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# THE IMPACT OF SUPPLY CHAIN PARTNERSHIPS ON SUPPLIER PERFORMANCE: AN EMPIRICAL STUDY OF THE UK FRESH PRODUCE INDUSTRY.

#### **ABSTRACT**

This paper presents a framework of buyer-supplier relationships used in an empirical study to investigate how the development of more collaborative relationships between UK retailers and fresh produce suppliers affects the financial performance of suppliers in such relationships. Relationships between key partnership characteristics and performance are discussed and empirically tested. In addition, multivariate analysis is used to identify the dimensions of buyer-supplier relationships that make the greatest relative contribution to the explanation of the performance construct.

#### INTRODUCTION

Traditionally, inter-organisational linkages between firms have been arm's-length and often adversarial with individual firms seeking to achieve cost reductions or profit improvements at the expense of their buyers and/or suppliers. However researchers, such as Lamming (1993) and Christopher (1998), state that successful companies recognise that the transfer of costs up and down the supply chain does not make firms any more competitive as ultimately all costs make their way back to the final marketplace. Instead firms that engage in co-operative long-term partnerships, that help to improve the efficiency of the supply chain as a whole for the mutual benefit of all parties involved, are more likely to be successful.

The UK food industry has seen a concerted move in recent years towards fewer and more cooperative buyer-supplier relationships as retailers have attempted to gain more control over their
supply chains. This has been done to ensure the integrity of their own label products, in terms of
quality and safety issues, and to reduce supply chain costs in an effort to increase their
competitiveness in a highly competitive retailing environment (Fearne and Hughes 1999). These
efforts have been accelerated in recent years by the introduction of Efficient Consumer Response
(ECR), which promotes the development of collaborative partnerships between retailers and suppliers
(Mitchell 1997, Fiddis 1997).

ECR is based on the premise that many business practices and attitudes within the food industry are counter-productive, with firms seeking to maximise their own efficiency and profitability by passing problems and costs up or down the supply chain to their trading partners. Therefore, the fundamental aim of ECR is to apply a total systems view and encourage firms to work together to remove unnecessary costs from the supply chain and to add value to products by identifying and responding to consumer needs more effectively (Mitchell 1997, Fiddis 1997, Lamey 1996). Because ECR relies on a seamless flow of information throughout the supply chain the benefit of ECR is dependent on a move away from traditional confrontational relationships to relationships based on co-operation and trust (Wood 1993, IGD 1996, Fiddis 1997, Mitchell 1997).

In the food industry partnerships have been promoted as offering mutual benefits to both retailers and suppliers. However the publicised benefits have referred primarily to the supply chain as a whole or to the retailer's operations (IGD 1996, Coopers and Lybrand 1996). In addition, anecdotal evidence that does exist in the food industry refers primarily to relationships between retailers and large branded manufacturers (Harlow 1994, Pearce 1997, Fiddis 1997, Mitchell 1997). As such there is virtually no evidence of the status or outcomes of partnership developments with suppliers in unbranded commodity sectors, such as fresh meat and fresh produce (i.e. fresh fruit, salads and vegetables).

Although moves towards more co-operative buyer-supplier relationships are evident in the food industry, and much has been written about the creation of such partnerships in the extant literature, research that has investigated what these partnerships entail and that has examined the outcomes of these relationships is limited. This lack of research has been highlighted by researchers such as Stuart (1993) who notes, "empirical evidence of the benefits of partnerships is scant and primarily limited to the automotive industry". Similarly Heide and Stump (1995) state, "empirical evidence regarding performance is virtually non-existent and although recent evidence suggests that co-operative forms of buyer-supplier relationships are becoming increasingly common no study to date has formally examined their implications." More recently several other researchers have also commented on the lack of research regarding the performance outcomes of partnerships (i.e. Kalwani and Narayandas 1995, Sheth and Sharma 1997, Cannon and Homburg 2001).

To our knowledge there seems to be a complete lack of any UK research that attempts to quantify the outcomes of moves to greater collaboration between food retailers and their suppliers. These deficiencies in research suggest that an empirical investigation of the nature of buyer-supplier relationships and their implications for performance will make a useful contribution, to both interorganisational theory in general, and our understanding of retailer-supplier partnerships in the UK food industry in particular.

Therefore, this research investigates how partnerships between UK food retailers and suppliers affect the financial performance of suppliers. The views of suppliers are of particular interest as most suppliers are developing their relationships in response to their retail customer's demands for increased service. As partnerships require suppliers to make substantial investments in terms of time and financial resources the costs of engaging in closer relationships, such as those promoted by the ECR initiative, could outweigh the benefits of doing so, particularly in commodity sectors which consist of many small and medium sized businesses that typically operate on tight margins (Fearne and Hughes 1999).

# THE CONCEPTUAL FRAMEWORK

The framework used to investigate buyer-supplier relationships was developed from two key disciplinary orientations in channel theory: the behavioural approach and the political economy paradigm.

Building on the empirical work of Reve and Stern (1986) and the conceptual work of Robicheuax and Coleman (1994) who took a behavioural approach to the traditional structure-conduct-performance relationship, the premise of the model (figure 1) is that the structural elements of a buyer-seller relationship, such as activities and information flows, measured in the internal economy, and the nature of the power-dependence relationship, measured in the internal polity, influence each other but also influence the dominant attitudes and sentiments in the relationship and the performance outcomes achieved. Each part of the framework is briefly discussed in the following sections. For a full discussion regarding the development of the model and its validation see Duffy and Fearne (2002a).

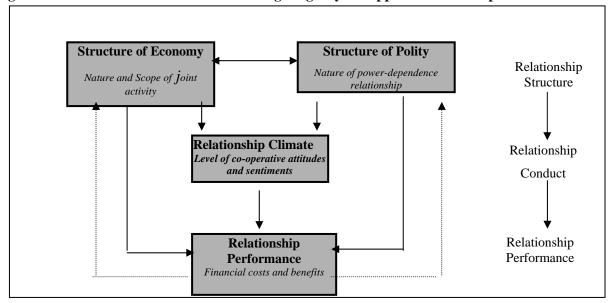


Figure 1: Theoretical Framework for Investigating Buyer-Supplier Relationships

# Conceptualisation of the Structure of the Economy

The internal economy is defined in terms of the types of activities, resources and information flows that are used to support and co-ordinate the operation of the buyer-supplier relationship (Arndt 1983, Reve and Stern 1986, Robicheaux and Coleman (1994) Cannon (1992). As such, the economy is conceptualised as existing on a continuum representing the more tangible and observable aspects of relationships. At one end, firms engage in low levels of joint activities and have low levels of operational integration and at the other they engage in high levels of joint activities and have high levels of operational integration.

# **Conceptualisation of the Structure of the Internal Polity**

The internal political structure is conceptualised as the level and nature of interdependence that exists in a relationship (Kumar, Scheer and Steenkamp 1995). Researchers state that a comprehensive view of interdependence must encompass both asymmetry and magnitude of interdependence as both describe the socio-political structure of a channel relationship (i.e. Kumar et al 1995, Frazier and Antia 1995, Geyskens et al 1996). Therefore an examination of the relationship polity directs attention to the level of total interdependence in the relationship (i.e. the sum of both firms' dependence) and the level of dependence asymmetry in the relationship (i.e. the difference in the firms' dependence scores).

#### **Conceptualisation of the Climate**

The climate examines the dominant attitudes and sentiments that exist in a buyer-supplier relationship (Reve and Stern 1986). In line with Reve and Stern (1986) researchers such as Stern and Reve (1980) and Skinner Gassenheimer and Kelley (1992) suggest that conflict and co-operation are the two dominant sentiments that regulate exchange relationships.

Four theoretical constructs are used to capture whether the dominant attitudes and sentiments in relationships are co-operative or adversarial in nature. These are trust, commitment, relational norms and functional conflict resolution methods, which are constructs that indicate the presence of co-operative behaviour directed towards collective as opposed to individual goals (i.e. Dwyer, Schurr and Oh 1987, Anderson and Narus 1990, Heide and John 1992, Morgan and Hunt 1994, Anderson, Hakansoon and Johansons 1994, Cannon and Perreault 1997, Siguaw, Simpson and Baker 1998). Functional conflict resolution is measured instead of measuring the level of conflict in a relationship as researchers suggest that conflict is not always detrimental to a relationship (i.e. Robicheaux and El-Ansary 1976, Michie and Sibley 1979). Instead it is the manner in which partners resolve conflict that has implications for partnership success (Mohr and Spekman 1994).

# **Conceptualisation of Performance**

The aim of this part of the framework is to examine the financial costs and benefits associated with different forms of buyer-supplier relationships. Because the focus of this study is concerned with the impact of partnerships on supplier performance, performance is viewed from the perspective of individual channel members. More specifically, the focus of performance concerns the supplier's overall view of the performance outcomes of a specific customer relationship. This view is taken because suppliers often have many customers. As such it would be difficult to isolate the impact of any individual relationship on overall performance at the firm level.

#### HYPOTHESISED RELATIONSHIPS

Each of the three key dimensions of buyer-supplier relationships in Figure 1 are hypothesised as being key influences on performance. A brief review of the literature is given to support the hypothesised relationships between each of the constructs in the model and performance. It should be noted that each of these three dimensions were found to exist in higher amounts in relationships classified as partnerships, as opposed to arms length relationships (Duffy and Fearne 2002a). Therefore the overriding hypothesis in the model is that partnerships improve performance.

#### The Relationship between the Internal Polity and Performance

In general, researchers suggest that the higher the level of interdependence in a relationship the better the implications for performance. For example, Mohr and Spekman (1994) and Gattorna and Walters (1996) suggest that the essence of successful partnerships is the extent of interdependence between the partners. Several other researchers also suggest that high bilateral dependence is related positively to performance (i.e. Anderson and Narus 1991, Buchanan 1992, Kumar, Scheer and Steenkamp 1995, Lusch and Brown 1996).

With regard to the nature of asymmetry in the relationship, the dependence literature does not offer unambiguous performance implications. Instead two points of view exist regarding the relationship between dependence and performance and are referred to as the opportunistic and benevolent perspectives (Gundlach and Cadotte 1994). The opportunistic perspective suggests that a dependence advantage will manifest exploitative tendencies. That is, the possession of more power (i.e. less dependence) will encourage action to gain a disproportionate share of resources from a less powerful partner (Beier and Stern (1969), Buchanan 1986, Noordewier, John and Nevin (1990) Gundlach and Cadotte 1994). On the other hand, the benevolent perspective emphasises co-operative exchange as those with the greatest power are able to manipulate other members to act in ways that achieve greater positive results for the whole system (Beier and Stern 1969). Although there are a number of views on the relationship between the structure of interdependence and performance two hypotheses are posited from the literature.

- H1 (b) Suppliers in buyer-supplier relationships characterised by greater dependence asymmetry achieve lower levels of performance.
- H1 (a) Suppliers in buyer-supplier relationships characterised by greater interdependence achieve higher levels of performance.

# The Relationship between the Internal Economy and Performance

Numerous articles routinely exhort both customer and supplier firms to seek collaborative relationships with each other as a way of improving performance. For example, Spekman (1988) states that in an attempt to gain greater competitive advantage, buyers are forging closer, more

collaborative relationships with a smaller number of vendors. Similarly, Mohr and Spekman (1994) suggest that more successful partnerships exhibited higher levels of co-ordination than less successful partnerships, while Narus and Anderson (1987) suggest that successful working partnerships are marked by co-ordinated actions directed at mutual objectives across organisations. Kalwani and Narayandas (1995) also suggest that suppliers in long-term, closer relationships achieve a higher level of sales growth and profitability compared to supplier firms that used a transactional approach to servicing customers. Therefore the following hypothesis is posited:

H2. Suppliers engaging in buyer-supplier relationships characterised by higher levels of collaborative activity achieve higher levels of performance.

#### The Relationship between Climate and Performance

The importance of variables such as trust and commitment are highlighted in the food industry initiative ECR, which emphasises that the benefit of joint working between retailers and manufacturers would only be fully realised if there was a move away from confrontational relationships to relationships based on co-operation, openness and trust (Fiddis 1997, Mitchell 1997).

In the inter-organisational literature commitment and trust are frequently highlighted as key mediating variables that contribute to relationship success in terms of efficiency, productivity and effectiveness (i.e. Noordewier, John and Nevin 1990, Sherman 1992, Anderson and Weitz 1992, Morgan and Hunt 1994, Mohr and Spekman 1994, Gundlach, Achrol and Mentzer 1995, Siguaw et al 1998). Researchers also suggest a positive relationship between the existence of relational norms and performance (Lusch and Brown 1996, Siguaw et al 1998) and suggest that conflict can be productive for the relationship if disputes are resolved amicably (Anderson and Narus 1990, Morgan and Hunt 1994, Mohr and Spekman 1994). The hypothesised relationship between the climate and performance is posited as:

H3: Suppliers in buyer-supplier relationships characterised by higher levels of co-operative attitudes and sentiments achieve higher levels of performance.

#### **METHODOLOGY**

#### **Data Collection**

Data was collected via a questionnaire sent to the managing directors of 337 fresh produce suppliers who supplied food retailers or food service companies directly. The survey was administered in March 2001 and a total of 173 questionnaires were returned. 155 of these were deemed usable, resulting in a usable response rate of nearly 46 percent.

Suppliers were instructed to answer the questionnaire in relation to the customer with whom they had been doing business with for the longest period of time. This was done to increase the likelihood that suppliers commented on a relationship that was properly formed and had established patterns of behaviour (Leuthesser 1997). The decision to specify the customer about whom suppliers should comment on was made as Ellram and Hendrick (1995) suggest that if the decision is left to the supplier the results will be biased in favour of high performing relationships as given the choice, suppliers are most likely to pick their best customer arrangements to discuss. It was believed that the selection of high age group relationships would not bias the responses towards relationships with more partnership characteristics, as researchers such as Leuthesser (1997) and Blois (1996, 1997) state that the established patterns of behaviour in the relationship may or may not be relational in nature. This belief was supported by the results of an ANOVA analysis, which showed that there were no significant differences in any of the variables in the study when relationships were grouped according to age (Duffy and Fearne 2002b).

#### **Measures Used**

All theoretical constructs were measured using multiple item scales. The structure of the economy was measured using a 22-item scale designed to capture the task-related flows of activities, resources and information in a relationship. The structure of the polity was measured using parallel multiple item scales; one to measure the suppliers view of its dependence on the chosen customer and the other to measure the supplier view of their customer's dependence on their own firm. This method for measuring interdependence has been suggested and used in several previous studies (i.e. Buchanan 1992, Kumar et al 1995, Lusch and Brown 1996, Frazier and Antia 1995, Geyskens et al 1996).

To measure the dominant attitudes and sentiments in the exchange separate scales were developed to measure levels of trust, commitment, relational norms and functional conflict resolution methods. Trust was measured using a four-item scale that captured trust in a partner's honesty and trust in a partner's benevolence (Kumar et al 1995). Commitment was measured using three items that captured the attitudinal and temporal components of commitment (Kumar et al 1995, Wilson and Vlosky 1998). Relational norms were measured using eight items that measured four norms most frequently used to operationalise the construct of relationalism. These were solidarity, flexibility, mutuality and information exchange (i.e. Kaufmann and Stern 1988, Noordewier, John and Nevin 1990, Gundlach et al 1995, Dant and Schul 1992, Heide and John 1992, Lusch and Brown 1996). Functional conflict resolution was measured using items that identify whether problems are resolved amicably or by resorting to threats using items drawn from previous studies (Salmond 1987, Gundlach et al 1995, Morgan and Hunt 1995).

Finally, performance was measured using nine items that captured commonly cited benefits of partnerships. These items measured whether there had been a reduction in costs and a sharing of realised benefits (IGD 1996, Fiddis 1997, Mitchell 1997) and changes in sales and profits which

Frazier, Spekman and O'Neal (1988) and Nielson (1997) suggest are the most important outcomes of partnerships. In addition, items were developed which captured the supplier's beliefs and expectations regarding the future prospects for the relationship and its future viability as Woo and Willard (1983) and Stern and El-Ansary (1992) suggest that performance cannot be measured solely by past or current levels of sales and profitability, but should also include indicators of how the firm will do in the future.

#### Validation And Modification Of Measures

Prior to the questionnaire being sent, all measures were reviewed by a panel of academic specialists in the area of fresh produce and buyer-supplier relationships and by a group of industry executives. This review resulted in minor changes to the wording of some questions.

After the data had been collected all measures were tested for their reliability and validity, using Cronbach's alpha and factor analysis. A factor analysis of each multiple item scale identified ten distinct and separate inter-organisational constructs that were used in all subsequent statistical analyses. These had alpha values ranging from 0.6298 to 0.9311 indicating that all scales were reliable (Duffy and Fearne 2002a). These are listed in Table 1.

**Table 1: Key Dimensions of Buyer-Supplier Relationships** 

Variable	Description
Economy Economy Factor 1 Economy Factor 2 Economy Factor 3. Economy Factor 4	Sum of Economy Factors 1 to 4  Focus On Supply Chain Efficiency Exclusive Offerings Scope And Level Of Communication and Joint Activities Involvement in Decisions And Planning
Polity Total Interdependence Dependence Asymmetry	Total Interdependence and Dependence Asymmetry  Supplier Dependence + Customer Dependence  Supplier Dependence - Customer Dependence
Climate Climate Factor 1 Climate Factor 2 Climate Factor 3	Sum of Climate Factors 1 to 3  Trust and Relational Norms Commitment Functional Conflict Resolution Methods
Performance	Future growth (performance factor 1) and current costs and sales (performance factor 2)

#### **RESULTS**

The data was analysed in three parts. Firstly, the hypotheses were tested using three regression models that estimated the separate influence of the economy, the polity and the climate on performance. Secondly a regression model was estimated that used all the theoretical constructs in their factor form to identify the joint predictive power of all of the variables in the framework. In addition, this model was used to determine the relative importance of each independent variable in the prediction of performance.

#### **Multiple Regression: Hypothesis Testing**

Three regression models were estimated to test the hypotheses. Prior to conducting the regressions the data for each of the individual variables was checked to ensure that it met the general assumptions of normality, linearity and homoscedasticity that underlie multivariate analyses (Hair et al 1998). The results of these tests indicated that no serious violations of these assumptions existed in the data set (Duffy 2002).

The results of the separate regression models for the economy, climate and polity (models 1 to 3) are shown in Tables 2 and 3. Table 2 compares the three models in terms of the amount of variance that the construct accounted for as a whole, while Table 3 shows the individual impact of the underlying dimensions of each construct on performance.

Table 2 Total Variance in Performance Accounted for By Regression Models 1 To 3

Model	Variables entered into model	R Square	Adjusted R Square	Standard Error of the estimate	F Statistic	Sig.
1	Economy: Factors 1-4.	.427	.412	.4484	27.956	.000**
2	Climate: Factors 1-3.	.644	.637	3524	90.906	.000**
3	Polity: Total Interdependence Dependence asymmetry	.185	.174	.5312	17.259	.000**

Table 3: Impact on Performance Of the Variables in Regression Models 1 to 3

Model	Variables Entered into model	Beta coefficients	T statistic	<b>Sig.</b> ** Sig. at 0.01 * sig. at 0.05
1	Constant		8.172	.000**
	Economy Factor 1	.103	1.280	.202
	Economy Factor 2	.014	.220	.826
	Economy Factor 3	.109	1.383	.169
	Economy Factor 4	.513	6.232	.000**
2	Constant Climate Factor 1 Climate Factor 2 Climate Factor 3	.406 .428 .144	2.310 6.215 7.418 2.535	.022* .000** .000** .012*
3	Constant Total interdependence Dependence Asymmetry	.360 277	8.229 4.884 -3.761	.000** .000** .000**

**Economy Factor** 1 = focus on supply chain efficiency, **Economy Factor** 2 = exclusive offerings, **Economy Factor** 3 = level and scope of communication and joint activities, **Economy Factor** 4 = Involvement in decisions and planning, **Climate Factor** 1 = Trust and Relational Norms, **Climate Factor** 2 = Commitment, **Climate Factor** 3 = Functional conflict resolution

Table 2 shows that on its own the factors that represent the economy construct accounted for 41.2 percent of the variance in the performance construct. Therefore, the results support the hypothesis that collaborative activity is positively related to performance. The results in table 2 also indicate that of the four factors that represent the economy, factor four (involvement in decision making and planning) accounts for the greatest amount of variance in performance.

Model 2 shows that the factors that make up the climate significantly accounted for 63.7 percent of the variance in the performance variable (table 2). Therefore hypothesis 3 is supported. An

examination of the beta values in table 3 show that commitment was the best predictor of performance, followed by trust and relational norms, functional conflict resolution.

Finally, model 3 shows that the structure of interdependence significantly accounts for 17.4 percent of the variance in performance. Table 3 shows that dependence asymmetry has a significant negative relationship with performance, while total interdependence has a significant positive relationship with performance. Therefore the results support hypotheses 1(a) and 1(b). According to the beta values total interdependence explained more of the variance in performance than dependence asymmetry.

#### **Identifying the Key Influences on Performance**

#### **Multiple Regression**

A regression model was also estimated using all the theoretical constructs in their factor form to identify which aspects of buyer-supplier relationships in the framework have the greatest influence on performance. Table 4 shows that together the nine variables significantly explained 64.2 percent of the variation in the performance variable. However, only four variables explained a significant amount of variation in the performance construct when all the variables in the framework were considered simultaneously (Table 5).

**Table 4: Total Variance In Performance Accounted For** 

1	Model	R Square	Adjusted R	Standard Error	F Statistic	Sig.
			Square	of the estimate		
	4	.662	.642	.3500	31.625	.000

**Table 5: Impact on Performance Of Individual Variables** 

Variables Entered.	Beta coefficient	T Statistic	Sig.
			**= 0.01 level
			* = 0.05 level
Constant		1.366	.174
Supply chain focus	004	063	.950
Exclusive offerings	061	-1.104	.272
Frequency/scope: communication/Joint activities	.009	.125	.900
Involvement in decisions/ Planning	.157	1.988	.049*
Trust & Relational Norms	.318	3.894	.000**
Commitment	.380	5.782	.000**
Functional Conflict Resolution	.129	2.269	.025*
Total Interdependence	.079	1.291	.199
Dependence Asymmetry	007	119	.905

Table 5 shows that of the four significant predictors, two variables (trust and relational norms and commitment) were significant at the 0.01 level and two variables (involvement in decisions and planning and functional conflict resolution) were significant at the 0.05 level. Using the beta coefficients to compare the impact of each variable it can be seen that commitment accounted for the most variance in performance, followed by trust and relational norms, involvement in decisions and planning and finally the level of functional conflict resolution methods. Therefore, the results indicate that the sentiments and attitudes that underlie the exchange are more significant indicators of

performance than the structural dimensions of relationships. The interpretation of the results could have been distorted by multicollinearity in the data set but, following recommendations by Gujarati (1992), a series of auxiliary regressions carried out on the set of independent variables showed that level of multiciollinearity in the set of independent variables was low (Duffy 2002).

#### **CONCLUSIONS**

The results provide support for the theory that partnerships can help a firm to improve its performance. This conclusion is based on the fact that each of the main partnership dimensions in the theoretical framework had a significant and positive relationship with performance. The exception was the relationship between dependence asymmetry and performance, which had a negative relationship as predicted and indicates that power imbalances have a detrimental effect on the sharing of partnership benefits. The results also showed that when considered together the variables in the framework significantly accounted for over 64 percent of the variation in performance. Although causality cannot be inferred from these results the research contributes to the body of knowledge that implies that partnerships can help a firm to improve its performance.

The results also showed that commitment and trust and relational norms had the greatest predictive ability in the multiple regression analysis, followed by functional conflict resolution and involvement in decisions and planning. Therefore it is concluded from this research that while all three constructs in the framework are significant indicators of performance it is the softer, more intangible, aspects of buyer-supplier relationships that are the more reliable indicators of performance.

This study contributes to inter-organisational theory as it provides empirical evidence of the performance implications of partnerships, which have been severally lacking in the literature. In particular, it has answered the calls of researchers such as Heide and John (1988), Heide and Stump (1995) and Kalwani and Narayandas (1995) who have stressed the need for empirical research that examines the outcomes of closer relationships and partnerships, particularly on the performance of supplier firms.

The finding that the attitudes and sentiments that exist in the buyer-supplier have the greater relative influence on performance highlights the importance of the legally binding code of practice that has been introduced by the UK Competition Commission to govern relationships between retailers and their suppliers in the food industry (Competition Commission 2000). This code of practice was introduced after the Competition Commission found evidence that retailers had been abusing their position of power in the industry and engaging in a number of buying practices that adversely affected the competitiveness of suppliers. They found that this had resulted in a "climate of apprehension" among many suppliers, many of whom would not identify the offending parties for fear of reprisals. This research suggests that by encouraging the development of co-operative

attitudes, the code of practice will help to ensure that the benefits to suppliers increase and that they do not receive an unfair portion of the costs associated with exchange.

As this research is one of the first attempts to investigate the outcomes of different types of buyer-supplier relationships in the fresh produce industry, it provides an important platform for further research in the area. In particular, as the inter-organisational variables in the theoretical framework accounted for a substantial and significant amount of the variation in the performance of suppliers, the framework developed in this study could be used as the basis for future empirical studies. However further research is needed to gain a more complete understanding of the dynamics of successful customer relationships and the realities of forming collaborative partnerships in a low margin commodity sector. To do this requires additional forms of research such as case studies, which would explore the inter-organisational variables in more detail. Ideally these should involve speaking to both the retailer and the supplier. Whilst this was not considered to be a viable option for empirical research in the food industry, it should prove to be more feasible using a case study approach.

#### **REFERENCES**

Anderson, J. & Narus, J. 1990, A Model Of Distributor Firm And Manufacturer Firm Working Partnerships. Journal of Marketing, vol. 54(January).

Anderson, J. & Narus, J. 1991, *Partnering As A Focused Market Strategy*. Californian Management Journal, vol. 33(Spring), pp. 95-113.

Anderson, E. & Weitz, B 1992, *The Use Of Pledges To Build And Sustain Commitment In Distribution Channels*. Journal Of Marketing Research, vol. 29(February).

Arndt, J. 1983, *The Political Economy Paradigm: Foundation For Theory Building In Marketing*, Journal Of Marketing, vol. 47, pp. 44-54.

Beier, F. & Stern, L. 1969, *Power In The Channel Of Distribution*, in Distribution Channel: Behavioural Dimensions, (Ed) L. Stern, Houghton Mifflin Company, Boston.

Blois, K. 1996, *Relationship Marketing In Organisational Markets: Assessing Its Costs And Benefits*, Journal Of Strategic Marketing, vol. 4, pp. 181-191.

Blois, K. 1997, *Are Business To Business Relationships Inherently Unstable?* Journal Of Marketing Management, vol.13.

Buchanan, L. 1986, The Organisation Of Dyadic Relationships In Distribution Channels: Implications For Strategy And Performance, in School Of Business, Stanford University.

Buchanan, L. 1992, Vertical Trade Relationships: The Role Of Dependence And Symmetry In Attaining Organisational Goals, Journal Of Marketing Research, vol. XXIX (February), pp. 65-75.

Cannon, J.P. 1992, A Taxonomy Of Buyer-Supplier Relationships In Business Markets, University Of North Carolina, Chapel Hill.

Cannon, J. & Homburg, C. 2001, *Buyer-Supplier Relationships And Customer Firm Costs*, Journal Of Marketing, vol.65(1).

Carlisle, J. & Parker, B. 1989, Beyond Negotiation, Chichester: Wiley.

Christopher, M. 1998, Logistics And Supply Chain Management: Strategies For Reducing Cost And Improving Service, Second Edition, London, Financial Times, Pitman Publishing.

Competition Commission. 2000, A Summary Of Supermarkets: A Report On The Supply Of Groceries From Multiple Stores In The United Kingdom. Available at www.competition-commission.org.uk/reports/446super.htm

Coopers and Lybrand. 1996, European Value Chain Analysis Study: A Cornerstone For Efficient Consumer Response.

Cravens, D., Shipp, S. & Cravens, K. 1993, Analysis Of Co-operative Interorganisational Relationships, Strategic Alliance Formation And Strategic Alliance Effectiveness, Journal Of Strategic Marketing, vol. 1, pp. 55-70.

Dant, R.P. & Schul, P.L. 1992, Conflict Resolution Processes In Contractual Channels Of Distribution, Journal Of Marketing, vol. 56, pp. 38-54.

Duffy, R. 2002, The Impact of Supply Chain Partnerships on Supplier Performance: A Study of the UK Fresh Produce Industry, PhD Thesis, Imperial College at Wye, University of London.

Duffy. R and Fearne, A. 2002a, The Development and Empirical Validation Of A Political Economy Model Of Buyer-Supplier Relationships In The UK Food Industry. *Under Review* 

Duffy, R and Fearne, A. 2002b, Buyer-Supplier Relationships: An Investigation of Moderating Factors on the Development of Partnership Characteristics and Performance. *Under Review* 

Dwyer, F.R., Schurr, P.H & Oh, S. 1987, *Developing Buyer-Seller Relationships*. Journal Of Marketing, vol. 51(April), pp. 11-27.

Ellram, L, 1991b, A Managerial Guideline For The Development And Implementation Of Purchasing Partnerships, International Journal Of Purchasing And Materials Management, vol. 2(1).

Ellram, L. & Hendrick, T. 1995, *Partnering Characteristics: A Dyadic Perspective*, Journal Of Business Logistics, vol. 16(1).

Emerson, R.M. 1962, *Power-Dependence Relations*, American Sociological Review, vol. 27, pp. 31-41.

Fearne, A. & Hughes, D. 1999, Success Factors In The Fresh Produce Supply Chain: Insights From The UK, Supply Chain Management, vol. 4(3), pp. 120-128.

Fiddis, C. 1997, Manufacturer-Retailer Relationships In The Food And Drink Industry: Strategies And Tactics In The Battle For Power, Financial Times Retail And Consumer Publications.

Frazier, G.L. & Antia, K.D. 1995, *Exchange Relationships And Interfirm Power In Channels Of Distribution*, Journal Of The Academy Of Marketing Science, vol.23(4), pp.321-326.

Frazier, G., Spekman, R & O'Neal, C. 1988, *Just In Time Exchange Relationships In Industrial Markets*. Journal Of Marketing, vol. 52(October), pp.52-67.

Gattorna, J.L. & Walters, D.W. 1996, *Managing The Supply Chain: A Strategic Perspective*, Macmillan Business.

Geyskens, I., Steenkamp, J., Scheer, L & Kumar, N. 1996, *The Effects Of Trust And Interdependence On Relationship Commitment: A Trans-Atlantic Study*, International Journal Of Research In Marketing, vol.13, pp. 303-317.

Gundlach, G.T., Achrol, R.S & Mentzer, J.T. 1995, *The Structure Of Commitment In Exchange*, Journal Of Marketing, vol. 59(January), pp. 78-92.

Gundlach, G. & Cadotte, E.R. 1994, Exchange Interdependence And Interfirm Interaction: Research In A Simulated Channel Setting, Journal Of Marketing Research, vol. XXXI (November), pp. 516-532.

Hair, J.F., Anderson, R., Tatham, R & Black, W. 1998, *Multivariate Data Analysis*. Fifth Edition New Jersey: Prentice-Hall International, Inc.

Harlow, P. 1994, *Category Management: A New Era In FMCG Buyer-Supplier Relationships*, Journal Of Brand Management, vol.2(5).

Heide, J. & John, G. 1988, *The Role Of Dependence Balancing In Safeguarding Transaction-Specific Assets In Conventional Channels*, Journal Of Marketing, vol. 52(January), pp. 20-35.

Heide, J.B. & John, G. 1992, *Do Norms Matter In Marketing Relationships?* Journal Of Marketing, vol.56 (April), pp. 32-44.

Heide, J. & Stump, R. 1995, *Performance Implications Of Buyer-Supplier Relationships In Industrial Markets: A Transaction Cost Explanation*, Journal Of Business Research, vol.32.

IGD. 1996, ECR Process Framework, IGD Business Publications

Jackson, B. 1985, *Build Customer Relationships That Last*, Harvard Business Review, vol. (November-December), pp. 120-8.

Joseph, W., Gardner, J., Thach, S. & Vernon, F. 1995, *How Industrial Distributors View Distributor-Supplier Partnership Arrangements*. Industrial Marketing Management, vol. 24, pp.27-36.

Kalwani, M.U. & Narayandas, N. 1995, Long-Term Manufacturer-Supplier Relationships: Do They Pay Off For Supplier Firms, Journal Of Marketing, vol.59(January), pp. 1-16.

Kaufmann, P.J. & Stern, L.W. 1988, *Relational Exchange Norms, Perceptions Of Unfairness And Retained Hostility In Commercial Litigation*, Journal Of Conflict Resolution, vol.32(3), pp. 534-552.

Kumar, N. 1996, *The Power Of Trust In Manufacturer-Retailer Relationships*. Harvard Business Review, vol. (November-December).

Kumar, N., Scheer, L.K. & Steenkamp, E.M. 1995, *The Effects Of Perceived Interdependence On Dealer Attitudes*, Journal Of Marketing Research, XXXII(August), pp. 348-356.

Lamey, J. 1996, Supply Chain Management: Best Practice And The Impact Of New Partnerships, Financial Times Management Reports.

Lamming, R. 1993, Beyond Partnership: Strategies For Innovation And Lean Supply, Prentice Hall.

Leuthesser, L. 1997, Supplier Relational Behaviour: An Empirical Assessment. Industrial Marketing Management, vol.26, pp.245-254.

Lusch, R.F. & Brown, J.R. 1996, *Interdependency, Contracting, And Relational Behaviour In Marketing Channels*, Journal Of Marketing, vol.60, pp. 19-38.

Michie, D. & Sibley, S. 1979, Channel Conflict, Competition, And Co-operation: Theory And Management, in Contemporary Issues In Marketing Channels, R. Lusch & P. Zinszer, (Eds). University Printing Services, The University Of Oklahoma.

Mitchell, A. 1997, Efficient Consumer Response: A New Paradigm For The European Fmcg Sector, Financial Times Retail And Consumer Publishing.

Mohr, J. & Spekman, R. 1994, Characteristics Of Partnership Success: Partnership Attributes, Communication Behaviour And Conflict Resolution Techniques, Strategic Management Journal, vol.15, pp.135-152.

Morgan, R. & Hunt, S. 1994, *The Commitment- Trust Theory Of Relationship Marketing*, Journal Of Marketing, vol. 58(July), pp. 20-38.

Mudambi, R. & Schrunder, C.P. 1996, *Progress Towards Buyer-Supplier Partnerships: Evidence From Small And Medium-Sized Manufacturing*, European Journal Of Purchasing And Supply Management, vol.2(2/3), pp.119-127.

Narus, J. & Anderson, J. 1987, *Distributor Contributions To Partnerships With Manufacturers*, Business Horizons, vol.30, pp. 34-42.

Nielson, C. 1997, An Empirical Examination Of The Role Of Closeness In Industrial Buyer-Seller Relationships, European Journal Of Marketing, vol.32(5/6).

Noordewier, T.G., John, G & Nevin, J.R. 1990, *Performance Outcomes Of Purchasing Arrangements In Industrial Buyer-Vendor Relationships*, Journal Of Marketing, vol. (October).

Omta, S., Trienekens, J & Beers, G. 2001, *Chain And Network Science: A Research Framework*, Chain And Network Science, vol.1(1).

Paswan, A. & Young, J. 1999, *An Exploratory Examination Of The Relationship Between Channel Support Mechanisms And Relational Norms In An International Context*, Journal Of Business And Industrial Marketing, vol.14 (5/6), pp. 445-455.

Pearce, T. 1997, Lessons Learned From The Bird's Eye Wall's ECR Initiative, Supply Chain Management, vol.2(3).

Reve, T. & Stern, L. 1986, The Relationship Between Interorganisational Form, Transaction Climate, And Economic Performance In Vertical Interfirm Dyad, in Marketing Channels: Relationships And Performance, L. Pellegrini & S.K. Reddy, (Eds), Lexington Books.

Robicheaux, R. & Coleman, J. 1994, *The Structure Of Marketing Channel Relationships*, Journal Of The Academy Of Marketing Science, vol. 22(1), pp.38-51.

Robicheaux, R. & El-Ansary, A. 1976, A General Model For Understanding Channel Member Behaviour, Journal Of Retailing, vol.52(4), pp.13-30.

Salmond, D. 1987, When And Why Buyers And Sellers Collaborate: A Resource Dependence And Efficiency View, PhD Thesis, Department Of Marketing, Maryland.

Sherman, S. 1992, Are Strategic Alliances Working? Fortune Magazine, Issue (September)

Sheth, J. & Sharma, A. 1997, *Supplier Relationships: Emerging Issues And Challenges*, Industrial Marketing Management, vol.26, pp. 91-100.

Siguaw, J.A., Simpson, P.M. & Baker, T.L. 1998, Effects Of Supplier Market Orientation On Distributor Market Orientation And The Channel Relationship: The Distributor Perspective, Journal Of Marketing, vol. 62, pp. 99-111.

Skinner, S.J., Gassenheimer, J.B. & Kelley, S.W. 1992, *Co-operation In Supplier-Dealer Relations*, Journal Of Retailing, vol.68(2).

Spekman, R. 1988a, *Strategic Supplier Selection: Understanding Long-Term Buyer Relationships*, Business Horizons, vol.31(July/August).

Spekman, R., Kamauff, J & Myhr, N. 1998, *An Empirical Investigation Into Supply Chain Management: A Perspective On Partnerships*, International Journal Of Physical Distribution And Logistics Management, vol.28(8), pp.630-650.

SPSS 1999, SPSS for Windows (Version 10) Chicago, II: SPSS Inc

Stern, L. & El-Ansary, A. 1992, Marketing Channels, Englewood Cliffs: Prentice Hall.

Stern, L.W. & Reve, T. 1980, Distribution Channels As Political Economies: A Framework For Comparative Analysis, Journal Of Marketing, vol.44, pp. 52-64.

Stuart, F. 1993, Supplier Partnerships: Influencing Factors And Strategic Benefits. International Journal Of Purchasing And Material Management, pp.22-28.

Webster, F.R. 1992, *The Changing Role Of Marketing In The Corporation*, Journal Of Marketing, vol.56(October).

Wilson, D. & Vlosky, R. 1998, *Interorganisational Information System Technology And Buyer-Seller Relationships*, Journal Of Business And Industrial Marketing, vol.13(3)

Woo, C. & Willard, G. 1983, Performance Representation In Strategic Management Research: Discussion And Recommendations, in 23rd Annual National Meetings Of The Academy Of Management, Dallas.

Wood, A. 1993, Efficient Consumer Response, Logistics Information Management, vol.6(4), pp.38-40.