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The Effects of Alternative Channel Integration Structures on the Channel Performance: An Implication for Export Channel Strategy*

유통경로 지배구조 유형과 유통성과 간의 관계에 관한 실증적 연구: 수출유통구조 전략에 관한 시사점

Kyu Dong Kim
Sookmyung Women's University

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ABSTRACT

In order to maintain high level of control over and close coordination of foreign marketing activities, export manufacturers often consider vertical integration strategy into global distribution. However, full integration is not always a feasible option. The purpose of this study is to investigate the alternative ways to achieve optimal level of control over export channel system for desirable channel performance. This study investigates different options for integration of the vertical channel structure, and examines their effect on the performance. The findings of this study suggest different combination of ownership and coordination level has varying impact upon channel performance: efficiency, effectiveness, and adaptiveness. This implies exporters may achieve desirable performance control over export channel without fully integrating the channel via ownership.

Key Words : Export channel management, Channel integration, Channel Performance, Channel Control

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Ⅰ. Background

To many export manufacturers, export channel structure arrangement as a foreign entry strategy is one of the main strategic concern. They often employ vertical integration strategy into global distribution in an attempt to achieve a high degree of control over their foreign-based sales and marketing operations (Root 1994). However, full integration is not always a feasible option for exporting firms that lack foreign market knowledge or the necessary strategic capabilities (Anderson and Coughlan 1987). The problem with exporting through foreign-based distributors, international intermediaries, is that the export manufacturers may suffer from low degree of control and coordination in foreign marketing operation. Such channel structure arrangement shifts marketing responsibility to their foreign intermediaries as they spin off important marketing functions. Because key functions are delegated, manufacturers may find it difficult to coordinate foreign marketing and are vulnerable to low export performance.

Management theorists and practitioners agree that the ways in which organizations are designed and the environments in which they operate affect organizational performance (Gerrit et al., 2010; Ganesan et al., 2009; Neslin et al., 2006; Neslin and Shankar, 2009; Robicheaux and EI-Ansary, 1975-1976; Stern and Reve, l980). The most important concern for channel managers is the performance of the channel system. Channel managers seek channel strategy that will ensure effective channel performance. Bowersox et al. (1980) refers to channel performance assessment as one of the important ingredients in developing channel strategies. This applies to export channel management in the same way.

Channel theories (Gerrit et al., 2010; Ganesan et al., 2009; Neslin et al., 2006; Neslin and Shankar, 2009; Robicheaux and EI-Ansary, l975-l976; Stern and Reve, l980) suggest that channel performance is closely related to channel structure. The channel structure is particularly important as related to the channel performance because it is a controllable variable available to managers.

Research on the export channel shows that relationships with foreign distributors are hard to coordinate and high performance is difficult to achieve (Rosson and Ford 1982). However, there are alternative ways to vertical integration arrangement of the channel structure which can provide export manufacturers better coordination and control over their foreign channel intermediaries.[1)]

1) Habib, Ghazi M. and John J. Burnett, "An Assessment of Channel Behavior in an Alternative Structural Arrangement: The

Non-ownership involving forms of governance structure can be employed by exporters to effectively organize and regulate exchange behavior of their foreign marketing partners. Thus, it is imperative that gaining control over foreign partners without physically integrating the operation is important strategical issue.

The purpose of this study is to suggest alternatives to vertical integration strategy in manufacturer-channel intermediary governance structures for better business performance. This study does so by investigating the effects of vertical integration options which affect manufactures' control and coordination over their channel intermediary partners, which in turn will influence the marketing performance. In order to achieve this research goal, this study will treat channel structure as an independent variable affecting channel performance. The governance of the channel structure will be viewed from two dimensions, physical ownership arrangements and trading process arrangements, such as degree of communication and coordination. Another notable attempt of this study is that channel performance is analyzed from the perspectives of the channel intermediaries looking up the channel system, instead of the traditional perspective of a manufacturer looking down the channel system. Lastly, channel performance is viewed as multidimensional measure, while past studies mainly focused on channel efficiency as the performance measure. The performance measured in this study include effectiveness, efficiency, and adaptiveness.

Ⅱ. LITERATURE REVIEW

1. Channel Structure-Performance Research

Dalton (1980) reviewed the organizational structure literature and concluded that the association between structural variables and performance, the single most important dependent variable in both the public and private sector, has been largely ignored. It is widely accepted that the discipline of management has had a long-standing interest in the design and management of organization structures.[2)]

International Joint Venture." International Marketing Review, Vol. 6, No. 3, 1988, p. 7.

The same problem can be found in marketing channel research. While many channels researchers indicate that channel structure is closely related to channel performance (Neslin et al., 2006; Robicheaux and EI-Ansary, l975-l976; Stern and Reve l980), studies that examine the direct effect of channel structure on channel performance are rare.

Robicheaux and EI-Ansary (l975-l976) proposed the channel member behavior model, and stated that the channel structure-performance relationship is the focal point of their theoretical model. Even though their model is regarded as the most comprehensive channels model, the model is incomplete because the channel structure variable was not included.

Frazier, Kittisawhney, and Shervani (l989) also recognized an urgent need for the channel structure and performance study. They attempted to develop a conceptual framework which focuses on three dimensions of channel structure, namely, the intensity of distribution, the functions or job tasks that need to be performed in the channel, and the level of forward integration in the channel. Their framework points out that structure is an important variable that directly affects channel performance, yet that relationship was not seriously examined.

Although channel structure has been subject to a number of channel studies (Anderson l986; Dwyer and Oh l987; Gerrit et al., 2010; Kotler and Keller, 2006; Lilien l979), the association between structural variables and performance has not been explored. Most channel structure studies merely describe a wide range of alternative structures without much analysis of their relationships to channel system performance.

Most studies of channel structure have dealt only with the situational influence on the design of the channel structure, and not with the effect of the channel structure on the channel performance. Dwyer and Welsh (l985) hypothesized and tested the association between channel structure and channel environments, but they did not go on to explore the effect of channel structure on performance.

Although some studies have directly attempted to study the structure-performance relationship (Dwyer and Oh, l988; Kabadayi et al., 2007; Ruekert, Walker, and Roering l985; Sharma and Mehrotra, 2007; Vorhies and Morgan, 2003), they, too, have their limitations.

First, they tend to evaluate the channel structure-performance relationship only from the perspective of manufacturers looking down the channel toward their customers, neglecting the

2) Neslin, Scott A., D. Grewal, R. Leghorn, V. Shankar, M. L. Teerling, J. S. Thomas, and P. C. Verhoef. "Challenges and Opportunities in Multichannel Customer Management," Journal of Service Research, Vol.9, No.2, 2006, p. 96,

importance of the channel intermediaries' perspectives. According to marketing philosophy, no marketing study is complete without an understanding of customers. Since channel intermediaries may be viewed as customers of manufacturers, taking only the perspective of a manufacturer looking down the channel would lead to marketing myopia. It means that channel managers become interested only in achieving their own goals without considering what customers want and need.

A number of authors agree on the importance of the channel intermediary's perspective on the channel study.

Frazier, Kittisawhney, and Shervani (1989) noted that it is important to analyze channel structure from the perspective of distributors and retailers looking up the channel system when examining the channel system performance.

Goldman (1992) also argued that performance evaluation should consider the ability of the system to satisfy the goals and aspirations of the various constituencies involved in its operations. Since channel intermediary is certainly an important part of channel system, and its goals and perception toward channel structure should be considered when studying channel structure-performance relationship.

Social exchange theory suggests that the manufacturer or buyer forms the expected level of outcome which becomes a standard to measure the desirability of the actual outcomes realized through the existing exchange relationship (Anderson and Narus 1984). Thus, both manufacturer's and channel intermediary's perspectives of channel outcome(performance) should be the bases for performance evaluation.[3)]

An excellent conceptual article by Reukert, Walker, and Roering (1985), considered the first in marketing literature that focused on the structure-performance relationship, suggested that structure affects effectiveness, efficiency, and adaptiveness of an organization. The authors developed a contingency framework hypothesizing the environment-structure-performance relationships. They related organizational structure with its subsequent performance by combining organizational theory and transaction theory. They then put forth four archetypical marketing structure-performance relationships. Their study has tremendous value in suggesting that the structure of the organization impacts such performance dimensions as efficiency, effectiveness, and adaptiveness.

3) Robicheaux, Robert A. and Adel I. El-Ansary. "A General Model for Understanding Channel Member Behavior," Journal of Retailing, Vol.52, No.4, Winter, 1975-1976, p. 15.

Another structure-performance study in marketing literature is one by Droge and Germani (1989), which examined the structure of logistics and its performance. Her study focused on internal organizational configuration rather than on the structural dimensions of inter-organizational relationships. Thus, while its measurements of the structural dimension (a degree of centralization) and performance are better defined than those of Ruekert, Walker, and Roering (1985), and empirical support was provided, the scope of the study was limited. It only looked at the relationship between logistics performance and the degree of centralization as a channel structural dimension.

The focus of this study is vertical integration-performance relationship. Prompted by transaction cost analysis, vertical integration has been the focus of many channel studies (Buchanan 1992; D'Aveni and Ravenscraft 1994; Day and Klein 1987; Dweyer and Oh 1988; Dwyer and Welsh 1985; Gerrit et al., 2010; Stern and El-Ansary, 1989; Ruekert, Walker, and Roering 1985; Wallace et al., 2004).

According to transaction cost theory, vertical integration improves the efficiency of the channel system when market failure occurs. Despite the vast importance of transaction cost theory in the marketing literature, it is surprising to see that there have been very few empirical studies to support that proposition. Besides, most studies only looked at antecedents of the vertical integration, treating vertical integration as the dependent variable. In other words, most studies have focused on the factors influencing the integration decision, neglecting how it actually affects the performance of the channel system.

According to Day and Klein (1987), vertical cooperative linkages emerge because of market failure or strategic choice. According to them, past studies have merely suggested the circumstances in which vertical integration emerges, and have not empirically tested the performance effect of vertical integration. Their review of related research indicates that research which analyzes the direct effect of vertical integration on organizational performance is lacking.

For example, notable work on vertical integration done by Harrigan (1983) specifies the situations and factors that might affect the vertical integration decision without explicitly identifying the effect of the vertical integration on the performance.

Existing studies on vertical integration appear to be normative in that they provide how the channel should be organized in the different situations. Most of the marketing literature on this

issue has tried to provide insights into how these decisions are and should be made from a system-structural perspective, or environmental contingency perspective. The bulk of research suggests that the decision whether or not to integrate the channel system is and should be made on the basis of a set of contingent factors (Vinhas and Anderson, 2005).

Although this approach may be useful in a normative sense, it may fail to provide adequate descriptions and explanations for how channel structure design decisions are actually made and affect performance. Such an approach indicates that the manager's role in making such a decision is a reactive one, responding to the environmental constraints and aligning the channel structure to the given situation. However, more effective management should be proactive in designing channel structure to achieve the desired channel performance. The fact that channel structure design can be proactive and can affect those environments has been largely ignored.

The alternative approach in management, strategic choice perspective, views the structure issue and manager's role differently. This approach views managers in a proactive role. It argues that designing an organization involves more than accommodating situational constraints, and managers can choose the environments in which to operate by choosing product/markets and competitive strategies to pursue and those to avoid. Thus, this approach advocates that organizational change is not always externally induced, but can be initiated by managers to achieve their goals. In this regard, the understanding of channel structure-performance relationship is important in developing an appropriate channel structure.

Another problem in the vertical integration literature is that it has focused on only one dimension of performance: efficiency. The premise of the transaction cost theory is that a firm will internalize activities that it is able to perform at lower cost. In other words, main focus of integration decision is cost efficiency. The work by Anderson and Weitz (l986), probably the most popularly cited vertical integration study, focused on a key set variables associated with the efficiency with which the marketing activity is performed. Their performance measure was conveniently simplified into long-term efficiency: the ratio between effectiveness achieved through increased revenue by increased marketing activities and administrative overhead costs of managing and monitoring the activities. This is problematic since organizational performance should be understood and measured as a multidimensional construct, including efficiency, effectiveness, and adaptiveness.

2. Channel Structure Design

Channel structure is defined as "the group of channel members to which a set of distribution tasks has been allocated"(Rosenbloom, l99l), or the specific type, number, and organization of institutions that make up the channel (Gerrit et al., 2010; Kotler and Keller, 2006). These definitions suggest that the channel managers are faced with an allocation decision. That is, given a set of distribution tasks that must be performed to accomplish a firm's distribution objectives, the managers must decide how to structure the distribution tasks.

The allocation decision faced by channel managers in designing the channel structure includes: l) number of levels in the channel (length), (2) intensity at the various levels, and (3) types of intermediaries at each level. Robicheaux and EI-Ansary (l975-76), in their channel behavior model, noted that the market configurational structure is one of the important variables that affects the channel performance. He referred to two structural variables as major determinants of each channel member's behavioral characteristics: number of channel levels (length); number of channel members at each level (intensity).

The primary goal of the market configuration structure is optimum market coverage.[4] Thus, when channel managers make decisions regarding channel structure options, the relevant performance goal is to achieve the maximum market coverage. Besides the market configuration structure, channel managers are also faced with the decision regarding ownership structure, internal or external structure.

1) Market configuration structure

Intensity of distribution concerns how many sales outlets needed to be established in each geographical region served by the firm. Three basic strategic choices are normally seen as being available: intensive, exclusive, and selective.

Intensive structure is aimed at achieving the highest level of sales volume in the short run(Coelho, Easingwood, and Coelho, 2003; Stern and EI-Ansary, l992). Exclusive channel structure guarantees the greatest levels of commitment and stronger partnerships between supplier and middlemen(Bagozzi, l986; Kotler, l984). However, the risk level is higher than other forms

4) Mallen, Bruce. Principles of Marketing Channel Management Lexington, Ma.: Lexington Books, 1977, pp..29-32.

since the interdependence is high. Selective channel structure is a structural option that offers a mixture of strengths and weaknesses of the other two options(Aspinwall, l958). However, conflict is the highest with this type of channel structure because of uncertainty and the greatest sense of territoriality among resellers(Magrath and Hardy, l988). When related to channel performance, it can be expected that intensive channels perform better in terms of market coverage and ensured availability when the market has great potential, is geographically concentrated, and competition is stiff.

Sharma et al.(l992) noted that channel length is strategically significant to individual firms and hierarchies attempting to enhance profits and lower costs. According to the 'functional spin-off' theory (Mallen, l973), a supplier will spin off a marketing function to a marketing intermediary if it can perform the function more efficiently than the supplier. The most important performance consideration with this structural strategy is efficiency. This may happen if economies can be achieved by moving the products from supplier to middlemen. For example, if selling a particular product or service involves a specialized service, spinning off the function to the specialists may result in higher efficiency. As a result, the channel lengthens. The length or directness of marketing channel structure is affected by market factors, product factors, organization factors, and channel member factors, as well as environmental factors. Generally, a shorter channel performs more effectively under a fast changing environment.[5] This is so because when the channel is shorter, the less sub-optimization occurs, and the channel is more adaptive to a fast changing environment(Gerrit et al,, 2010).[6]

2) Ownership Structure

Internal versus external structure is one of the most basic decision areas in structuring distribution channel systems. Firms face several choices when structuring selling activities. At the most basic level, the choice is between using external, autonomous contractors (i.e., independent sales representatives) and internal sales force or organizations.

The decision whether or not to use internal channel structure is determined mainly by economic

5) Hutt, Michael D. and Thomas W. Speh. *Business Marketing Management: 3rd edition*, Hinsdale, Ill.: The Dryden Press, 1985, p.396

6) More specific predictor variables are found in: Jackson, Donald M., Robert F. Krampf, and Leonald J. Konopa. l982. "Factors that Influence the Length," Industrial Marketing Management, Vol. ll, October, p. 264.

considerations. The firm size has a direct relationship with the distribution system and to achieve economies of scale.[7] Lilien(l979) and Nunes and Cespedes(2003) suggested that such factors as size of a firm, average order size, production complexity, dictate the internal or external structure of the channel system. Transaction cost theory contends that the factors affecting the decision include transaction characteristics such as transaction specificity of assets, difficulty in assessing performance, and environmental unpredictability (Anderson and Narus, l984; Coughlan et al., 2006; Williamson, l985).

3. Channel Performance

Channel performance is certainly the variable of utmost concern to managers(Frazier et al., l989; Kabadayi et al., 2007; Sharma and Mehrotra, 2007; Vorhies and Morgan, 2003). Robicheaux and EI-Ansary(l975) called channel performance the focal point of a channel system. As such, channel performance is a legitimate concern for practitioners and researchers. Particularly, in structuring and managing marketing channels, assessment of channel performance is a necessary task to ensure that the channel operates effectively and efficiently.

Three categories of performance measures were suggested by Van de Ven(l976) for a comparative study of organizational performance over time: efficiency, employee morale, and effectiveness. Efficiency is defined as the ratio of output to input or effort; employee morale is defined as the degree of maintenance of the social system in organization; and effectiveness is defined as the extent to which organizational goals are attained.

Channel performance criteria according to Stern, EI-Ansary, and Brown(l989) include effectiveness efficiency, and equity. They defined effectiveness as a goal-oriented measure of how well the commercial channel sector or any of its members meet the demand for service outputs placed on it by the consumption sector. Equity was defined as a condition where every member of a country has the same opportunity to use and ability to access the marketing channels existing in that country. Efficiency was defined as how cost effectively a society's resources are being used to accomplish specific outcomes. Ruekert, Walker, and Roering(l985) studied the relationship between organizational structure and performance, and their performance dimensions

7) Cravens, David W. *Strategic Marketing*, Homewood, Ill: Richard D. Irwin Inc., 1982, p. 27l.

included effectiveness, efficiency, and adaptiveness.

Organizational theory defines production, efficiency, and satisfaction as short term performance goals, adaptiveness as intermediate term goals, and effectiveness as all-encompassing concept which includes a number of component concepts. Gibson et al. (l982) defined effectiveness as organization's ability to sustain itself in the environment.

The major reason for a channel change is a discovery of more effective or efficient ways to accomplish the same work(Ganesan et al., 2009; Neslin et al., 2006; Neslin and Shankar, 2009; Rangaswamy and Van Bruggen, 2005). In cases where intermediaries can perform the selling function at a lower cost, the manufacturer will "spin-off" the function to that group.[8)]

In a variable environment, adaptiveness of an organization is probably the most important aspect of organization's performance. Specialization of organizational structure is thought to be closely associated with adaptiveness, where specialists can quickly respond to the changing needs of customers. Steers(l975) reviewed l7 works on the organizational performance measurement, and found adaptability, profitability, efficiency, satisfaction, productivity as the most utilized performance measures. Robicheaux and Coleman(l994), in their channel relationship study, also listed efficiency, effectiveness, and adaptiveness as the key performance consequences of the channel structure. They noted that efficiency represents marketing expense ratio, inventory turnover, and profit margin; and effectiveness measures sales growth, market share, product/service quality, and customer satisfaction.

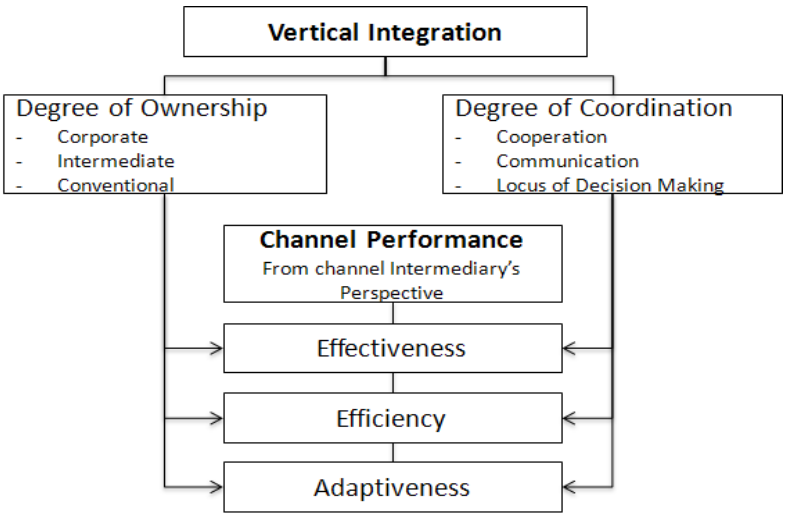
Based on the literature review in organizational theory and channel literature, it is concluded that the most commonly used and widely accepted performance measures for an organization are effectiveness, efficiency, and adaptiveness. Consequently, these three performance dimensions will be included in this study.

8) Stern, Louis W., Adel I. EI-Ansary, and James R. Brown, Management in marketing Channels, Engelwood Cliffs, NJ: Prentice-Hall, Inc., 1989, p. 385

Ⅲ. Research Model and Hypotheses

1. Research Model

The theoretical and empirical development in vertical integration provided the framework for developing a descriptive model of vertical integration and channel performance studied in this research <figure l>. The model depicts that vertical integration can be achieved through ownership and close coordination between suppliers and channel intermediaries. Vertical integration is measured by (l) vertical integration by ownership types and (2) vertical integration by its process(coordination).



<Figure 1> Model of Vertical Integration and Channel Performance

In the research model, two dimensions of vertical integration(ownership and coordination) are treated as independent variables, and three dimensions of the performance(effectiveness, efficiency, and adaptiveness) are treated as dependent variables.

The research model of this study proposes that a degree of ownership and a degree of coordination jointly influence channel performance. Therefore, this study will examine effects of both ownership and coordination on channel performance, and the analysis will include two steps.

First, the effects of ownership and coordination on channel performance will be investigated separately by uni-variate analysis to establish the justification for two factor model. Second, tow factor ANOVA model will be developed to investigate the performance effect of ownership and coordination together.

2. Research Hypotheses

1) Ownership on Channel Performance

It has been suggested that higher ownership provides a manufacturer higher direct control over distribution channels. And all the marketing activities are formalized and standardized through detailed plans and programs (Stern and El-Ansary 1992, p. 322). As the literature suggests, manufacturers may benefit from having direct control over channel intermediaries.

However, channel intermediaries may perceive the performance effect of the same relationship differently. High ownership, direct control by manufacturer, may have negative effect on channel intermediary's performance such as adaptiveness. For example, channel intermediary may not be able to respond to any changes in the market place if it does not have any autonomy in decision making, and if it must follow rigid business guidelines set by the owner. In other words, bureaucratic characteristic of high ownership structure limits the ability of channel intermediaries to quickly adjust their business practices when the need arises. Dwyer and Oh (1988) maintained that channel structures need to be relatively decentralized, in-formalized, and highly specialized to cope with environmental diversity. Such a structure affords flexibility necessary to cope with a complex environment. While cost advantages favor vertical marketing systems, independent operators have a distinct advantage when it comes to adapting to changing market opportunities (Brown, Lusch, Koenig, 1984). This rationale leads to the following hypothesis regarding the relationship between ownership and channel performance.

Hypothesis 1a: High ownership is associated with low adaptiveness for channel intermediaries.

According to transaction cost paradigm, high ownership or high control leads to high efficiency for manufacturers. This is expected because high control gained through ownership decreases the

transaction cost and opportunistic behavior of channel intermediaries. As transaction cost theory suggests, opportunistic behavior of channel members can be avoided if channel intermediary is a part of a supplier.

High efficiency of high ownership structure can be also attributed to its formalized and standardized business procedure. This is expected because formalization and standardization can eliminate unnecessary administrative or marketing works for a company (Dwyer and Welsh 1985; Ruekert, Walker, and Roering 1985). Even though highly integrated structure may be an efficient form for suppliers, it may not be the desirable form for channel intermediaries. If they have to follow rigid guidelines and central decision making, they would feel it is a major hindrance for efficient operation. On the basis of this rationale, the following hypothesis is formed.

Hypothesis 1b: High ownership is associated with low efficiency for channel intermediaries.

High ownership structure has positive effect on the channel intermediary's effectiveness. It is much easier to differentiate marketing practices and services when channel intermediaries can be controlled by manufacturer than when channel intermediary is independent. In other words, high control gained by ownership makes marketing strategy or plan be implemented more effectively.

According to the system-structural view, centralization leads to effectiveness due to the ability of a decision maker to plan, coordinate, and ability of a decision maker to plan, coordinate, and control activities more effectively (Ruekert, Walker, and Roering 1985). These rationales lead to the following hypothesis.

Hypothesis 1c: High ownership is associated with high effectiveness for channel intermediaries.

2) Coordination on Channel Performance

According to Roth and Nigh (1992), integration within an organization depends on two processes: coordination and control. Lawrence and Lorsch (1967) examined the relationship of the effectiveness of the headquarters-subsidiary relationship of a multinational corporation. They used control and coordination as the two key ingredients of the integration. The effectiveness of the relationship was investigated as perceived by the subsidiary manager. Their empirical testing suggested that coordination is a contributing factor to effectiveness of the headquarters-subsidiaries

dyad. Roth and Nigh (1992) contended that coordination results in effective performance as perceived by a subsidiary because of its indirectness and thus less conflict in dyad. Research suggests that collaborative dyad is associated with increased trust, communication, and participative decision making (Anderson and Narus, 1990).

The coordination construct in this study is measured by combining three latent constructs: cooperation, communication, and participation in decision making (or the locus of decision making). A highly bureaucratic system will have a low degree of information inflow from the channel intermediaries, low communication, and low participation. On the other hand, a well-programmed and coordinated system will have high coordination through communication, information sharing, and participatory decision making. Cooperation is defined as coordinated actions taken by firms in interdependent relationships to achieve mutual outcomes (Anderson and Narus 1990). Brown (1978) said, "to the extent that suppliers and distributors can avoid conflictual behavior and exhibit cooperative behavior, performance should be enhanced." Mohr and Nevin (1990) described communication as the glue which holds together a channel of distribution. They also contended that when communication strategy is well implemented, channel outcomes will be enhanced through better coordination, satisfaction, and commitment.

Schul and Babakus (1988) tested, within the franchise channel environment, the impact of alternative power sources on the nature of channel governance as reflected in the perceived characteristics of the decision-structure construct, and the impact of the channel decision structure on intra-channel conflict. They suggested that more participation will decrease the intra-channel conflict, and that higher participation will enhance channel performance.

These literature findings suggest that coordination enhances channel performance across all performance dimensions. Based on this rationale, the following hypotheses are formed.

Hypothesis 2a: High coordination is associated with high adaptiveness for channel intermediaries.

Hypothesis 2b: High coordination is associated with high efficiency for channel intermediaries.

Hypothesis 2c: High coordination is associated with high effectiveness for channel intermediaries

3) Ownership and Coordination on Channel Performance

Based on the discussions regarding the performance effects of ownership and coordination, it can be expected that ownership has varying effects on channel performance, and coordination enhances channel performance if well implemented.[9] This is a challenge to the traditional view of vertical integration, which suggests that ownership gives a firm a direct control over the channel member and, as a consequence, results in better performance. Since vertical integration should be viewed from two aspects (ownership control and coordination), channel performance effect of vertical integration should be explained by both elements of vertical integration. The need for studying vertical marketing system in terms of both ownership and coordination is implied by Boyle et al. (1992).[10]

Harrigan (l983) also said that channel managers can administer their channels and achieve performance levels equal or better than those in fully integrated channels via ownership. Therefore, it is proposed that ownership control by itself does not guarantee better channel performance, and that coordination can enhance and improve channel performance. This suggests the interaction effects of ownership and coordination on channel performance. This rationale leads to the following hypotheses of interaction effect of ownership and coordination on channel performance.

Hypothesis 3a: Ownership and coordination together have effect on channel intermediaries' effectiveness.

Hypothesis 3b: Ownership and coordination together have effect on channel intermediaries' efficiency.

Hypothesis 3c: Ownership and coordination together have effect on channel intermediaries' adaptiveness.

9) Buzzel, Robert D. "Is Vertical Integration Profitable?" Harvard Business Review, Vol.83, No.1, l983, pp. 96-l00.

10) Boyle, Brett, Robert F. Dwyer, Robert A. Robicheaux, and James T. Simpson. "Influence Strategies in Marketing Channels: Measures and Use in Different Relationship Structures," *Journal of Marketing Research*, Vol.29, November, 1992, p.464.

Ⅳ. Analysis

1. Data Collection and Variables

A national sample survey of automobile replacement tire dealers of multinational tire suppliers was conducted. A sample of 2,000 dealerships on an Nth name basis from yellow page listing provided by 'American List Council'is drawn. Prestudy interviews indicate that the owner/manager is a fitting informant, a business decision maker responsible for interacting with the supplier's representative. A survey questionnaire is administered through mail. 85% of the final total responses were returned within a 2 week period. The total of l,870 survey questionnaires were sent to the sample, and l96 were returned with 6 unusable. The resulting response rate was l0.5%.

The detailed descriptions of the measures are presented in appendix 3. In this section, brief description on the measures are presented.

Independent Variables

In this study, ownership was classified into high or low ownership based on both ownership characteristics and level of alignment of tire dealers with their primary suppliers. For example, low ownership represents dealers who characterized themselves as independent from their primary suppliers, or not-aligned with the suppliers. On the other hand, high ownership represents dealers who are either wholly or partially owned by their primary suppliers, or in some way aligned with the suppliers.

The coordination construct in this study is measured by combining three latent constructs: cooperation, communication, and participation. The measures of coordination were adopted from the study of Anderson and Narus(l984), Brown(l981), Dwyer and Oh(l988), Noordewier, and Phillips(l982).

Dependent Variables

Effectiveness is defined as the extent to which channel system goals are reached. Since this study's objective is to measure the performance perception of the channel intermediaries, it is

measured by asking the channel intermediaries about their performance level in relationship with their primary supplier's products. The measurements were adopted from the study of Kumar et al.(1992).

The operational definition of efficiency used for the study is 'the ratio between revenue generated by a channel intermediary and the channel intermediary's selling effort required.' Since it is difficult to measure actual efficiency ratio, the perception of channel intermediaries on efficiency is measured instead. The efficiency measures were adopted from the study of Kumar et al.(1992).

Adaptiveness is defined for the purpose of this study as the channel intermediaries' flexibility to change marketing or selling procedure to cope with any changes in the market. The adaptiveness measures were adopted from the studies of Kumar et al.(1992) and Heide and John(1988).

2. Reliability and validity of Instrument

Coefficient alpha scores[11] were calculated for all multi-item variables, and are reported in the <table 1>. The Cronbach's alpha scores for all the variables are above 0.7. According to Nunnally's(1967) guideline, alphas between 0.50 and 0.60 are acceptable. Since reliability coefficients of variables included in the research instrument for this study are all higher than Nunally's standard, the research instrument is considered a highly consistent and reliable one.

<Table 1> Reliability Coefficients of the study's Variables

Constructs	Number of Items	Cronbach's Alpha
coordination	10	0.89
effectiveness	4	0.85
efficiency	3	0.71
adaptiveness	4	0.74

11) Peter, J. Paul. "Reliability: A Review of Psychometric Basics and Recent Marketing Practices," Journal of Marketing Research, Vol.16, February, 1979, p. 8, "Coefficient alpha is "the most accepted formula for assessing reliability of a measurement scale with multi-point items"

Construct validity for the research instrument was assessed by factor analysis. The correlation matrix of question items and the final factor loading matrix are presented in appendices 1 and 2. The factor loading result shows that all the items loaded on the expected factors. The first factor is named coordination, the second factor the adaptiveness, the third factor the effectiveness, and the fourth factor the efficiency. Four factor solution shows that the model explains approximately 60% of the total variation in the data, which is considered acceptable.

3. Measures

Observed variables are measured in 7 point Likert scale. The descriptive statistics of each question items are shown in the <table 2>, <table 3>, and <table 4>. Coordination measure consists of 10 items, and effectiveness, efficiency, and adaptiveness measures consist of 4, 3, 4 items respectively. The value of each variable was calculated by taking composite score and averaging them. They are shown in <table 4>.

<Table 2> Descriptive Statistics of Response Items

Variable	Mean	Std Dev	Minimum	Maximum	Valid N
COMM1	4.8	1.76	1	7	190
COMM2	4.9	1.64	1	7	190
COMM3	4.26	1.86	1	7	190
PART1	3.56	2.01	1	7	190
PART2	2.94	2.07	1	7	190
PART3	4.41	1.81	1	7	190
COOP1	4.87	1.62	1	7	190
COOP2	-4.48	1.75	1	7	190
COOP3	5.24	1.47	1	7	190
COOP4	5.02	1.60	1	7	190
EFFECT1	4.75	1.30	1	7	190
EFFECT2	4.63	1.33	1	7	190
EFFECT3	4.63	1.41	1	7	190
EFFECT4	4.54	1.41	1	7	190
EFFI1	5.09	1.40	1	9	190

Variable	Mean	Std Dev	Minimum	Maximum	Valid N
EFFI2	4.63	1.55	1	7	190
EFFI3	5.57	1.60	1	7	190
ADAPT1	4.78	1.55	1	7	190
ADAPT2	4.54	1.43	1	7	190
ADAPT3	5.01	1.40	1	7	190
ADAPT4	4.73	1.37	1	7	190

<Table 3> Descriptive Statistics of Measures

	No. of Items	Mean	Standard dev	Skewness
Coordination				
Communication	3	4.6526	1.4311	-0.3552
Participation	3	3.6386	1.5815	0.1822
Cooperation	4	4.9026	1.3135	-0.3669
Composite	10	4.4484	1.2378	-0.1139
Performance				
Effectiveness	4	4.6368	1.1291	-0.2316
Efficiency	3	5.0982	1.2078	-0.2888
Adaptiveness	4	4.7671	1.0801	-0.1231

<Table 4> Descriptive Statistics of All Composite Scores

Variable	Mean	Std Dev	Minimum	Maximum	Valid N
Coordination HL*	4.45	1.24	1.4	7	190
Effectiveness	4.64	1.13	1.8	7	190
Adaptiveness	4.77	1.08	1.8	7	190
Efficiency	5.10	1.21	1.0	7	190

* Coordination high = 1, low = 0

5. Results

1) Uni-variate Analysis

Ownership and performance

The research hypotheses of ownership-performance relationships are presented in the <table 5>.

〈Table 5〉 Ownership-performance hypotheses H1a, H1b, H1c.

	Hypotheses
H1a	High ownership leads to low adaptiveness for channel intermediaries
H1b	High ownership leads to low efficiency for channel intermediaries.
H1c	High ownership leads to high effectiveness for channel intermediaries.

A one-tailed t-test was conducted for testing for differences in each performance dimension between high ownership and low ownership groups. The test result is shown in <table 6>. Mean scores of each performance dimension were calculated with average scores of the composite scores of responses on 4 items for effectiveness, 3 items for efficiency, and 4 items for adaptiveness.

〈Table 6〉 t-Test Results for Hypotheses: Ownership & Performance

	Mean for High Ownership (N=124)	Mean for Low Ownership (N=66)	P-Value
Adaptiveness	4.72	4.86	0.205
Efficiency	4.92	5.42	0.003
Effectiveness	4.53	4.83	0.043

As shown in the test results, hypothesis H1b on efficiency was supported at a significant level. A one-tailed t-test indicates that the mean efficiency score of the low ownership group is significantly higher than that of the higher ownership group (p=0.003). This result is consistent with how it was hypothesized in H1b. Therefore, it can be concluded that high ownership channel structure indeed leads to lower efficiency for channel intermediaries.

However, the other two hypotheses were not supported. The result in <table 6> shows that the mean adaptiveness scores of the high ownership group and the low ownership group are not significantly different. Therefore, hypothesis H1a, regarding the adaptiveness, is not supported. This suggests that channel intermediaries do not perceive any difference in their ability to adapt to a changing environment regardless of the ownership relation with their suppliers. In other words, ownership alone does not significantly affect the adaptiveness of channel intermediaries.

The t-test result regarding effectiveness shows an interesting result. Contrary to what is widely believed and hypothesized in this study, the mean effectiveness score of low ownership channel structure is significantly higher than that of high ownership channel structure. This indicates that vertical integration via ownership does not increase the effectiveness of channel intermediaries. This may be attributable to the fact that channel intermediaries always favor autonomy to bureaucratic relationship with suppliers.

Coordination and Performance

The following hypotheses are tested in this section.

〈Table 7〉 Coordination-performance hypotheses H2a, H2b, H2c

	Hypotheses
H2a	High coordination leads to high adaptiveness for channel intermediaries.
H2b	High coordination leads to high efficiency for channel intermediaries.
H2c	High coordination leads to high adaptiveness for channel intermediaries.

Since coordination was measured on a 1 to 7 Likert scale, the original data had to be recoded to 1 or 0 to classify them into the high or low coordination group. The mean of the composite score was used as a cutoff point for the high and the low coordination groups, resulting in 100 and 90 observations respectively.

According to the test statistics in <table 8>, hypotheses H2a and H2c are supported. A one-tail t-test indicates that the mean scores of adaptiveness and effectiveness of high coordination channel structure are significantly higher than those of low coordination channel structure. Therefore, it can be concluded that high coordination between suppliers and channel intermediaries leads to higher

adaptiveness and effectiveness than low coordination channel structure.

<Table 8> t-Test Results for Hypotheses: Coordination & Performance

	Mean for High Coordination (N=100)	Mean for Low Coordination (N=90)	P-Value
Adaptiveness	5.24	4.24	0
Efficiency	5.16	5.03	0.229
Effectiveness	5.13	4.09	0

However, the test result on the hypothesis of efficiency is inconclusive. Although the direction of the test is consistent with the hypothesized direction as shown by the higher mean value of high coordination channel structure than that of low coordination channel structure, the difference between the mean efficiency value is not statistically significant. Therefore, it can not be concluded as hypothesized in hypothesis 2b. This suggests that coordination alone does not affect the efficiency level of channel intermediaries.

The mixed result of the uni-variate analysis suggests that one variable of vertical channel structure is not sufficient to explain the channel structure-performance relationship. This problem should be solved if both factors are included in the model. In the next section, two factors will be simultaneously analyzed in relationship with performance variables.

2) Two-way ANOVA Model

Since main effects of ownership and coordination on channel performance are well documented, and the main research interest of this study is to investigate whether ownership and coordination together affect channel performance perception of channel intermediaries, ANOVA model will be used to find the performance effects of ownership and coordination simultaneously. For this purpose, a factorial design is used. Both factors in this study, a degree of ownership and coordination have two levels (high or low). This yields 2X2 factorial design as shown in <table 9>.

Once the effect of both ownership and coordination on channel performance is established, one can compare performance levels of different combinations of vertical channel structures. Based on two dimensions of vertical integration discussed earlier, four types of vertical integration are

classified as shown in figure 2.

<table 9> 2x2 Factorial Design

	High Coordination	Low Coordination
High Ownership	Full Integration: Mean Performance (μ11)	Bureaucratic Structure: Mean Performance (μ12)
Low Ownership	Quasi-Integration: Mean Performance (μ21)	Pure Disintegration: Mean Performance (μ22)

For hypotheses H3a, H3b, and H3c, more than two means are involved. In this 2x2 model, one dependent variable and two independent(factor) variables are involved. The dependent variable is performance which is interval variable. The two independent variables are a degree of ownership and a degree of coordination, both of which are categorical(either high or low).[12)]

Hypotheses on joint effect of Ownership-Coordination

The hypotheses for the joint effect on the performance are presented in the <table 10>below.

<Table 10> Ownership-Coordination joint effect Hypotheses

	Hypotheses
H3a	Ownership and coordination together have effect on channel intermediaries' effectiveness.
H3b	Ownership and coordìnation together have effect on channel intermediaries' efficiency.
H3c	Ownership and coordination together have effect on channel intermediaries'adaptiveness.

It was proposed in H3a that ownership and coordination together have an effect on channel intermediaries'effectiveness. As shown in <table 11>, the F-value for the main effects on effectiveness was significant. A significant F-value in the ANOVA model indicates that the treatment effect is not all zero. In other words, at least one mean differs from the others.

12) ANOVA assesses how one or more nominal independent variables affect a continuous dependent variable. The general form of the two-way ANOVA model is as follows:
Xi]k = m + ai+ bj+ (ab)ij +eijκ, where m is the overall mean, ai is the row effect (i high, low), bj is the column effect(j high, low), (ab)ij is the interaction effect, and eijk is the error associated with the kthdatapointfromleveliofrowfactorandleveljof column factor.

Therefore, it can be concluded that the two factor model explains the channel structure-performance relationship well. This supports hypothesis H3a.

〈Table 11〉 ANOVA Table for Effectiveness Measure

Source of Variation	Sum of Squares	DF	Mean Square	F	Sig of F
Main Effects	40.04	2	20.02	20.521	0.000
OWNERSHIP	3.652	1	3.652	3.743	0.055
COORDINATION	35.199	1	35.199	36.079	0.000
2-Way Interactions	6.146	1	6.146	6.299	0.013
OWNERSHIP & COORDINATION	6.146	1	6.146	6.299	0.013
Explained	59.481	3	19.827	20.323	0.000
Residual	181.461	186	0.976		
Total	240.942	189	1.275		

The F-value for main effects on efficiency is also shown to be significant in the ANOVA output in <table 12>. This supports hypothesis H3b.

〈Table 12〉 ANOVA Table for Efficiency Measure

Source of Variation	Sum of Squares	DF	Mean Square	F	Sig of F
Main Effects	11.384	2	5.692	4.020	.020
OWNERSHIP	10.991	1	10.991	7.762	.006
COORDINATION	.217	1	.217	.153	.696
2-Way Interactions	.950	1		.671	.414
OWNERSHIP & COORDINATION	.950	1		.671	.414
Explained	12.347	3	4.116	2.907	.036
Residual	263.375	186	1.416		

As shown in <table 13>, the F-value for main effects on adaptiveness was significant. A significant F-value in the ANOVA model indicates that the treatment effect is not all zero. This is equivalent to the statement that at least one mean differs from the others. Therefore, hypothesis

3c is supported, and it can be concluded that two factor model explains the channel structure-performance relationship substantially.

〈table 13〉 ANOVA Table for Adaptiveness Measure

Source of Variation	Sum of Squares	DF	Mean Square	F	Sig of F
Main Effects	44.193	2	22.097	23.728	.000
OWNERSHIP	.464	1	.464	.498	.481
COORDINATION	43.194	1	43.194	46.384	.000
2-Way Interactions	.089	1	.089	.096	.757
OWNERSHIP & COORDINATION	.089	1	.089	.096	.757
Explained	47.297	3	15.766	16.930	.000
Residual	173.209	186	.931		
Total	220.507	189	1.167		

V. Conclusion

The purpose of this study was to investigate the effect of different channel governance structure arrangements on channel performance from the perspective of channel intermediaries, representing multinational manufacturers. To achieve the intended purpose, two dimensions of vertical integration were suggested to analyze their effects on three dimensions of channel performance. Vertical integration was viewed from a level of ownership and a degree of coordination between primary tire suppliers (exporters) and local tire replacement dealers. The mail survey was directed to tire replacement dealers to collect the data on how channel intermediaries perceive their performance level in association with channel structure relationship with their primary suppliers.

The results of hypotheses H1a through H3a suggest that the ownership variable of vertical integration has a varying impact upon three performance dimensions. It was observed that channel intermediaries perceive their efficiency higher when the ownership control by supplier is low. Adaptiveness of channel intermediaries was not influenced by a degree of ownership. An

interesting result was found on a level of effectiveness perceived by channel intermediaries. Contrary to expectations, ownership level had a negative effect on the effectiveness level of channel intermediaries. There is a logical explanation for this result. Calantone and Gassenheimer (1991) found that channel intermediaries prefer autonomy in their operation, and that perceived conflict and dissatisfaction increase as supplier's control over their business increases. Conflict and dissatisfaction are seen as a major factor for ineffectiveness of channel systems (Etgar 1979; Lawrence and Lorsch 1967). Therefore, the negative relationship between the ownership level and channel intermediary's effectiveness was observed in this study because channel intermediaries' perception of their effectiveness was negatively affected by their perception of deprivation of their autonomy. This implies that manufacturers should pay attention to what their channel intermediaries want, and strive for developing a good rapport with them through ensuring that the goals of both parties are in compliance. This is further evidenced by the results of hypotheses tests regarding the coordination effect on performance. Hypotheses H2a through H2c suggests that sound relationship between suppliers and channel intermediaries via good communication, cooperation, and joint decision making lead to good performance on all three dimensions. As Harrigan(1983) and Day and Klein(1987) noted, vertical integration achieved through good coordination can result in a superior system than a vertical integration achieved solely through ownership.

In order to construct a better model of vertical integration and performance relationship, both ownership and coordination were included in a multivariate model. The results indicate that the model explains the phenomenon better when two factors are considered simultaneously. All hypotheses regarding the fitness of the two factor model on three performance dimensions were supported. This implies that there is a certain degree of interaction effect between two vertical integration variables in affecting the performance variables. This result again provides support for the argument that the vertical integration decision should be made by considering both ownership and coordination.

Based on the two factor model, the group means may be compared to suggest rank order channel structure arrangements on each performance dimension. Therefore, it could be proposed that channel structures with high level of coordination tend to perform better on effectiveness and adaptiveness, and that ownership has more impact on the efficiency dimension. Based on the

findings, four different vertical integration types can be modeled and compared. The proposition for these types may be named: (1) bureaucratic system (high ownership & low coordination), (2) full integration (high ownership & high coordination), (3) quasi-integration (low ownership & high coordination), and (4) pure-disintegration (low ownership & low coordination). It would be interesting to further analyze the level of performance effects of each different type.

In conclusion, vertical integration should be understood as a multifaceted construct. One dimensional understanding of vertical integration will be misleading in its effect on channel performance. Performance also has to be considered from more than one dimension. The fact that most vertical integration literature has concentrated attention on the efficiency dimension of performance is a mistake. An organizational structure that performs well in one area of performance does not necessarily create a good structure. The ideal channel system would be the one that can produce high levels of performance on all three dimensions: effectiveness, efficiency, and adaptiveness. From the findings of this study, one can clearly see that channel performance is affected by both factors: ownership and coordination. Therefore, both researchers and channel managers should pay closer attention to both factors when considering a vertical integration of a channel system.

Finally, this study has several limitations which must be taken into consideration in generalizing its findings.

First, it is possible the study result may apply only to the industry involved. In other words, it is quite possible that the findings could be industry specific and the result generalization is limited.

Second, performance of channel systems can also be affected by various environmental factors. Inclusion of environmental contingency variables could have been desirable.

Third, interaction effect of ownership and coordination on the channel performance need to be further analyzed with more rigid test to substantiate the structure-performance relationship.

References

Anderson, Erin and Barton Weitz. "Make or Buy Decisions: A Framework for Analyzing Vertical Integration Issues in Marketing," Sloan Management Review, Vol.27, Spring, 1986, pp.3-19.

_____, and Anne T. Coughlan. "International Market Entry and Expansion via Independent or Integrated Channels of Distribution," Journal of Marketing, Vol.51, January, 1987, pp.71-82.

Anderson, James C. and James A. Narus. "A Model of the Distributor's Perspective of Distributor-Manufacturer Working Relationships," Journal of Marketing, Vol.48, Fall, 1984, pp.62-74.

Aspinwall, Leo. The Characteristics of goods and Para11e1 Systems, in Management Marketing, Harold Kelley and William Lazer, eds. Homewood, IL:Richard D. Irwin, pp.434-50, 1958.

Boyle, Brett, Robert F. Dwyer, Robert A. Robicheaux, and James T. Simpson. "Influence Strategies in Marketing Channels: Measures and Use in Different Relationship Structures," Journal of Marketing Research, Vol.29, November, 1992, pp.462-471.

Brown, James R. "A Cross-Channel Comparison of Supplier-Retailer Relations," Journal of Retailing, Vol.87, Winter, 1981, pp.3-18.

Buzzel, Robert D. "Is Vertical Integration Profitable?" Harvard Business Review, Vol.83, No.1,1983, pp.92-102.

Coelho, Filipe, Chris Easingwood, and Arnaldo Coelho. "Exploratory Evidence of Channel Performance in Single Vs. Multiple Channel Strategies," International Journal of Retail and Distribution Management, Vol.31, No.11, 2003, pp.561–573.

Coughlan, Anne T., Erin Anderson, Louis W. Stern, and Adel I. El-Ansary. Marketing Channels, Upper Saddle River, NJ: Prentice Hall, 2006.

Cravens, David W. Strategic Marketing, Homewood, Ill: Richard D. Irwin Inc., 1982.

Dalton, Dan R., William D. Todor, Michael J. Spendolini, Gordon J. Fielding, and Lyman W. Porter "Organization Structure ad Performance: A Critical Review." Academy of Management Review, Vol. 5, No. 1, 1980, pp.49-64.

Day, George and Saul Klein. Cooperative Behavior in Vertical Markets: The Influence of Transaction Costs and Competitive Strategies, in Review of Marketing, Ed. Michael Houston, Chicago, Ill: American Marketing Association, pp.39-66, 1987.

Dwyer, F. Robert and Sejo Oh. "A Transaction Cost Perspective on Vertical Contractual Structure and Interchannel Competitive Strategies," Journal of Marketing, Vol.52, April, 1988, pp.21-34.

_____, and M. Ann Welsh, "Environmental Relationships of the Internal Political Economy of Marketing Channels." Journal of Marketing Research, Vol.22. November, 1985, pp.397-414.

Frazier, L. Gary, Kitti Sawhney, and Tasadduq Shervani. Intensity, Functions, and Integration in Channels of Distribution, Review of Marketing, Chicago, Il: American Marketing, pp.263-298, 1989.

Ganesan, Shankar, Morris George, Sandy Jap, Robert W. Palmatier, and Barton Weitz. "Supply Chain Management and Retailer Performance: Emerging Trends, Issues, and Implications for Research and Practice," Journal of Retailing, Vol.85, No.1, 2009, pp.84-94.

Gerrit H. Van Bruggen, Kersi D. Antia, Sandy D. Jap, Werner J. Reinartz, and Florian Pallas. "Managing Marketing Channel Multiplicity," Journal of Service Research, Vol.13, No.3, 2010, pp.331-340.

Habib, Ghazi M. and John J. Burnett, "An Assessment of Channel Behavior in an Alternative Structural Arrangement: The International Joint Venture." International Marketing Review, Vol. 6, No. 3, 1988, pp.7-21.

Harrigan, Kathryn Rudie, Strategies for Vertical Integration, Lexington, MA: Heath and Lexington Books, 1983.

Hutt, Michael D. and Thomas W. Speh. Business Marketing Management: 3rd edition, Hinsdale, Ill.: The Dryden Press, 1985.

Jackson, Donald M., Robert F. Krampf, and Leona1d J. Konopa. "Factors that Influence the Length," Industrial Marketing Management, Vol.11, October, 1982, pp.263-268.

Kabadayi, Sertan, Nermin Eyuboglu and Gloria P. Thomas. "The Performance Implications of Designing Multiple Channels to Fit with Strategy and Environment," Journal of Marketing, Vol.71, October, 2007, pp.195-211.

Stern, Adel I. EI-Ansary, and James R. Brown. Management in Marketing Channels, Engelwood Cliffs, NJ: Prentice-Hall, Inc., 1989.

Kotler, Philip and Kevin L. Keller. Marketing Management, Upper Saddle River, NJ: Prentice Hall, 2006.

Kumar, Nirmalya, Louis W. Stern, and Ravi S. Achrol. "Assessing Reseller Performance From the Perspective of the Supplier," Journal of Marketing Research, Vol.29, May, 1992, pp.238-53.

Lilien, Gary. "Advisor 2: Modeling the Marketing Mix Decisions for Industrial Products," Management Science, Vol.25, February, 1979, pp. 191-204.

McCarnmon, Jr., Bert C. Perspectives for Distribution Programming in Vertical Marketing Systems, Ed. Louis P. Bucklin, Glenview, Ill: Scott Foresman, 1978.

Magrath, Allan and Kenneth Hardy. "A Strategic Framework for Diagnosing Manufacturer-Reseller Conflict." working paper, Marketing Science Institute, 1988, pp.88-101.

Mallen, Bruce. "Functional Spin-off: A Key to Anticipating Change in Distribution Structure," Journal of Marketing, Vol.37, July, 1973, pp.18-25.

_____. Principles of Marketing Channel Management Lexington, Ma.: Lexington Books, 1977.

Neslin, Scott A., D. Grewal, R. Leghorn, V. Shankar, M. L. Teerling, J. S. Thomas, and P. C. Verhoef. "Challenges and Opportunities in Multichannel Customer Management," Journal of Service Research, Vol.9, No.2, 2006, pp.95-113.

_____, Scott A. and Venkatesh Shankar. "Key Issues in Multichannel Customer Management: Current Knowledge and Future Directions," Journal of Interactive Marketing, Vol.23, No.1, 2009, pp.70-81.

Noordewier, Thomas G., George John, and John R. Nevin. "Performance outcomes of Purchasing Arrangements in Industrial Buyer-Vendor Relationships," Journal of Marketing, Vol.54, October, 1990, pp.80-93.

Nuna1ly, J. C. Psychometric Theory, New York: Mcgraw-Hill Book Co, 1967.

Nunes, Paul F. and Frank V. Cespedes. "The Customer Has Escaped," Harvard Business Review, Vol.81, No.11, 2003, pp.96-105.

Peter, J. Paul. "Reliability: A Review of Psychometric Basics and Recent Marketing Practices," Journal of Marketing Research, Vol.16, February, 1979, pp.6-17.

Phillips, Lynn. "Explaining Control Losses in Corporate Marketing Channels: An Organization Analysis," Journal of Marketing Research, Vol.19, November, 1982, pp.525-549.

Rangaswamy, A. and G. van Bruggen. "Opportunities and Challenges in Multichannel Marketing: An Introduction to the Special Issue," Journal of Interactive Marketing, Vol.19, No.2, 2005, pp.5-11.

Robicheaux, Robert A. and Adel I. El-Ansary. "A General Model for Understanding Channel Member Behavior," Journal of Retailing, Vol.52, No.4, Winter, 1975-1976, pp.13-30.

_____, and James E. Coleman. "The Structure of Marketing Channel Relationships," Journal of Academy of Marketing Science, Vol.22, No.1, 1994, pp.38-51.

Rosenbloom, Bett. Marketing Channels, A Management View, Chicago, Ill.: The Dryden Press, 1991.

Root, Franklin R. Entry Strategies for International Markets, Lexington, MA: Lexington Books, 1994.

Rosson, Phillip J. and David Ford (1982), "Manufacturer-Overseas Distributor Relations and Export Performance," Journal of International Business Studies, Vo. 13, No. 2, 1982, pp.57-72.

Roth, Kendall and Douglas Nigh. "The Effectiveness of Headquarters-Subsidiary Relationships: The Role of Coordination, Control, and Conflict," Journal of Business Research, Vol.25, 1992, pp.277-301.

Ruekert, Robert w., Orvil1e C. Walker, Jr., and Kenneth J. Roering. "The Organization of Marketing Activities: A Contingency Theory of Structure and Performance," Journal of Marketing, Vol.49, Winter, 1985, pp.13-25.

Sharma, Arun and Anuj Mehrotra. "Choosing an Optimal Channel Mix in Multichannel Environments," Industrial Marketing Management, Vol.36, No.1, 2007, pp.21-28.

_____, and Luis V. Dorninguez, "Channel Evolution: A Framework for Analysis." Journal of the Acaderny of Marketing Science, Vol.20, No.1, 1992, pp.1-15.

Steers, Richard M. "Problems in the Measurement of Organizational Effectiveness," Administrative Science Quarterly, Vol.20, December, 1975, pp.546-558.

Stern, Louis W. and Adel I. El-Ansary. Marketing Channels, 4th edition, Engelwood Cliffs, NJ: Prentice-Hall, Inc., 1992.

_____, Adel I. EI-Ansary, and James R. Brown, Management in marketing Channels, Engelwood Cliffs, NJ: Prentice-Hall, Inc., 1989.

_____, Louis W. and Torger Reve. "Distribution Channels as political Economies: A Framework for Comparative Analysis," Journal of Marketing, Vol.44, Summer, 1980, pp.52-64.

Van de Ven, Andrew H. "A Framework for Organization Assessment," Academy of Management Review, January, 1976, pp.64-78.

Vinhas, Albberto Sa and Erin Anderson. "How Potential Conflict Drives Channel Structure: Concurrent (Direct and Indirect) Channels," Journal of Marketing Research, Vol.42, No.4, 2005, pp.507-515.

Vorhies, Douglas W. and Neil A. Morgan. "A Configuration Theory Assessment of Marketing Organization Fit with Business Strategy and Its Relationship with Marketing Performance," Journal of Marketing, Vol.67, January, 2003, pp.100-115.

Wallace, David W., Joan L. Giese, and Jean L. Johnson. "Customer Retailer Loyalty in the Context of Multiple Channel Strategies," Journal of Retailing, Vol.80, No.4, 2004, pp.249-263.

Williamson, Oliver E. The Economic Institutions of Capitalism, New York: Free Press, 1985.

국문초록

유통경로 지배구조 유형과 유통성과 간의 관계에 관한 실증적 연구: 수출유통구조 전략에 관한 시사점*

김 규 동*

본 연구에서는 유통경로 상의 지배구조 유형이 기업성과에 미치는 영향에 대해 실증적으로 검증해 보았다. 수출유통의 성과를 극대화 하기위한 일반적 전략대안은 수직적 통합에 의한 성과관리이다. 그러나 수출유통에 있어서 소유구조에 의한 수직적 통합은 용이하지 않은 경우가 대부분이다. 본 연구의 결과, 소유구조 이외에도 다양한 관계전략으로 유통성과 관리가 가능하다는 것을 알 수 있었다. 본 연구의 전략적 시사점으로, 수출유통경로결정에 있어서, 소유구조이외에도 거래관계구조 상의 정보교류, 협력관계, 신뢰관계 확립 등을 통하여 유통경로의 수직적 통합과 같은 수준의 성과를 이루어 낼 수 있다는 것을 제시할 수 있다.

주제어 : 수출유통경로, 지배구조, 관계구조, 수출경로통합유형, 유통성과

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** Assistant Professor, Department of Entrepreneurship, School of Global Services

Appendix 1. Correlation Matrix of Question Items

	COMM1	COMM2	COMM3	PART1	PART2	PART3	COOP1	COOP2	COOP3	COOP4	EFFECT1	EFFECT2	EFFECT3	EFFECT4	EFFECR5	EFFI1	EFFI2	EFFI3	ADAPT1	ADAPT2	ADAPT3	ADAPT4
COMM1	1.000																					
COMM2	0.577	1.000																				
COMM3	0.485	0.443	1.000																			
PART1	0.43	0.304	0.402	1.000																		
PART2	0.402	0.239	0.367	0.451	1.000																	
PART3	0.425	0.387	0.406	0.427	0.550	1.000																
COOP1	0.573	0.475	0.418	0.481	0.499	0.672	1.000															
COOP2	0.45	0.346	0.250	0.332	0.421	0.435	0.566	1.000														
COOP3	0.519	0.486	0.415	0.308	0.384	0.499	0.712	0.468	1.000													
COOP4	0.413	0.427	0.343	0.352	0.345	0.555	0.615	0.314	0.705	1.000												
EFFECT1	0.460	0.337	0.286	0.275	0.407	0.259	0.385	0.273	0.369	0.283	1.000											
EFFECT2	0.432	0.345	0.24	0.281	0.41	0.282	0.427	0.346	0.334	0.242	0.779	1.000										
EFFECT3	0.357	0.288	0.215	0.23	0.353	0.277	0.321	0.314	0.247	0.181	0.693	0.756	1.000									
EFFECT4	0.346	0.206	0.325	0.25	0.437	0.418	0.384	0.312	0.439	0.412	0.505	0.427	0.355	1.000								
EFFECR5	0.197	0.180	0.264	0.105	0.398	0.286	0.238	0.159	0.318	0.389	0.474	0.319	0.240	0.651	1.000							
EFFI1	0.028	-0.01	0.023	-0.008	0.024	0.054	0.045	0.018	0.151	0.162	0.063	-0.024	0.052	0.070	0.254	1.000						
EFFI2	-0.01	-0.013	0.018	-0.02	0.026	0.071	0.120	0.081	0.123	0.091	0.146	0.023	-0.009	0.145	0.304	0.453	1.000					
EFFI3	0.058	0.09	0.038	0.022	0.084	0.155	0.189	0.076	0.274	0.225	0.159	0.083	0.053	0.228	0.305	0.405	0.488	1.000				
ADAPT1	0.216	0.188	0.196	0.201	0.286	0.399	0.298	0.183	0.396	0.402	0.323	0.254	0.300	0.281	0.297	0.229	0.115	0.244	1.000			
ADAPT2	0.239	0.229	0.192	0.164	0.296	0.346	0.38	0.271	0.470	0.414	0.317	0.266	0.269	0.410	0.299	0.125	0.131	0.214	0.444	1.000		
ADAPT3	0.316	0.25	0.254	0.236	0.380	0.382	0.437	0.362	0.482	0.384	0.235	0.264	0.206	0.255	0.189	0.089	0.08	0.154	0.398	0.435	1.000	
ADAPT4	0.37	0.334	0.295	0.201	0.366	0.39	0.464	0.343	0.43	0.381	0.348	0.302	0.232	0.269	0.22	0.038	0.165	0.171	0.309	0.388	0.566	1.00

Appendix 2. Factor Loading Matrix

	Factor1	Factor2	Factor3	Factor4
COOP1	0.73655	0.39289	0.15485	0.08396
COMM1	0.72986	0.10478	0.29835	-0.01517
COMM3	0.68275	0.05565	0.10756	0.01707
COMM2	0.67034	0.0954	0.16616	-0.00299
PART1	0.66169	0.03746	0.13853	-0.04563
PART3	0.63002	0.42739	0.07595	0.05059
COOP3	0.60409	0.52453	0.08888	0.19037
COOP4	0.56623	0.50371	-0.00767	0.17907
COOP2	0.53749	0.27326	0.19533	-0.00806
PART2	0.50357	0.28462	0.33694	-0.02387
ADAPT3	0.22807	0.7429	0.06116	-0.01171
ADAPT2	0.10061	0.73085	0.19531	0.1114
ADAPT1	0.08094	0.64536	0.21274	0.18726
ADAPT4	0.29788	0.61099	0.1508	0.03383
EFFECT2	0.25608	0.14914	0.86455	-0.02964
EFFECT3	0.16411	0.13512	0.85544	-0.02318
EFFECT1	0.24481	0.17135	0.84947	0.11743
EFFECT4	0.31272	0.32694	0.44378	0.17964
EFFI2	0.00209	0.03862	0.03993	0.80943
EFFI1	-0.00885	0.06155	-0.00393	0.76883
EFFI3	0.05192	0.188156	0.04984	0.76577
Eigen Val	7.454	2.086	1.73	1.193
Percent of Variance	35.6	10	8.3	5.8
Cumulati	35.6	45.6	53.9	59.7

Note : Bartlett test of sphericity=1878.954, p=0.0000

Appendix 3. Construct Measures

Construct	Definition	Operationalization	Example Measures
Ownership	Internal, Intermediate or external. (e.g., corporate system, administered system, contractual system, joint ventures, conventional system)	a degree along a continuum of high to low. Ownership is highest if a channel intermediary is a part of a supplier, and lowest if it is independent. Intermediate levels of ownership were assigned to high or low depending on their levels of % ownership by supplier. Median % point is used to Judge high or low level of ownership. Boyle et al. (1992)	1. Your operation: A. __ is wholly owned by this supplier. B. __ is partially owned by this supplier (if yes, please state percentage of ownership; %). C. __ is completely independent from this supplier. 2. Which of the following best describes your business; A. __ We sell only one brand of tires. B. __ We sell different brands, but our identity and loyalty are tied primarily to one supplier's brand. C. __ We sell different brands, and our identity and loyalty are not tied to any one supplier's brand.
Coordination	Collaborative actions taken to achieve a unity of effort within an organization.	Coordination construct is operationalized by combining three latent construct: cooperation, communication, and participation. (Anderson and Narus 1990; Guilman et al. 1980; Mohr and Nevin 1990)	All items below are scale (1 to 7) to the extent respondent agree or disagree with each statement; (Communication) 1. This supplier does not keep us well informed of new development. 2. This supplier usually participates in our goal setting. 3. We frequently communicate informally with this supplier. 4. We frequently communicate formally with this supplier. (participation) 1. We are encouraged by this supplier to make suggestions pertaining to our territory. 2. We are encouraged by this supplier to play an active role in making our marketing decisions. 3. This supplier always consults with us before making decisions affecting our territory. 4. This supplier encourages us to participate in long-range planning pertaining to our territory. (Coordination) 1. This business relationship with this supplier can be best described as a "cooperative effort." 2. We cooperate with this supplier in all aspects of marketing the product in our territory. 3. Our working relationship can be best described as a smooth and comfortable one. 4. This supplier helps us out in whatever ways we ask.

Construct	Definition	Operationalization	Example Measures
Ownership	Internal, Intermediate or external. (e.g., corporate system, administered system, contractual system, joint ventures, conventional system)	a degree along a continuum of high to low. Ownership is highest if a channel intermediary is a part of a supplier, and lowest if it is independent. Intermediate levels of ownership were assigned to high or low depending on their levels of % ownership by supplier. Median % point is used to Judge high or low level of ownership. Boyle et al. (1992)	1. Your operation: A. __ is wholly owned by this supplier. B. __ is partially owned by this supplier (if yes, please state percentage of ownership; %). C. __ is completely independent from this supplier. 2. Which of the following best describes your business; A. __ We sell only one brand of tires. B. __ We sell different brands, but our identity and loyalty are tied primarily to one supplier's brand. C. __ We sell different brands, and our identity and loyalty are not tied to any one supplier's brand.
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Appendix 3. cont' d

Construct	Definition	Operationalization	Example Measures
Effectiveness	The extent to which channel system goals are reached.	Measured by asking channel intermediaries about their performance level (on market share, sales volume, profitability) in relationship with their primary supplier's product. kumar et al. (1992)	1. We have satisfactory growth in our sales volume for this supplier's products. 2. We have achieved high level of market penetration for this supplier's products. 3. We usually meet our sales target for this supplier's products in our territory. 4. We are very satisfied with the relationship with this supplier. 5. Our customers are highly satisfied with this supplier's products. 6. Selling this supplier's products is highly profitable for us. 7. Selling this supplier's products is more profitable than selling other's products.
Efficiency	The relationship between outputs of an organization and the inputs required.	The ratio between revenue generated by a channel intermediary and the channel intermediary's selling effort required. The perception of channel intermediaries on efficiency is measured.	1. The cost of doing business with this supplier is reasonable, given the amount of business it generates 귄 us. 2. Given the amount of revenue generated by us, administrative work required by this supplier is excessive. 3. Given the amount of profits generated by us, this supplier's sales support and assistance are minimal. 4. Considering the revenues we generate, our marketing expenses for selling this supplier's products are high. 5. On average, the billing and ordering procedures for this supplier are too complex.
Adaptiveness	The ability of an organization to change or adjust within its environment.	channel intermediary's flexibility to change marketing or selling practices to cope with any change in their markets.	1. We have not experienced any difficulty in changing or adjusting our selling practices for this supplier's products when needs. 2. It is easy to be innovative in marketing this supplier's products. 3. Meeting competitive changes is not difficult for this supplier's products. 4. Responding to seasonal demand fluctuations is difficult for this supplier's products. 5. Customizing our service for individual customer needs is not difficult for this supplier's products. 6. It is easy to make emergency deliveries to our customers for this supplier's products. Responding to changing 7. Requests from our customers is not difficult for this supplier's products.