, Indonesia is a developing country, as opposed to the western country, and it is deemed desirable to assess the effects of level supplier partnership on firm performances. *Third*, the retail industry in Indonesia has been experiencing an exciting period of growth. Between 1991 to 1995, the Indonesian retail market has grown by 71.1 percent in current terms to reach Rp140,500 billion in 1995. In constant 1991 terms the retail market has grown by 12.4 percent to Rp92, 313 billion in 1995 (RMI 1997).

This article is organized as follows: the definition of supplier partnership will be discussed. Then, the conceptual framework of consequences of supplier partnership will be described. This is followed by a description of the methodology and empirical analysis. Then, it concludes with a discussion of the key results, limitations, and directions of the research.

Supplier Partnership

Lewis (1996: 30) defined a partnership as "a balanced sharing of business systems, information, risks, and any other elements to effectively and efficiently meet the demands of the mutually targeted consumers." Weitz and Jap (1995) suggest an alternative view that relationships or partnerships are learned through past interactions as trading partners act and react to each other. Relational exchange norms are based on the expectation of mutuality interest and are designed to enhance the wellbeing of the relationship as a whole. These norms have been operationalized as a higher order construct consisting of the dimensions flexibility, information exchange, and solidarity (Heide and John 1992). While norms refer to the behavioral standards against which group members evaluate the appropriateness of their conduct, such norms are manifested by the behaviors each side displays in the relationship (Campbell 1997). In this case, the three norms are manifested by three behaviors, which are joint decision-making, open information sharing, and relationship-specific investments (Anderson and Weitz 1089; Campbell 1997; Spekman and Salmond 1992).

All three behaviors increase the possibilities of realizing the benefits from partnerships. Both joint decision-making and information sharing help to better coordinate buyers' and suppliers' activities. Frequent information sharing also fosters confidence in the continuity of the relationship and reduces dysfunctional conflict (Anderson and Narus 1990; Dwyer et al. 1987). Relationship-specific investments stabilize relationships by altering the firm's own incentive structure (Wiliamson 1985). These investments also constitutes as "pledge," or "credible commitment" which signals a firm's sincerity (cf. Campbell 1997: 420).

Information sharing refers to the extent to which critical, often proprietary, information is communicated to the firm's partner (Mohr and Spekman 1994). Alternatively, information sharing is defined as "a bilateral expectation that parties will proactively provide information useful to the partner." It represents a guarantee to the supplier in the sense that the buyer can be expected to provide unforeseen information that may affect supplier operations (Heide and John 1992: 37). Sharing of information can be conducted formally or informally (Anderson and Narus 1984). Information exchange is a crucial component of the interaction process due to the absence of communication has been seen as a cause of conflict (Firat et al. 1974). Several studies suggest that the sharing of information is an important part of relationship marketing (e.g. Anderson and Weitz 1989; Dwyer et al. 1987). An open dialogue is often necessary means in developing and preserving a shared understanding of the relationship (cf. Selnes 1996: 310).

In addition to this, successful relationships are theorized to be high on information exchange connected to long-term planning and product, operation and physical distribution related issues (Frazier et al. 1988). This view has been supported in other study (Selnes 1996). He found that honest and timely communications between a buyer and a supplier have a strong effect on relationship continuity. Nielson (1997) found that a firm which has established close and extensive working relationships and with its partner is to be more willing to share key strategic and operating information.

Joint decision-making refers to the partner-firms engaging in combined decision making and problem solving (Nielson 1997). Dwyer et al. (1987: 13) states that "joint decision making" especially related to performance and planning matters, are a key component of relational exchange and may even be essential to partnering success; "As the extent and scope of joint activities increase, the firm effectively become partners in an alliance" (Heide and John 1990: .25).

In addition to this, Heidi and John (1990) note that joint decision-making involves inter-penetration of organizational boundaries. Organizational boundaries become penetrated by the integration of activities as the supplier becomes involved in activities that traditionally are considered the buyer's responsibility and vice versa. Joint decision making in retail supplier relationship can occur over a large set of activities, including joint new product development, assortment planning, order processing, payment system, and joint promotional activities. As the extent and scope of joint activities, the firms effectively become partners in the relationship.

The relationship between two parties develops overtime, and as they gain experience and learn to trust each other, they will gradually increase their commitment through relation-specific investments in services, processes, or people dedicated to the particular relationship (Dwyer *et al.* 1987). Relation-specific investments are non-fungible investments that uniquely support the buyer-supplier relationship (Wiliamson 1985). The non-fungible nature means that they are not easily transferable to other relationship; therefore, they lose their value in the event that the relationship is terminated. Such investments are necessary part of achieving strategic outcomes because they promise efficiencies in coordination (Williamson 1983, 1984). They facilitate expectations of continued exchange into the future (Heide and John 1990), and represent credible commitments to the relationships that are useful in minimizing opportunities behavior, and build trustworthiness (Anderson and Weitz 1992; Wiliamson 1985).

As the parties invest in the relationship, they simultaneously increase their dependence on the other party (Emerson 1962). Dependence arises from these investments due to they make the focal exchange partner irreplaceable, or replaceable only at a cost (Heide and John 1988). Such a dependence structure actually decreases both parties over control another party decisions (Heide and John 1992). In addition, the interdependence between two parties tends to reduce the probability that one party will act in a manner that produces a sub-optimal result for the partnership. Through greater interdependence both parties work to create value of mutual benefit. As the level of partner's relationship specific investments increases, so does the partner's dependence on the relationship and willingness to collaborate (Spekman et al. 1998).

However, Spekman et al. (1998: 836) note that the successful of partnership, relates to the specific investments, depends on:

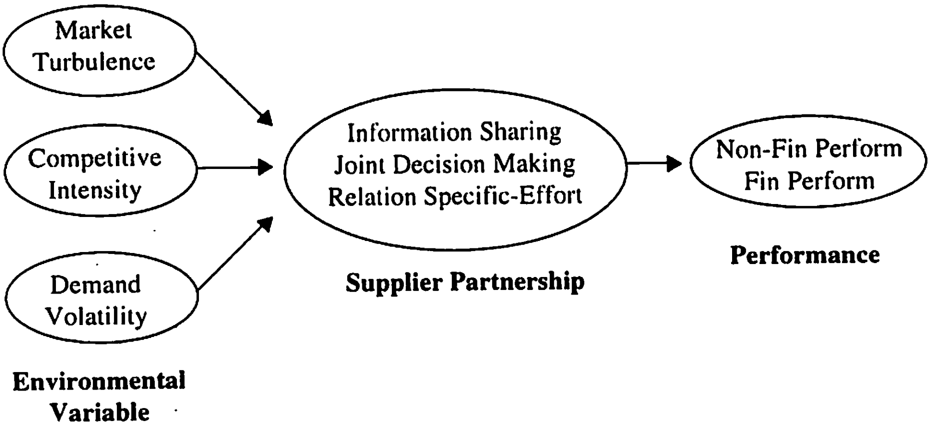
(i) both sides believe that their own investments are substantial;
(ii) each recognizes the substantial investments of the other;
(iii) both sides believe that they themselves would face difficulties accessing alternative partners; and
(iv) each believes that the other would face costly consequences if the established relationship were terminated.

Therefore, when both partners believe that they have substantial levels of specific investments, mutual recognition of interdependence exists, as should a mutual willingness to collaborate (Heide and John 1990).

Research Propositions

Figure 1 visually describes the theoretical relationships between environmen-

Figure 1. **Supplier Partnership, Firm Performance and Environmental Variables**



tal variables, supplier partnership and firm performance. The underlying rationale comes from the coalignment principle, which advocates the environment firm behavior performance paradigm (Cavusgil and Zou 1994; Li and Calantone 1998). This section explains the rationalization behind a model and develops the formal proposition.

Stuart and Mueller (1994) found that supplier partnering activities affects positively on increasing productivity and quality of the services. Further, Groves and Valsamakis (1998) note that supply chain literature strongly emphasized the benefits associated with partnerships. These include: better quality of products and services, increased flexibility and responsiveness to customer requirements, lower inventory levels across supply chain, and reduction of total costs to the benefit of all members of the supply chain. It is argued that these benefits ultimately lead to better financial performance (Saunders 1994).

In addition to this, Kalwani and Narayandas (1995: 14) made explicit notion that long term relationships are able to retain or even improve the profitability levels more than firms which employ a transactional approach. More over, Lusch and Brown (1996) have found that it is not the length of the relationship that leads to positive outcomes but rather the relationship orientation. Further, supplier partnership frequently is believed to result in a higher performance level (eg. Akacum and Dale 1995; Campbell 1998; Graham et al. 1994). For instance, Akacum and Dale (1995) addressed that the major benefits of partnering relationships with suppliers were: flexibility in terms of scheduling, improved inventory management, reduction non-confirming products, etc. These benefits lead to reductions in cost and improvements in quality (cf. Campbell 1998: 23). Consistent with this view, a study conducted by Spekman et al. (1988) in the US, Canada, and Western Europe reveals that sharing information and joint problem solving contribute significantly to reducing cost.

From studies across Europe and United States, it has been shown that companies which have stable relationships with suppliers achieve benefits across their whole business (Boitoult 1997: 68) such as maximization of consumer satisfaction through greater choice, availability of fresher products and improved service, ability to have local and store specific ranges whilst maintaining economics of scale. These benefits enable firms to enhance their strategic outcomes: profit performance and realized competitive advantage (Jap 1999), therefore:

Hypothesis 1: The higher the overall level of supplier partnership, the higher the overall firm performance

Supplier Partnership and Environmental Variables

Firm environment is a major source of contingencies faced by organizations (Tosi and Slocum 1984). The marketing strategy literature (Day 1990) and the competitive strategy literature (Porter 1980; 1985) emphasize the potential importance of these variables. Accordingly, a match between environmental conditions and a firm capabilities and resources is critical to performance. In conditions of high uncertainty in the environment, successful performance is likely to depend on a company having the capacity for intelligent adaptation to changing circumstances (Child 1975). In a more recent study, Venkatraman and Prescott (1990) found a positive performance impact for environment-strategy coalignment among firms in the US market. In addition to this, Tan and Litschert (1994) examined the relationships between environment-strategy-performance in the China market. They found that environmental uncertainty was positively related to defensive strategies, and it was also linked to higher performance.

Competitive environment represents the degree of threat to the firm posed by multifacetedness, vigor and intensity of the competition and the downswings and upswings of the firm's principal industry (cf. Miller and Friesen 1983: 222). Buzzell and Ortmeyer (1995: 88) noted that "competitive pressure led to the development of partnership between suppliers and retailers. It focused on a simple idea: make sure the right product at the right price is on the shelf when the customer enters the store, while maintaining the lowest possible inventory at all points in the pipeline running from suppliers to retailer." Further, as market become more competitive, Teece (1992) suggested that firms have started to abandon use of power to coordinate marketing channels (whether retailer or supplier). The motivation behind this is to enhance the value of the channel's market offering to its customers and/or to lower the total of the channel costs (Stern and El-Ansary 1992). By working together, retailers and suppliers will gain beneficiary because they have an ability to fill the basic requirement of staying in business better than competitors: finding out what their customer wants. Consequently, in highly competitive environment, retail firms are being forced to develop a much closer relationship with their supplier. Therefore,

Hypothesis 2: The greater the level of competitive intensity, the greater the level of supplier partnership.

Demand volatility refers to the extent to which demand changes are rapid. Under conditions of high volatility, writing contracts that cover all unanticipated contingencies is difficult and costly. In such circumstances, suppliers can take advantage of retailers by interpreting unspecified clauses in their contract to their own benefit. To avoid such opportunistic behaviors, retailers are likely to develop good relationship with key suppliers that permit sequential and adaptive decision making

(John and Weitz 1988). Thus the following hypothesis is formulated:

Hypothesis 3: The greater the level of demand volatility, the greater the level of supplier partnership.

Market turbulence is defined as the degree of change related to the customers' composition and their preferences (Jaworski and Kohli 1990: 14). Celly and Frazier (1996) found that market turbulence has a strong positive correlation with partnership behaviors. Through an emphasis on partnership behaviors when uncertainty is high, cause-effect ambiguity may be reduced and the perceived riskness of efforts lessened. For example, in the absence of partnership behavior efforts, the suppliers may be unwilling to support sales promotion and below the line activities because they do not know these activities will result in improved their product performance. It can be said; changing business environment will lead to channel collaborations. This in line with Raphel (1996) suggestion market turbulence might stimulate retailer firms to do cooperation with their key suppliers. Hence the following hypothesis is posited:

Hypothesis 4: The greater the level of market turbulence, the greater the level of supplier partnership.

Methods

To test the model presented in Figure 1, data were collected to assess the relationship between market orientation and retail performance. Names of retailers were culled from different sources; Indonesian Directory, Retail Association, CIC, BPS and Yellow Pages. Each retailer was contacted by telephone to obtain co-operation. In addition, we asked them to provide the name of the person who was most knowledgeable about the business strategy had been conducted by the firm. Coded questionnaires were mailed to all informants along with a cover letter on university stationary explaining the purpose of the study, and the confidentiality of responses. Surveys were returned to the researcher by pre-addressed, postage-paid envelopes enclosed with the questionnaires. Three or four time's follow-up by telephoning them to explain the benefit of joining this project, make sure that they do understand the questionnaire, and remind them to return it the questionnaire. These procedures resulted in responses from total 172 retail firms for response rates of 36.5 percent, and used the 159 fully completed questionnaires. Seven of these cases were not classified as 'key informants' due to their positions being too junior or not involved in marketing activities. Six of theses cases had significant missing data and were excluded from the data set. The final data set comprised of 159 usable responses. The characteristics of the final responses are shown in Table 2.

The profile of the samples shows a reasonable spread of retail firms based on types of retailers and size. Of these, 18.9 percent were categorizes as food stores (supermarkets and mini markets), 14.5 percent were categorized as department stores, 21.4 percent were categorized as clothing and textiles stores and 17 percent were categorized as furniture stores. About 41.4 percent of the retailers were represented small independent retailers, 31.4 percent were mid-sized independent retailers, 8.3 percent were large independent retailers, and 13.7percent were large chain retailers. About 73.4 percent were having more than 5 years relationships with key suppliers.

Table 2. **Sample Characteristics (n=159)**

		Frequency	Percent
Years of Supplier Relation	less than 3 years	28	17.6
	3 to 5 years	14	8.8
	5 to 10 years	75	47.2
	10 to 20 years	22	13.8
	more than 20 years	2	1.3
	no response	18	11.3
Retailer's Type	food stores	30	18.9
	mix store and dept, store	23	14.5
	clothing and sport store	34	21.4
	furniture, electronic stores	27	17.0
	chemist and optic stores	23	14.5
	book stores	12	7.5
	others	10	6.2
Retail Size	less than 400 sq. m	56	35.2
	400 to 5000 sq. m	59	37.1
	more than 5000 sq. m	31	19.5
	no response	13	8.2
Annual Sales	less than Rp 10 billion	55	34.6
	Rp 10 to Rp 25 billion	39	24.5
	Rp 25 to Rp 100 billion	30	18.9
	Rp 100 to Rp 500 billion	22	13.8
	more than Rp 500 billion	5	3.1
	no response	8	5.0
Title of Key Informant	Owner	30	18.9
	General Manager/Director	49	31.4
	Manager (all function)	77	48.4
	no response	3	1.9

In addition to mailed questionnaire, unstructured or in-depth personal interviews were used in this study. The usefulness of qualitative, alongside quantitative, do not only gives understanding the meaning of the numerical data and respondent vocabulary, or confirms or refutes the survey findings. The interviews have been conducted with twenty retail firm's senior managers. Based on their title, there were five directors, which are also owners; four operation directors; one commercial director; two general managers of business development; two general managers of store operation; one general manager of merchandising; two senior marketing managers; and three senior merchandiser. Seven out of the twenty retail firms are food chain stores on which four are a franchisee of foreign retailers. The other seven are clothing chain stores, two are book chain stores, one is handcraft store, one is furniture store, one is home improvement store, and one is direct sale retailer.

Instrument Development

Based on an extensive review of existing literature on supplier partnership, performance and environmental studies, a set of items was generated for each of these three components. These items reflected the degree in which retail firms' focus on partnership should behave according to our conceptual definition. The total number of items generated for the supplier partnership construct was 16 items; for the performance construct was 10 items; competitive intensity was 5 items; market turbulence was 4 items; and demand volatility was 4 items (Exhibit 1). Each item was scaled on a 5-point scale ranging from one to five, where one indicated that the firm did not practice "in any degree", and five indicating that the firm developed it "in an intensive degree." The items were translated into Indonesian by translators who are faculty members of Prasetiya Mulya Business School, and the quality of the translation was subsequently verified using back translation by independent judges.

Having generated data using the items developed in the previous subsection, the next task was to purify the data in order to determine whether any item needed to be eliminated from the instrument. When generating an instrument, one is trying to select a set of items, which most accurately belong to the specified domain. However, it is important to identify poor items (items which correlate negatively or do not correlate strongly with other items) and eliminate them from the instrument (e.g. Churchill 1979; Cadogan et al. 1999). The purifying of instruments has relied on the confirmatory factor analysis (Jaworski and Kohli 1993).

The purpose of factor analysis is to define the underlying structure in a data matrix through analysing the structure of the inter-relationship among a large number of items by defining set of common underlying dimensions, known as factors (Hair et al. 1995). There are two approaches concerning factor analysis technique, which are exploratory and confirmatory. In exploratory, the researcher may not have any idea as to how many underlying dimensions there are for the given data. Thus, the focus of investigation is directed toward uncovering the minimal number of factors that underlie the observed variables. Alternatively, the researcher may predict or hypothesise that there are several underlying dimensions and that certain variables belong to one dimension while others belong to other dimension. If factor analysis is used to confirm hypothesize, then called as confirmatory factor analysis (Kim and Mueller 1994).

The result was provided sufficiently to support the model fit of the supplier partnership constructs (χ^2= 88.40 (*.068*); GFI=.938; AGFI=.888); firm performance construct (χ^2=45.84 (*p*=*.215*), GFI=.921; AGFI= .869); competitive intensity construct (χ^2= 9.213 (*p*= *.162*), GFI= .943; AGFI= .809); demand volatility construct (χ^2= 2.251 (*p*= *.283*), GFI= .992; AGFI= .960); and market turbulence construct (χ^2=.440 (.507); GFI= .998; AGFI= .989). The structural parameter estimate of supplier partnership construct can be seen in Figure 2 (other constructs can be seen in Exhibit B).

All measures were analyzed their reliability following the guidelines offered by Jaworski and Kohli (1993) and Byrne (1989). The Cronbach's alphas of the multi-item scales in this study range from a minimum of .3158 (market turbulence) to a maximum of. 8355 (information sharing). Table 3 provides the outcomes of the reliability analysis for the four constructs under study.

Figure 2. **Supplier Partnership Construct**

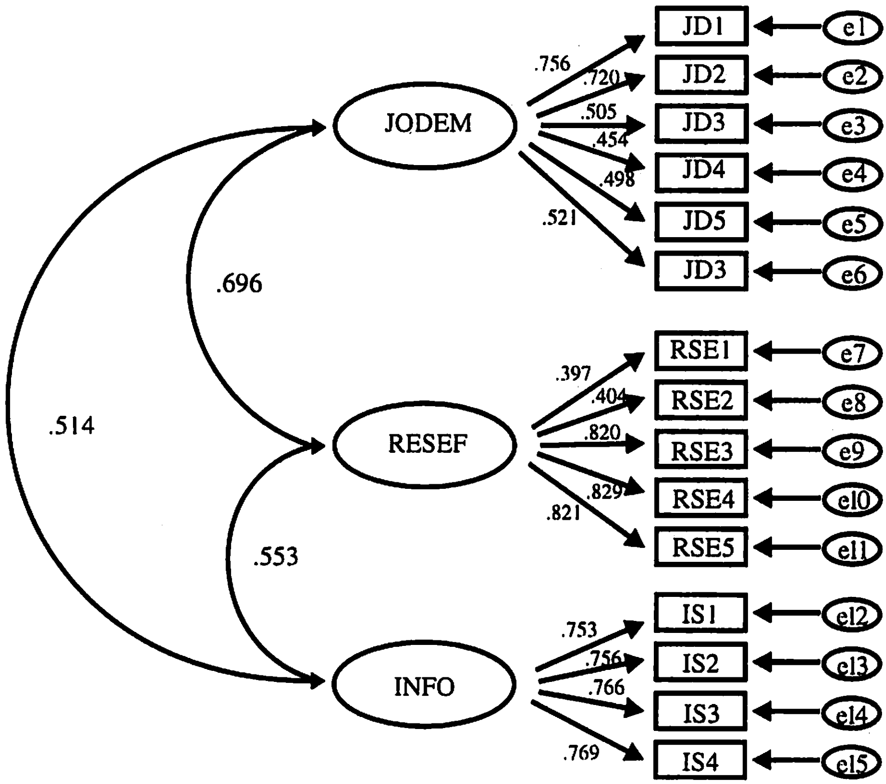


Table 3. **Reliability of the Construct**

Constructs	No. Items	Cronbach's Alpha
Relation-specific efforts	5	.7888
Information sharing	4	.8355
Joint decision making	4	.8037
Competitive intensity	4	.5465
Demand volatility	4	.6770
Market Turbulence	3	.3158
Financial Performance	4	.5237
Non-Financial Performance	5	.6100

Due to the reliability value of market turbulence variable is too low it means that the items perform poorly in tapping the construct (Churchill 1979). Therefore, this study chose one particular item (MT3[1]) to represent the construct. The arguments for choosing this item were: (1) its closeness to the market turbulence definition com-

[1] Our customers tend to look for new products/services all the time

Table 4. **Items Deleted After Confirmatory Factor and Reliability Analysis**

Sub-construct	Instrument Item
Supplier Partnership	• We made a substantial number of adaptations in our delivery system to increase efficiency dealing with key suppliers (IS5)
Competitive Intensity	• Our competitors are relatively weak (CI5)
Market Turbulence	• Customers' preference changes quite a bit over time (KJK) (MT1) • Our customers are very price sensitive (KJK) (MT2) • Our customers tend to look for new product/services all the time (KJK) (MT4)

pared to other items, (2) its representation of major characteristics of the Indonesian market which is dominated by the youth generation in that they tend to look for new products/services and (3) based on practical reason, that is, this item provided better solution compared to other items when a factor loading of each item was being fixed to 1.

The confirmatory factor analysis and reliability analysis lead to an elimination of 5 measurement indicators. As illustrated in Table 4, one indicator belongs to the construct of supplier partnership; one indicator was deleted from competitive intensity construct; and three indicators were deleted from market turbulence construct.

Results

The study used the general SEM model to examine the hypothesized relationships among the constructs. A software package AMOS was applied to execute the model because it is perhaps the most "user friendly" software for this statistical technique (Hox 1995; Kline 1998; Ridgon 1994).

The structural equation modeling was conducted using the maximum likelihood estimation method in AMOS 3.61. The 'best' model was determined through a combined use of model comparison and model development. In this case, the operational model was first subjected to a rigorous test than compared with a set of alternative model.

The operational model posits that supplier partnership —which has been associated with firm performance in past research— influences firm performance. Further, the environmental variables are being treated as antecedence of supplier partnership (Figure 3). The underlying rationale of operational model has been explained in the previous section.

The first competing model, as illustrated in Figure 4, tested the hypotheses predicting that all-endogenous variables have an effect directly on performance. Thus, there is no mediating effect in this model. The competing model 1 argued that environment factors and strategic behaviors of supplier partnership are directly influences firm performance. *The second competing model* (Figure 5) tested that the environmental variables directly influence

Figure 3. **The Operational Model**

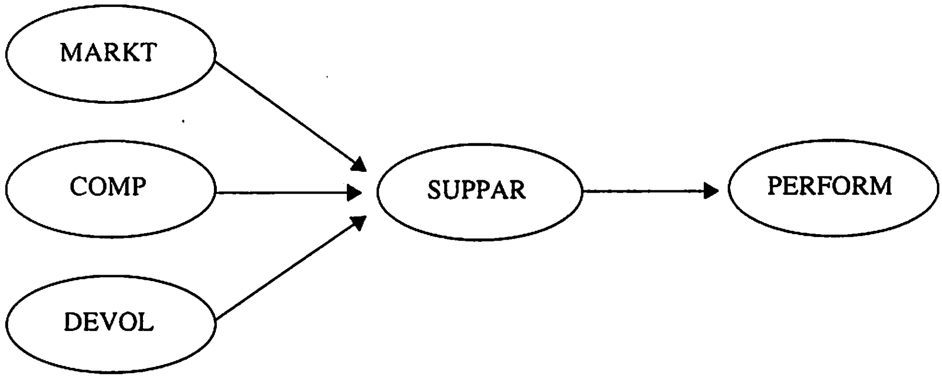


Figure 4. **The Competing Model 1**

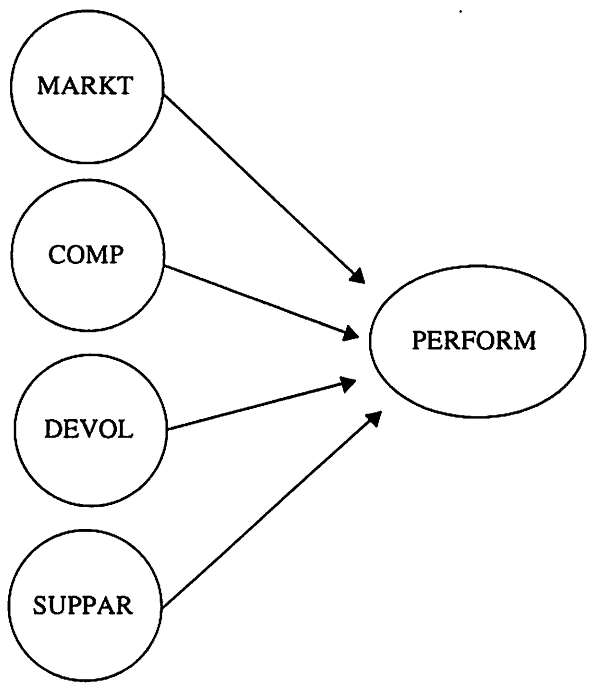


Figure 5. **The Competing Model 2**

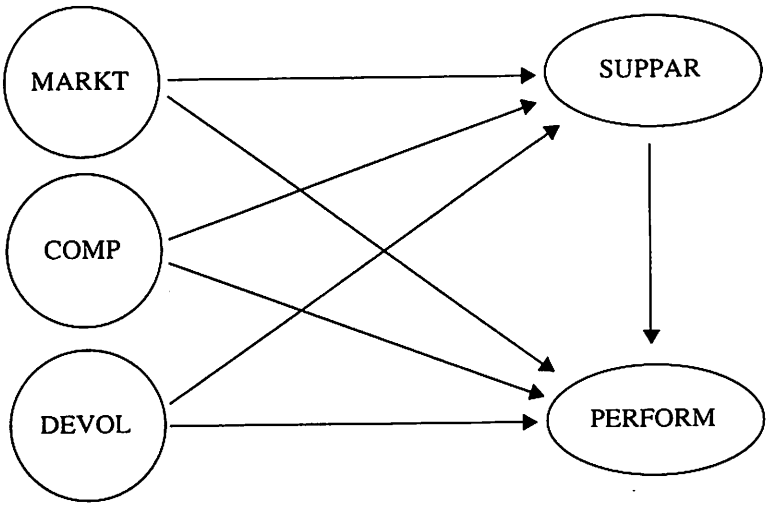


Table 5. **Model Comparisons**

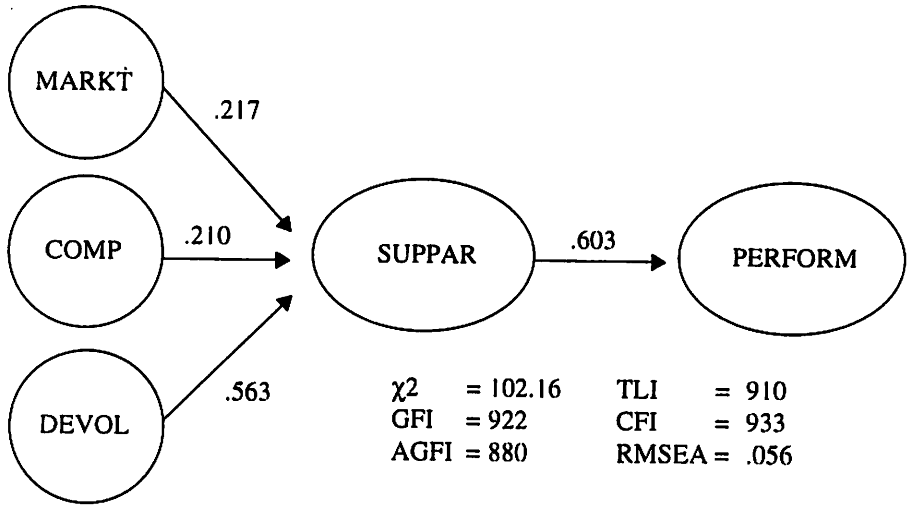
Model	χ^2	df	$\Delta\chi^{2+}$	Δdf	p	GFI	TLI	CFI	RMSEA
Operational	102.16	68			.005	.871	.983	.987	.025
Competing Model 1	233.23	74	131.07	6	.000	.763	.688	.733	.106
Competing Model 2	140.95	69	38.79	1	.000	.810	.806	.846	.083

the firm performance. This competing Model 2 argued that the influences of the environmental variables are partly mediated by the strategic behaviors of supplier partnership.

A series pair wise analysis between the operational model and the competing model was conducted to determine which model better accounts for the observed data. The models were compared on the basis of $\Delta\chi^2$ statistics (Hoyle 1995). Table 5 demonstrates the results of model comparisons.

Although the operational model has only moderate fit to the sample data, the comparisons between it and the competing models demonstrate the relative advantages of the operational model over the other models. The chi-square difference statistics between the operational model and the competing models are all significant at either .05 or .01 levels. Apart from this, other indicators such as the comparative fit index (CFI), the goodness–of-fit (GFI) the Tucker-Lewis index (TLI) and RMSEA demonstrate the relative advantages of the operational model over the other models. It can be said, the operational model is superior to the competing models in terms of overall model fit.

Figure 6. **Relationship between Supplier Partnership, Firm Performance and Environmental Variables**



Hypothesis 1 posits that a positive relationship exists between supplier partnership and performance. The result of a SEM analysis reveals that supplier partnership has significant effect on performance (b_l = .603; $p > .01$). The results underscore the importance of supplier partnership efforts. These efforts enable retail firms to enhance their performances.

The result fails to support the *hypothesis 2* that competitive intensity affects positively to supplier partnership. The result shows that competitive intensity affects negatively supplier partnership (b_{ci} = -.210, $p < .05$). This means that in the more competitive market situation, Indonesian retailers tend to reduce the partnership effort with their key suppliers. Further, the result shows that demand volatility affects negatively supplier partnership (b = -.563, $p < .05$) which is contradictory with *hypothesis 3*. This suggests retail firms in facing volatile environment avoid making some further commitments toward their suppliers, because future states of such environments are difficult to predict. Bourgeois (1985) warned that firms in volatile environments would not necessarily seek reduced uncertainty because attempts to avoid risk through reducing uncertainty may result in missed opportunity.

As proposed in *Hypothesis 4*, market turbulence have a strong positive relationship with supplier partnership (b_{mt} = .217, $p < .05$). Through an emphasis on suppliers partnership when market turbulence is high, retailers might gain substantial supports to maintain the capability to serve customers.

Discussion

The results of the study provide support for the existence of a link between supplier partnership and firm performance in Indonesian retail industry. In other words, firms with high-level supplier partnership tend to have better performance than their competitors. This finding is consistent with the expectation and supports the notion that supplier partnership is an important determinant of its performance.

This is in line with the academic findings (e.g., Abramson and Ai 1998; Groves and Vassilios 1998; Jap 1999). As such, it appears that retail firms should strive to improve the relation with suppliers in their efforts to attain higher business performance.

As was discussed previously, there are three major benefits retailer firms can get from the suppliers. *First*, retail firms with a high level of supplier partnership are most likely to be able to make better plan and decision. Based on exploratory interviews with senior managers in retail firms, one informant illustrates his experience: "Suppliers ask us to stock more items, because, in the following months, they can not supply product due to management change their distributor, or they cut production till 40 percent to anticipate worst situation in the general election. In another case, suppliers give information that they have a problem with bottling company. This problem will affect their service level (stock and delivery). All information from suppliers helps us to make better plan and decision."

Second, close relation with suppliers will increase the capability of retail firms to implement marketing program effectively. An informant illustrates his notion: "We have a calendar promotion for each category product, and one month before implementation we invite key suppliers to joint in the program. If they interest, all promotion budget are under their expenses. Due to we have a good program, they show their willingness to contribute in the program ....as a result, and we get two main benefits: reducing stock-out problem, and increasing customer patronage."

Third, retail firms get support from suppliers to increase operational efficiency such as speedy-up order processing, delivery, and availability product. An informant gives an illustration: "Suppliers frequently involved in solving our problem. For example, during the riot situation, it was difficult to deliver product in day time. Then we discuss this problem with suppliers to find the solution, and we come to the conclusion that the product would be delivered to the outlets between 2 AM to 4 AM early in the morning."

In addition to this, the benefits come from suppliers will contribute positively to firm performances. These findings are parallel with the work of Abramson and Ai (1998), who found the sellers that had high level of supplier partnership had significantly higher sales level, better sales growth, and better general performance than the sellers used transactional marketing.

Contrary to the expectation, competitive intensity negatively affects supplier partnership. One possible explanation is, in a highly competitive market, retail firms tend to use price and promotion strategies as competitive weapons. The success of this strategy depends on the extent to which they can negotiate with their key suppliers to gain some concessions. In this situation, price will be the dominant element in purchasing. This has encouraged the entry of new suppliers and might break down some existing suppliers. However there are some signs of reversal of this process where switching between suppliers for price reasons has led to variability in offerings to consumers.

The effect of demand volatility in increasing the level of supplier partnership is contrary to the hypothesis. A possible explanation is that the threat posed to firms in a very volatile demand environment may force retail firms to avoid any long term commitments in order to reduce the risk, especially of holding items which are possibly more difficult to sell. Volatility reduces the predictability of outcomes for channel partners. Not only does this escalate information needs and confound managerial decision-making (Scott 1987), volatility can interfere with partnerships. Specifically, a volatile demand condition confounds a partner's efforts to gauge the other's performance (Oh et al. 1992).

Furthermore, volatility makes it difficult to project a partnership into the future. Uncertainty and differing perceptions of future outcomes make it more difficult for the parties to foresee the other mediating important resources. This impairs their 'tolerance' for inevitable inequities in discrete transaction episode (Walster and Knee 1989). One informant illustrated the situation in the retail business: "Recently, some distributors and suppliers cannot supply some products because their warehouses or production facilities have been badly damaged by the riots .... This situation is difficult for us and our suppliers to make commitments for the long term. Apart from this, some customers are now more rationale in choosing their products. They tend to find substitute items which are cheaper than they bought previously." This illustration may help to explain the reasons for using short-term transaction instead of long-term, to reduce risk.

To further substantiate this view, Daft and Weick (1984) suggest that organizations tend to accept the environment as given and respond actively only when a crisis occurs. In this case, when operating in a volatile environment, it is often a more effective strategy to have the resources necessary to function reactively rather than to make long-term commitment. Such commitments might bind retailers to a specific course of action and subsequent investments. Therefore, long-term commitment to suppliers may inhibit retailers' flexibility in managing their merchandise, and ability to respond to changes in environmental demands (Jap 1999).

The results indicate a positive association between levels of change of consumer preferences (item on the market turbulence scale) and supplier partnership. Through an emphasis on partnership behaviors when consumer preferences changing frequently, retailers can gain substantial support from suppliers for developing service or product offerings better over competing alternatives. For example, in the absence of partnership behavior efforts, the suppliers may be unwilling to support sales promotion and below the line activities because they do not know these activities will result in improved their product performance. It is therefore reasonable to expect firms to respond to high consumer preferences changing by developing a high degree supplier partnership.

Conclusion

The research is intended to bridge the current gap in theory on supplier partnership. It advances our understanding of supplier partnership by proposing and testing a comprehensive model that integrates the supplier partnership behavior, environmental variables and firm performances. The model emphasizes a holistic view of the antecedence and consequences of supplier partnership in the Indonesian retail businesses. It implies that supplier partnership affects firm performances and the magnitude of association was influenced by environmental variables.

Contrary to the hypothesis, competitive intensity and demand volatility has a negative effect on the supplier partnership. As was expected, the effect of market turbulence on the supplier partnership is positively significant. The empirical results indicate the effect of environmental variables on the strategic behavior (supplier partnership) is inconclusive.

In the interests of obtaining a higher response rate and remaining within budgetary constraints, the use of single informant was necessary in this study. The use of information from only a single source to generalize about an organization's condition may be misleading. Such information is selective, if not biased, owing to the informant's position or other characteristics or his/her way of using and weighting the information when making judgments (Philips 1981). Achrol (1991) suggests using multiple informants because multiple informants eliminate errors resulting from the one informant's selective perception, thus increasing reliability. However, multi-respondent studies are relatively few in number though due to the require cooperation and coordination within subject firms and consequently are much more difficult to execute (Slater 1995). The use of non-random sample can always be questioned for its generalizability. Although it is extremely difficult to draw random samples in Indonesia, future researchers should attempt to study market orientation of retailers with randomized samples

In addition, it is important to study how personal and business relationships should be balanced in Indonesian retail businesses to maximize retail performances. This notion appears several times during personal interview. An emphasis on business relationships can often be perceived as an intention to have a "distant" personal relationship or as a "distrustful" gesture. On the other hand, a personal relationship often requires the two parties to be "flexible" so that getting things done becomes possible, more quickly or more favorably to the two parties (Liu and Wang 1999).

Furthermore, there is a need to adapt and refine thoroughly the measures of environmental variables in a specific context in order to avoid lower quality instrument. According to Cadogan et al. (1999), changes in context cannot always be accommodated by simply changing the wording or translation of an existing instrument; a clear picture of the context and manifestation of construct being studied in that context is required to determine whether current operationalizations are sufficiently comprehensive.

Finally, this study employs manager's reports for assessing firm performances. Recently, several retail authors have suggested using customer perception or behavior as a basis for measuring performance output in retailing parameters chosen includes perception of service quality, customer satisfaction and customer loyalty (Spreng and Mackoy 1996; Magi and Julander 1996). Measuring customer perceptions could therefore be a very useful measure of firm performances.

References

Achrol, R. S. 1991. Evolution of the marketing organisation: New forms of turbulent environments. *Journal of Marketing* 55 (Oct): 77-93.

Abramson, N. R., and J.X. Ai. 1998. Practising relationship marketing in southeast asia: Reducing uncertainty and improving performance. *Management International Review* 38: 113-44.

Akacum, A., and B. G. Dale. 1995. Supplier partnering: Case study experiences. *International Journal of Purchasing and Materials Management* 31 (1): 38-45.

Anderson, E., and B. Weitz. 989. Determinants of continuity in conventional industrial channel dyads. *Marketing Science* 8 (4): 310-23.

Anderson, E., and J. C. Narus. 1984. A model of the distributor's perspective of distributor-manufacturer working relationships. *Journal of Marketing* 48 (Fall): 62-74.

________________. 1990. A model of distributor firm and manufacturer firm working partnerships. *Journal of Marketing* 54 (Jan): 42-58.

Bentler, P. M. 1990. Comparative fit indexes in structural models. *Psychological Bulletin* 107 (2): 238-46.

Boitoult, L. 1997. *Building the Foundations: An Introduction to Total Supply Chain Management.* Institute of Grocery Distribution. Watford.: IGD Business Publication.

Bourgeois III, L.J. 1985. Strategic goals, perceived uncertainty, and economic performance in volatile environments. *Academy of Management Journal* 28 (3): 548-73.

Buzzell, R. D., and G. Ortmeryer. 1995. Channel partnerships streamline distribution. *Sloan Management Review* 36 (Spring): 85-97.

Byrne, B. M. 1989. *A Primer of LISREL: Basic Applications and Programming for Confirmatory Factor Analytic Models.* Springer-Verlag.

Cadogan, J. W., A. Diamantopoulos, and C. P. de Mortanges. 1999. A measure of export market orientation: Scale development and cross-cultural validation. *Journal of International Business Studies* 30 (4): 689-704.

Celly, K. S., and G. L. Frazier. 1996. Outcome-based and behavior-based coordination efforts in channel relationships. *Journal of Marketing Research* 33 (2): 200-211.

Churchill, G.A., Jr. 1979. A paradigm for developing better measures of marketing constructs. *Journal of Marketing* 26 (February): 64-73.

Campbell, A. 1997. Buyer-supplier partnerships: Flip sides of the same coin? *Journal of Business and Industrial Marketing* 12 (6): 417-34.

________________. 1998. Do internal departmental relationships influence buyers' expectations about external supply partnerships? *Journal of Business and Industrial Marketing* 13 (3): 199-214.

Carlisle, J.A., and R.C. Parker. 1989. *Beyond Negotiation: Redeeming Customer-Supplier Relationships.* New York: John Wiley.

Cavusgil, S. T., and S. Zou. 1994. Marketing strategy-performance relationships: An investigation of the empirical link in export market ventures. *Journal of Marketing* 58 (Jan): 1-21.

Child, J. 1975. Managerial and organisational factors associated with company performance-part II: A contingency analysis. *The Journal of Management Studies* (Feb): 12-29.

Daft, R., and K. Weick. 1984. Toward a model of organisations as interpretation systems. *Academy of Management Review* 9 (April): 284-95.

Day, G.S. 1990. *Market-Driven Strategy: Process for Creating Value.* New York: The Free Press.

Dwyer, P. R., P. H. Schurr, and S. Oh. 1987. Developing buyer-seller relationships. *Journal of Marketing* 51: 11-27.

Emerson, R. M. 1962. Power-dependence relations. *American Review* 27: 31-34.

Firat, F. A., A. N. Tybout, and L. W. Stern. 1974. A perspective on conflict and power in distribution. *Proceedings of American Association Conference.* Amercan Marketing Association, Chicago, IL: 435-9.

Graham, T. S., P. J. Daugherty, and W. N. Dudley. 1994. The long-term strategic impact of purchasing partnerships, *International Journal of Purchasing and Materials Management* 30 (4): 13-23.

Groves, G., and V. Valsamakis. 1998. Supplier-customer relationships and company performance. *International Journal of Logistics Management* 9 (2): 51-64.

Harrigan, K. R. 1985. *Strategies for Joint Ventures.* Lexington, MA: Lexington Books.

Heide, J. B. 1990. Alliances in industrial purchasing the determinants of joint action in buyer-supplier relationships. *Journal of Marketing Research* 27 (February): 24-36.

________________. 1992. Do norms matter in marketing relationships? *Journal of Marketing* 56 (April): 32-45.

Heide, J. B., and G. John. 1988. The role of dependence balancing in safeguarding transaction-specific assets in conventional channels. *Journal of Marketing* 52 (January): 20-35.

Hox, J. J. 1995. Amos, EQS, and LISREL for Widows: A comparative review. *Structural Equation Modeling* 2: 79-91.

Hoyle, R. H. 1995. The structural equation modeling approach: Basic concepts and fundamental issues. In *Structural Equation Modeling: Concepts, Issues, and Applications.* R.H. Hoyle (ed.). Thousands Oaks, CA.: Sage Publications: 1-15.

Jap, S. D. 1999. Pie-expansion efforts: Collaboration processes in buyer-supplier relationships. *Journal of Marketing Research* 36 (November): 461-92.

Jaworski, B. J., and A. K. Kohli. 1993. Market orientation: Antecedents and consequences. *Journal of Marketing* 57 (July).

Joreskog, K.G. 1974. Analysing psychological data by structural analysis of covariance matices. In *Contempory Developments in Mathematical Psychology,* R. C. Atkinson, D.H. Krantz, R.D. Luce, and P. Suppes (eds.). San Fransisco: Freeman, 2: 1-56.

Kalwani, M. U., and N. Narayandas. 1995. Long-term manufacturer-supplier relationships: Do they pay off for supplier firms? *Journal of Marketing* 59 (April): 1-16.

Kim, J., and C. W. Mueller. 1994. Introduction to factor analysis: What it is and how to do it. In M. S. Lewis-Beck: *Factor Analysis and Related Techniques*: 1-73. SAGE Publication Toppan Publishing.

Kline, R. B. 1998. Software programs for structural equation modeling: AMOS, EQS, and LISREL. *Journal of Psychoeducational Assessment* 16: 343-64.

Lewis, R. 1996. Consumer response: Partnership paradox; The key players in the supply chain – From fabric suppliers to apparel manufacturers to retailers – need to work together to serve consumers' needs. *Daily News Record* 26 (103): 30-32.

Magi, A., and C. R. Julander. 1996. Perceived service quality and customer satisfaction in a store performance framework: An empirical study of Swedish grocery retailers. *Journal of Retailing and Consumer Services* 3 (1): 33-41.

Miller, D., and P.H. Friesen 1983. Strategy-making and environment: The third ling. *Strategic Management Journal* 4: 221-235.

Li, T., and J. Calantone. 1998. The impact of market knowledge competence on new product advantage: Conceptualisation and empirical examination. *Journal of Marketing* 62 (Oct): 13-29.

Liu, H., and Y.P. Wang. 1999. Co-ordination of international channel relationships: Four case studies in the food industry in China. *Journal of Business and Industrial Marketing* 14 (2): 130-50.

Lusch, R. H., and J.R. Brown. 1996. Interdependency, contracting, and relational behaviour in marketing channels. *Journal of Marketing* 60 (October): 19-38.

Mohr, J., and R. Spekman. 1994. Characteristics of partnering success: partnership attributes, communication behavior, and conflict resolution techniques. *Strategic Management Journal* 15: 135-52.

Nielson, C. C. 1997. An empirical examination of the role of "Closeness" in industrial buyer-seller relationships. *European Journal of Marketing* 32 (5/6): 441-463.

Oh, S., F. R. Dwyer, and R. Dahlstrom. 1992. External influences on channel relationships: Lesson from a negotiation lab. *Advances in Distribution Channel Research* 1: 87-213.

Philips, L. W. 1981. Assessing measurement error in key informant reports: A methodological note an organizational analysis in marketing. *Journal of Marketing Research* 17 (Nov): 395-415.

Porter, M. 1980. *Competitive Strategy*. New York: The Free Press.

________________. 1985. *Competitive Advantage*. New York: The Free Press.

Raphel, M. 1996. Manufacturers and retailers "Partner" to increase Sales. *Direct Marketing* 59 (3): 58-61.

Retail Monitor International. 1997. Structure of World Retailing: Retailing in Indonesia. *Euromonitor* (August).

Ridgon, E. E. 1994. Amos and amos draw. *Structural Equation Modeling* 1: 196-201.

Saunders, M. J. 1994. *Strategic Purchasing and Supply Chain Management*, London, England: Pitman Publishing.

Selnes, F. 1996. Antecedents and consequences of trust and satisfaction in buyer-seller relationships. *European Journal of Marketing* 32 (3/4): 305-322.

Slater, S. F. 1995. Issues in conducting marketing strategy. *Journal of Strategic Marketing* 3: 257-270.

Spekman, R. E., J. W. Kamauff Jr., and N. Myhr. 1998. An empirical investigation into supply chain management: A perspective on partnership. *Supply Chain Management* 3 (2): 53-67.

Spreng, R. A., and R. D. Mackoy. 1996. An empirical examination of a model service quality and satisfaction. *Journal of Retailing* 72 (2): 201-14.

Stern, L. W., and A. I.. El-Ansary. 1992. *Marketing Channels* (4^{th} ed.). Englewood Cliffs, NJ: Prentice-Hall.

Stuart, F.I., and P. Mueler Jr. 1994. Total quality management and supplier partnerships: A case study. *International Journal of Purchasing and Materials Management*, 30 (Winter), 14-21.

Tan, J.J., and R. J. Litschert. 1994. Rnvironment-strategy relationship and its performance implications: An Empirical study of the chinese electronics industry. *Strategic Management Journal* 15, 1-20.

Teece, J.B. 1992. The lessons GM could learn for its suppliers shake-up. *Business Week* August 31: 29.

Tosi, H. J., and J. W. Slocum. 1984. Contingency theory: Some suggested directions. *Journal of Management* 10: 9-26.

Venkatraman, N., and J. E. Prescott. 1990. Environment-strategy coalignment: An empirical test of its performance implications. *Strategic Management Journal* 11: 1-23.

Walters, D., and D. Knee. 1989. Competitive strategies in retailing. *Long Range Planning* 22 (6): 74-84.

Williamson, O.E. 1983. Credible commitments: Using hostages to support exchange. *American Economic Review* 73 (September): 519-40.

________________. 1984. Credible commitments: Further remarks. *American Economic Review* 74 (June): 488-90.

________________. 1985. *The Economic Institutions of Capitalism*. New York: The Free Press.

Weitz, B. A., and S. D. Jap. 1995. Relationship marketing and distribution channels. *Journal of the Academy of Marketing Science* 23: 305-20.

Exhibit 1. **A Pool of Scale Items for Measuring the Supplier Partnership, Environment Variables and Retail Performance.**

Construct	Item Measurement
Joint Decision Making	We make joint decisions with key suppliers about: ● Delivery scheduling (JD1) ● Order entry procedures (JD2) ● Sales promotion (JD3) ● New product launch (JD4) ● Price (JD5) ● Stock (JD6)
Information Sharing	We disclose full information to key suppliers about: ● Sales data for each category product (IS1) ● Lay-out plan (IS2) ● Budget (quarterly: sales, promotion etc (IS3) ● New service development (IS4)
Relation-specific efforts	● We devote considerable time to improve this relationship with key suppliers (RSE1) ● We devote considerable time trying to improve key suppliers' product performance (RSE2) ● We have made a substantial number of adaptations in order to deal more efficiently with key suppliers: ● Inventory management (RSE3) ● Order system (RSE4) ● Delivery system (RSE5)
Non-Financial Performance	● Overall Performance (IDP1) ● Market Share (IDP3) ● Space Productivity (IDP5) ● Stock-age (IDP6) ● Stock-age (DP4)
Financial Performance	● Sales Growth (IDP2) ● Gross Margin (IDP4) ● Sales Volume (DP1) ● Sales Growth (DP2)
Competitive Intensity	● Competition in our business is very intense (CI1) ● There are many "promotion wars" in our business (CI2) ● Anything that one competitor can offer, others can match readily (CI3) ● Price competition is a hallmark or our business (CI4)
Demand Volatility	● Sales forecasts are inaccurate (DV1) ● Sales trends are difficult to monitor (DV2) ● Market shares are volatile (DV3) ● Market demands are unpredictable (DV4)
Market Turbulence	● Our customers tend to look for new products/services all the time (MT3)