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International Strategic Alliances in the UK Fresh Produce Industry

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DEDICATION

To my family, Michael, Sophie, Alexander and Ben.

ABSTRACT

The focus of this thesis is an investigation of the key factors motivating fresh produce suppliers in the UK to form strategic alliances with producers from overseas; the process of alliance formation; and the success and development of these alliances.

The UK fresh produce industry has a number of features that differentiate it from other sectors, notably its downstream channel structure, the inflexibility of supply and the lack of product differentiation. Despite these distinguishing features, there has been only a very limited amount of empirical research into strategic alliance formation in this sector.

Strategic alliances have been studied from a number of theoretical perspectives. It is argued here that these provide only partial explanations for alliance formation in the fresh produce industry in particular and that a more complete understanding of firm behaviour is obtained by using a meta-theoretical approach. This is developed based on a synthesis of the resource-based view and the transaction cost perspective including social structural explanations.

The scope of previous empirical research has also been limited by the weaknesses of methodologies employed, which have been overwhelmingly quantitative in nature. The research used here takes a qualitative approach based on the concepts and measures developed in previous empirical research. Frameworks are developed for both motivational and success factors. On the basis of these frameworks a number of propositions are explored and developed through the use of in-depth semi-structured interviews with 20 fresh produce firms in the UK.

Our research provides support for the resource-based perspective as a basis for examining strategic alliance formation and success. It also highlights the importance of network theory in focusing on the opportunities to form an alliance. Trust emerges as a dominant factor in alliance formation and success.

Keywords: International strategic alliances; Resource-based view; Network perspective; Fresh produce.

TABLE OF CONTENTS

	Page
Title page	i
Declaration of author's rights	ii
Acknowledgements	iii
Dedication	iv
Abstract	v
Table of contents	vii
List of tables	xiv
List of figures	xvii
Statement of original authorship	xix
Chapter 1 - Overview of Research	1
1.0 Introduction	1
1.1 Background to the research	1
1.2 Research problem and contribution	2
1.3 Research objectives and methodology	3
1.4 Outline of the thesis	4
Chapter 2 – The Motivation for Strategic Alliance Formation	6
2.0 Introduction	6
2.1 Definition	8
2.2 Strategic Objectives	14
2.3 Theoretical Perspectives	15
2.3.1 The Transaction Cost Perspective	17
2.3.1.1 Theoretical Critiques	20
2.3.1.2 Empirical Evidence	24

2.3.2	The Resource-Based View	28
2.3.2.1	Resource Characteristics and Alliance Formation	32
2.3.2.2	Resource Types	34
2.3.2.3	Theoretical Critiques	36
2.3.2.4	Empirical Evidence	37
2.3.3	Network Theory	41
2.3.3.1	Theoretical Critiques	48
2.3.3.2	Empirical Evidence	49
2.4	Exogenous Factors	51
2.5	Relationship Between Theoretical Schools	55
2.5.1	Comparison of the Transaction Cost Perspective and the Resource-Based View	55
2.5.2	Comparison of the Transaction Cost Perspective, Resource-Based View and Network Theory	62
2.6	Synthesis of Approaches	66
 Chapter 3 – Alliance Success		71
3.0	Introduction	
3.1	Definition and Measurement of Alliance Success	72
3.2	Factors Leading to Success	77
3.2.1	Partner Asymmetries	78
3.2.1.1	Power Imbalance	78
3.2.1.2	Managerial Imbalance	80
3.2.1.3	Competitive Rivalry	81
3.2.2	Project Payoff	82
3.2.3	Partner Match	84
3.2.3.1	Organisational Culture	84
3.2.3.2	Flexibility	88
3.2.3.3	Prior History	89
3.2.3.4	Trust	91

3.3	Limitations of Empirical Research	98
3.4	Synthesis of Approaches	102
Chapter 4 - The UK Fresh Produce Industry		106
4.0	Introduction	106
4.1	Resource Dependencies	106
4.1.1	Supply	106
4.1.1.1	Production Systems	107
4.1.1.2	Production	109
4.1.1.3	Foreign Trade	130
4.1.1.4	Importing Channels	135
4.1.1.5	Summary	136
4.1.2	Firm Resources	137
4.1.2.1	Firm Size and Incomes	137
4.1.2.2	Employment	141
4.1.2.3	Costs	143
4.1.2.4	Summary	146
4.2	The Social Network	148
4.2.1	Horizontal Relationships	148
4.2.2	The Supply Chain	149
4.2.2.1	The Retail Sector	149
4.2.2.2	Supply Chain Efficiency	153
4.2.2.3	Summary	157
4.3	Emerging Producer Strategies	158
4.4	Conclusions	160
Chapter 5 – Research Propositions		164
5.0	Introduction	164
5.1	Research Propositions	164

5.1.1	Motivations for Alliance Formation	164
5.1.2	Measurement of Alliance Success	173
5.1.3	Factors Contributing to Alliance Success	174
5.2	Summary	178
 Chapter 6 – Research Methodology I		180
6.0	Introduction	180
6.1	Problem Definition and Research Objectives	181
6.2	Discussion of Methodological Issues	182
6.2.1	Strategic Themes	182
6.2.2	The Epistemological Divide	188
6.2.2.1	Positivism	188
6.2.2.2	Interpretivism	189
6.2.3	Overview of Research Strategies	191
6.2.4	Presentation and Justification of Research Methodology	195
6.3	The Research Process	211
6.3.1	Exploratory Research	211
6.3.2	The Development of the Conceptual Frameworks	212
6.3.3	The Qualitative Research	214
6.3.3.1	Data Collection	214
6.3.3.2	The Interview as a Data Collection Technique	214
6.3.3.3	The Interview	217
6.3.3.4	Response Strategies	221
6.4	Sampling	222
6.4.1	The Qualitative Sample	222
6.4.2	Justifying a UK Producer’s Perspective	225
6.4.3	Respondent Choice	226
6.4.4	Non-Response Strategies	227
6.5	Summary	228

Chapter 7 – Research Methodology II	229
7.0 Introduction	229
7.1 Construct Measure Development Process	229
7.1.1 Domain Specification	229
7.1.2 Construct Measurement	230
7.1.3 Operationalisation	230
7.1.4 Motivational Constructs	231
7.1.4.1 Transaction Costs	231
7.1.4.2 Strategic Interdependence	236
7.1.4.3 The Social Network	241
7.1.5 Success and Development of Alliance Constructs	244
7.1.5.1 Measurement of Alliance Success	244
7.1.5.2 Factors Contributing to Alliance Success	246
7.1.6 Non-Use of Collaborative Relationships	254
7.1.7 External Influences	256
7.1.7.1 The Supply Chain	256
7.1.7.2 Technological Development	257
7.1.7.3 Globalisation of Markets	257
7.2 Measurement Instruments	258
7.2.1 Interview Schedule	258
7.3 Pilot Testing	258
7.4 Data Analysis	259
7.5 Methodological Comparison	263
7.6 Conclusion	264
Chapter 8 – Strategic Alliances in the UK Fresh Produce Industry – Overview of the Sample	266
8.0 Introduction	266
8.1 The Sample	267

8.2	The Alliances	273
8.2.1	Alliance Scope	273
8.2.2	Age of the Alliances	281
8.2.3	Resource Input	282
8.2.4	Degree of Integration	288
8.2.5	Categorisation of the Alliances	289
8.3	Conclusion	290
 Chapter 9 – Testing the Propositions		292
9.0	Introduction	292
9.1	Motivations for Alliance Formation	292
9.2	Alliance Success	343
9.2.1	Measurement of Alliance Success	343
9.2.2	Factors Contributing to Alliance Success	350
9.3	Case Studies	377
9.4	Conclusion	387
 Chapter 10 – Conclusions		390
10.0	Introduction	390
10.1	Conclusions	391
10.1.1	Motivations for Alliance Formation	391
10.1.2	Alliance Success	398
10.2	Implications for the Firm	410
10.3	Contributions to Theory	415
10.4	Contributions to Methodology	420
10.5	Limitations	425
10.6	Suggestions for Further Research	427

Bibliography	429
Appendix 1 Empirical Studies of Strategic Alliance Formation: Non-Sector-Specific	476
Appendix 2 Empirical Studies of Strategic Alliance Formation: Sector-Specific	480
Appendix 3 ICM Protocols for Crop Production in the UK	482
Appendix 4 The Interview Guide	486
Appendix 5 Interview Tables	493

List of Tables

Table 2.1	Transaction cost Perspective and the Resource-Based View – Key Features	57
Table 2.2	Ownership Decisions based on Transaction Cost and Resource-Based Perspectives	59
Table 2.3	The Resource-Based View and Network Theory – Key Features	63
Table 3.1	Determinants of Alliance Success	77
Table 4.1	Field Vegetables: Planted Area in the UK, Hectares, 1990-2000	110
Table 4.2	Field Vegetables: Production, 1990-2000	111
Table 4.3	Field Vegetables: Value of Home Production Marketed in the UK, 1990-2000	113
Table 4.4	Protected Vegetables: Planted Area, Quantity and Value of Home Production Marketed in the UK, 1990-2000	118
Table 4.5	Potatoes: Planted Area, Quantity and Value of Home Production Marketed in the UK, 1990-2000	122
Table 4.6	Fruit: Planted Area, Quantity and Value of Home Production Marketed in the UK, 1990-2000	125
Table 4.7	Fruit and Vegetable Imports, Quantity and Value, 1990-1999	131
Table 4.8	UK Holdings by Total Horticultural Area Size Groups, 1999	137
Table 4.9	Number of VAT-Registered Growers of Fresh Fruits and Vegetables by Turnover, 1999	138
Table 4.10	Horticultural Holdings: Distribution of Farm Incomes in England 1999/00	140

Table 4.11	Horticultural Holdings: Income by Size of Farm in England, 1999/00	141
Table 4.12	UK Labour Force in Agriculture, 1999 and 2000	142
Table 4.13	Horticultural Holdings: Input Costs, 1996-2000	144
Table 4.14	Average Earnings per hour in Agriculture and Horticulture by type of worker, 2000	145
Table 4.15	Retail Sales by Major Supermarkets at Current Prices, 1994-1999	150
Table 4.16	Distribution of Fresh Fruit and Vegetables by Type of Outlet, 1994-1999	150
Table 6.1	Themes of Qualitative Inquiry	186
Table 6.2	Methodologies Used in Strategic Alliance Literature	197
Table 7.1	General Data Analysis Strategies by Authors	260
Table 8.1:	The Sample	268
Table 8.2	Partner Firm Indicators	274
Table 8.3	Product's Traded and Location of Alliance Partners	280
Table 8.4	Categorisation of the Alliances	283
Table 9.1	The Choice of Business Structure: Vertical Integration versus Alliance Formation	294
Table 9.2	Partner Firm Structure	298
Table 9.3	Costing the Alliance	300
Table 9.4	Capital and Labour Costs	304
Table 9.5	Frequency and Types of Interaction	308
Table 9.6	Financial Indicators, Alliance Partners	320
Table 9.7	Scope of Operations, UK Firms	324
Table 9.8	Prior Knowledge of Partner	331
Table 9.9	Partner Choice	337
Table 9.10	Outcomes	346

Table 9.11	Additional Benefits	362
Table 9.12	Alliance Development	373
Table 9.13	Support for the Propositions	376
Table A5.1	Firm Indicators	493
Table A5.2	Marketing	497
Table A5.3	Partner Firm Indicators	500
Table A5.4	Motivation for Alliance Formation Within Firm Strategy	505
Table A5.5	The Alliance	507
Table A5.6	Partner Choice	517
Table A5.7	Social Structure	523
Table A5.8	Costings	525
Table A5.9	Outcomes	530
Table A5.10	Outcomes – Additional Benefits	534
Table A5.11	Alliance Development	536
Table A5.12	External Influences	540

List of Figures

Figure 2.1	Strategic Alliance Forms	12
Figure 2.2	Transactions Cost Theory Framework	23
Figure 2.3	The Resource-Based View	30
Figure 2.4	Integrated Framework, Resource-Based Perspective and Social Structure, Gulati 1995	47
Figure 2.5	Integrated Framework, Resource-Based Perspective and Transaction Cost Economics, Bucklin and Sengupta, 1993	65
Figure 2.6	Proposed Framework for International Alliance Formation in the UK Fresh Produce Industry	67
Figure 3.1	The Antecedents and Outcomes of Trust	96
Figure 3.2	Proposed Framework for the Success and Development of Alliances in the Fresh Produce Industry	103
Figure 4.1	Average Farm-Gate Prices, Selected Field Vegetables	114
Figure 4.2	Monthly Marketing Patterns, Principal Field Crops	115
Figure 4.3	Index of Producer Prices of Selected Horticultural Products, 1988-1999	116
Figure 4.4	Principal Protected Vegetables: Average Farm-gate Prices, 1990-2000	120
Figure 4.5	Principal Protected Crops: Monthly Marketing Patterns	121
Figure 4.6	Average Farm-Gate Prices for Potatoes, 1990-2000	124
Figure 4.7	Average Farm-Gate Prices: Principal Fruit Crops, 1990-2000	128
Figure 4.8	Monthly Marketing Patterns: Principal Fruit Crops	129
Figure 4.9	Key Features of the UK Fresh Produce Industry	161

Figure 5.1	Proposed Framework for International Alliance Formation in the UK Fresh Produce Industry	166
Figure 5.2	Proposed Framework for the Success and Development of Alliances in the Fresh Produce Industry	176
Figure 9.1	Turnover of Focal Firm 1999	317
Figure 9.2	Market Share of Focal Firm 1999	319
Figure 10.1	Framework for International Alliance Formation in the UK Fresh Produce Industry	392
Figure 10.2	Framework for the Success and Development of Alliances in the UK Fresh Produce Industry	399
Figure 10.3	Antecedents to Trust	406
Figure 10.4	Alliance Formation and Success in the UK Fresh Produce Industry	417

STATEMENT OF ORIGINAL AUTHORSHIP

This thesis is the original work of the student submitting it for examination.

CHAPTER ONE

OVERVIEW OF THE RESEARCH

1.0 Introduction

This chapter presents an overview of this study. It outlines the background to the research and the key research questions under investigation. An outline of the research objectives and methodology is presented. Finally, a summary of the content of the chapters of the thesis is presented.

1.1 Background to the Research

The research stems from the author's developing interest in the strategic behaviour of firms in the fresh produce industry in response to changing pressures from both within and outwith the supply chain. In particular, the increasing importance of collaboration between UK producer firms and producers from overseas in strategic alliances. The author's interest was in what factors motivated firms to make the strategic choices they were making, how they made those choices, how these relationships evolved and what made these relationships successful.

Strategic alliances have become increasingly important as a strategic choice for firms (Bleeke and Ernst 1993; Faulkner 1994; James 1992; UNCTAD 1994; Urban and Vendemini 1992). However, none of the major studies investigating the motivations for strategic alliances over the last decade have focused on the fresh produce industry, or even agriculture. The sectoral focus of empirical research has generally been manufacturing and high technology industries.

There are three specific features of the fresh produce sector that differentiate it from other industries, notably its downstream channel structure, the inflexibility of supply and the lack of product differentiation.

There have been significant changes in the structure of marketing channels in the fresh produce industry over the past two decades which have impacted on the strategic behaviour of firms within these channels (Brookes 1995; Ducroq 1991; Greipl, Laumer and Tager 1992; Keynote Business Insight 2000; Pilotti 1991; Reuters 2000; Shaw and Dawson 1995; Smith and Sparks 1993). The main features are the increased market share and power of a decreasing number of large retail businesses over the rest of the marketing channel (Reuters 2000); a reduction in the number of suppliers to any one retailer; a reduction in channel length and a change in the role of suppliers.

The industry is also characterised by short-term supply inflexibility, notably the fact that supply does not automatically respond to demand because of factors such as climate and season. Third, product differentiation is relatively limited.

The author wanted to examine whether these factors imparted any distinctive characteristics to the motivations for, process and evolution of strategic alliance formation within the fresh produce sector.

1.2 Research Problem and Contribution

The purpose of this research is to ascertain the key factors motivating fresh produce suppliers in the UK to form strategic alliances with producers from overseas; the process of alliance formation; and the success and development of these alliances. The specific focus is on international producer alliances between firms in the UK and alliance partners from overseas.

This research will take account of the significant changes in the structure of marketing channels in the fresh produce industry and will examine the role of producer alliances within this context. It will also add an international dimension to an area that is very under-researched.

1.3 Research Objectives and Methodology

1. *To examine the viability of a resource-based view with social structural explanations as a means of investigating the motivations for alliance formation and the success and development of alliances.*
2. *To examine the interconnectedness and interaction between the factors influencing a firm's motivations to become involved in strategic alliances and the success and development of alliances.*
3. *To assess the significance of the proposed measures of motivations for alliance formation and the success and development of alliances.*
4. *To establish the gaps emerging from previous empirical work, based in part on the limitations of existing research.*
5. *To add knowledge to the literature by the development of theoretical perspectives and a focus on an area that is under-researched.*
6. *To identify research questions which still need to be addressed, both in the light of existing empirical research and the findings of this study.*

Research frameworks will be developed, following an assessment of the main theoretical schools that address strategic alliance formation and success. A set of

propositions will be composed, developed from these conceptual frameworks. These will be tested using a series of qualitative research interviews using a semi-structured interview guide. The justification of the primary research approach is outlined in Chapter 6.

1.4 Outline of the Thesis

This thesis is divided into 10 chapters. This first chapter presents an overview of the research. Chapters 2 and 3 review the literature and develop the conceptual frameworks for this research. This research focuses on strategic alliance formation in one particular industry, namely the fresh produce industry in the UK. This is described in Chapter 4. Chapter 5 details the research propositions to be tested. Chapters 6 and 7 present the research methodology. Chapters 8 and 9 present the research findings. Chapter 10 presents the conclusions and implications of the research.

Chapter 2 discusses the research literature on the motivations for strategic alliance formation and examines the contribution it makes to the investigation of strategic alliance formation in the fresh produce sector. A meta-theoretical framework is developed from a synthesis of theoretical schools.

Chapter 3 examines the research literature on the success and development of strategic alliances and its contribution to the study of strategic alliances in the fresh produce sector. A synthesis of the approaches used is developed and a framework for empirical testing presented.

Chapter 4 describes the fresh produce industry in the UK. It begins with an overview of the key market sectors. It then describes UK production and trade. Following this is a description of the industry structure and the supply chain. There is an

examination of the key drivers of change in the industry and the impacts of this change on producers in the industry.

Chapter 5 details the research propositions. Chapters 6 and 7 present the research methodology. Chapter 6 outlines the key methodological decisions. It describes the research objectives, data collection methods and sampling. Chapter 7 describes the development of the measurement instruments and the method of data analysis undertaken. Chapter 8 examines the nature and characteristics of the firms and alliances that formed the basis of the empirical research. Chapter 9 presents a discussion of the specific propositions that were tested. In the final chapter we summarise our study's main findings and discuss these results in the context of the literature discussed in Chapters 2 and 3. This is followed by a discussion of the implications of our results for the firm. The study's contributions to theory and methodology are identified. Finally, we highlight the limitations of our study and suggest avenues for future research.

CHAPTER TWO

THE MOTIVATION FOR STRATEGIC ALLIANCE FORMATION

2.0 Introduction

The purpose of this chapter is to examine the contribution that can be made by the research literature on strategic alliances into international alliance formation in the fresh produce sector in the UK. The UK fresh produce industry has a number of features that differentiate it from other sectors. It is characterised by short-term supply inflexibility, notably the fact that supply does not automatically respond to demand within the growing period because of factors such as climate and season. Despite improvements in storage and transportation most fresh produce is highly perishable, meaning that supplies of most fresh produce cannot be stored over more than a short-term period. Demand is also relatively unpredictable and responsive to factors such as the weather. There have also been significant changes in the structure of marketing channels in the fresh produce industry over the past two decades that has impacted on the strategic behaviour of firms within these channels (Brookes 1995; Keynote 2000; Reuters 2000; Shaw and Dawson 1996; Smith and Sparks 1993).

Despite these distinguishing features, there has been only a very limited amount of empirical research into strategic alliance formation in this sector. None of the major studies investigating the motives for strategic alliance formation have focused on the fresh produce sector or even agriculture (see Appendices 1 and 2).

In addition, most empirical research in this area has developed from a manufacturing tradition (Ford 1990; Gulati 1995, 1998; Nohria and Eccles 1992). The focus of the research inquiry has been on the motives of the seller firm marketing-out rather than a buyer with supply-side needs. In contrast, the focus of the research presented here

is on the viewpoint of the UK producer buying in from a producer from overseas. Thus the perspective of this research is of a buyer, not a seller, in contrast to most previous research.

Strategic alliances have been studied from a number of theoretical perspectives that provide distinctive yet often overlapping reasons to explain the motives underlying the entry of firms into strategic alliances, the conditions under which strategic alliances are likely to be formed and the types of strategic alliances that are likely to be formed. It is our contention that none of the theoretical perspectives used to study strategic alliances in themselves present full explanations of firm motivations and that a more complete understanding of firm behaviour is obtained by using a meta-theoretical approach.

Finally, previous empirical work is criticised here (Chapters 2, 3 and 6) and elsewhere (Buckley and Chapman 1997; Driscoll and Paliwoda 1997; Glaister and Buckley 1998; Parkhe 1993; Tsang 2000) for the weaknesses of methodologies. The methodologies used in previous empirical work on strategic alliances have been overwhelmingly quantitative in nature. Most empirical work has been principally conducted through the use of secondary data (Ahuja 2000; Burgers, Hill and Kim 1993; Combs and Ketchen 1999; Dussauge and Garrette 1995; Gulati 1995; Hamel, Doz and Prahalad 1989) and postal questionnaires (Aulakh, Kotabe and Sahay 1996; Bucklin and Sengupta 1993; Driscoll and Paliwoda 1997; Glaister and Buckley; Mohr and Spekman 1994). A key critique of previous empirical research is in the constructs and measures used in the research. There are several inter-linked areas of criticism. First, some of the constructs used in prior empirical work have been criticised in this thesis (Chapters 2 and 3) for being overly simplistic or not particularly good proxies for the variables they are intended for (Anderson and Coughlan 1987; Aulakh, Kotabe and Sahay 1996; Burgers, Hill and Kim 1993; Combs and Ketchen 1999; Mohr and Spekman 1994; Reijnders and Verhallen 1996). Second, a wide array of measures have been used to estimate the same variables with the consequence that the support for a variable as an influence on motivations or

success is totally dependent on the proxy used in empirical research. Third, the same measures have been used in different empirical work to measure different variables.

These criticisms have led a number of researchers to call for more qualitative approaches to this area to reach a deeper understanding of the subject (Buckley and Chapman 1997; Driscoll and Paliwoda 1997; Glaister and Buckley 1998; Parkhe 1993; Tsang 2000). The research used here research takes a qualitative approach based on the concepts and measures developed in previous empirical research.

This chapter presents an overview of research into strategic alliances, with a focus on the motivation for firms to become involved in alliances. The chapter starts with a discussion of the definition of strategic alliances. The various types of alliances are discussed in terms of functional characteristics and structural forms. The various strategic objectives of strategic alliance formation found in the literature are summarised. These are then discussed in specific relation to the differing theoretical perspectives proposed as explanations of alliance formation. These perspectives are presented and discussed and empirical research in each area analysed. The relationship between the perspectives is presented. Finally a theoretical framework is developed from a synthesis of the literature. This will be the basis of the empirical research in this study.

2.1 Definition

Strategic alliances between firms are not a new phenomenon. What is new is the increased significance in many companies adopting them as a strategic choice in competition. Over the last two decades there has been unprecedented growth in the number of strategic alliances between firms (Das and Teng 2000; Doz and Hamel 1998; Gomes-Casseres 1996; Gulati, Nohria and Zaheer 2000; Inkpen 2001; Parkhe 1998; Varadarajan and Cunningham 1995; Yoshino and Rangan 1995). An increasing number of these alliances are international in nature, involving partners

from more than one country (Parkhe 1998). The increased globalisation of markets, shorter product life-cycles, rising cost pressures and a growing need to respond to specific host government requirements and consumer tastes has meant that cross-border partnerships are being entered into with “greater frequency and urgency” (Parkhe 1998). Parkhe (1998) argues that international strategic alliances involve products central to partner firm’s competitive advantages rather than peripheral products, geographic markets and technologies. He concludes that companies are increasingly competing through co-operation and that the “familiar model of the single, independent, autonomous company is dying out”.

The proliferation of strategic alliances has led to a growing stream of research by scholars who have examined many of the causes and consequences of such partnerships, mostly at the dyadic level. The diverse organisational characteristics and different research interests of scholars in the field have resulted in a number of definitions of what constitutes a strategic alliance. Most scholars agree that strategic alliances are a relationship between firms involving exchange, sharing or co-development of products technologies or services. Inkpen (2001) defines strategic alliances as:

“collaborative organisational arrangements that use resources and/or governance structures from more than one existing organisation”.

Parkhe’s (1993) definition is more precise and also includes the notion of a time horizon:

“Relatively enduring inter-firm cooperative arrangements, involving flows and linkages that use resources and/or governance structures from autonomous organisations, for the joint accomplishment of individual goals linked to the corporate mission of each sponsoring firm.”

Das and Teng's (2000) definition of strategic alliances includes the objective of obtaining competitive advantage that is central to the resource-based view (discussed below):

“Strategic alliances are voluntary cooperative inter-firm agreements aimed at achieving competitive advantage for the partners.”

Finally, international strategic alliances involve cross-border flows and linkages. Using Parkhe's (1991) definition they can be defined as:

“Relatively enduring inter-firm cooperative arrangements that utilize resources from autonomous organisations based in two or more countries.”

Amalgamating Parkhe's definitions (1991 and 1993), the international strategic alliances examined in this thesis are defined as:

“Relatively enduring inter-firm cooperative arrangements, involving flows and linkages that use resources and/or governance structures from autonomous organisations based in two or more countries, for the joint accomplishment of individual goals linked to the corporate mission of each sponsoring firm.”

Inkpen (2001) argues that strategic alliances have three important characteristics. First, the two (or more) partnering firms remain independent subsequent to the formation of the alliance. Second, alliances possess the feature of ongoing mutual interdependence, in which one party is vulnerable to the other (Parkhe 1993). Mutual interdependence leads to shared control and management, which contributes to the complexity of alliance management and often creates significant administrative and

coordination costs. Third, because the partners remain independent, there is uncertainty as to what one party is counting on the other to do (Powell 1996).

Strategic alliances can take a variety of forms, including, but not limited to, joint ventures, minority equity alliances, research and development contracts, joint research and development, joint production, joint marketing and promotion, enhanced supplier partnerships, distribution agreements and licensing agreements (Adler 1966; Gates 1993; Inkpen 2001; Varadarajan and Rajaratnam 1996; Yoshino and Rangan 1995). They can occur across vertical and horizontal boundaries. They can be a long-term relationship between two firms or exist for only the lifetime of a particular project. Thus strategic alliances can be seen as taking a myriad of forms along a spectrum of firm collaboration. At one end of the spectrum is the pure, anonymous spot market, which is sufficient for simple transactions such as basic commodity sales. Market prices act as the incentives for the exploitation of profit opportunities and market participants are quick to adapt to changing circumstances as information is revealed through prices. At the other end of the spectrum lies the fully integrated firm, where trading parties are under unified ownership and control. These two types of inter-firm relationships are excluded from the definition of a strategic alliance. Inkpen (2001) notes that:

“Although some authors have treated mergers and acquisitions as a form of alliance, this is inconsistent with the concept of an alliance. The new organisation that results from a merger or acquisition does not depend on two or more existing organisations for its survival, as does an alliance.”

Contractor and Lorange (1988) list the various types of strategic alliances in ascending order of involvement and interaction by the organisations forming the alliance (Figure 2.1).

Figure 2.1

Strategic Alliance Forms

Technical training
Supplier/buyback arrangement
Production/assembly arrangement
Patents licensing
Franchising
Know-how licensing
Management/ marketing service agreement
Non-equity cooperative arrangements (exploration, research partnership, development, co-production)
Equity joint ventures

Source: Inkpen (2001) from Contractor and Lorange (1988)

Until the late 1980's, the equity joint venture was viewed virtually synonymously with the term alliance. More recently, and concurrent with the vast number of new alliance forms, researchers have been investigating a much broader set of national and international collaborative arrangements (Hagedoorn 1993).

In an effort to better organise such a large collection of alliance forms, theorists have proposed several typologies of strategic alliances (Das and Teng 2000; Dussauge and Garrette 1995; Lorange and Roos 1990; Oliver 1990; Pisano and Teece 1989).

Most typologies of alliances have been based on the dichotomy of equity alliance versus non-equity alliance (Gulati 1995; Osborn and Baughn 1990; Tallman and Shenkar 1990). Equity alliances include equity joint ventures and minority equity alliances. Non-equity alliances refer to all other co-operative arrangements that do

not involve equity exchange. Killing (1988) and Yoshino and Rangan (1995) differentiate equity alliances into three types: non-traditional contracts (non-equity based), minority equity alliances and joint ventures. Mowery, Oxley and Silverman (1996) differentiate two types of non-equity alliances: unilateral contract-based and bilateral contract based. Das and Teng (2000) integrate the above in their classification of alliance structures into four types: joint ventures; minority equity alliances; bilateral contract-based alliances and unilateral contract-based alliances.

Das and Teng (2000) define alliances as being bilateral contract-based when the partners have sustained production of property-rights. Joint research and development, joint marketing and promotion, joint production and enhanced supplier partnerships are some examples of bilateral contract-based alliances (Mowery, Oxley and Silverman 1996). Das and Teng (2000) argue that these alliances need partners to input resources and work together on a continuing basis so that there is a high degree of integration of the firms. Bilateral contracts are usually incomplete and open-ended. Das and Teng (2000) note that:

“To some extent, partners of bilateral contract-based alliances have to let the cooperative relationship unfold itself.”

Unilateral contract-based alliances embody a well-defined transfer of property-rights, such as the ‘technology for cash’ exchange in licensing agreements. Licensing, distribution agreements and research and development contracts are the main forms of unilateral contract-based alliances. The key feature is that individual firms carry out their obligations independently of others. Contracts tend to be complete and specific and partners are expected to perform on their own accordingly, without much coordination or collaboration. There is a low level of integration of the firms involved (Mowery, Oxley and Silverman 1996).

2.2 Strategic Objectives

The overall strategic objective of alliance partners is the pooling of resources to create value in a way that each firm could not achieve by acting alone. Value creation refers to the process of combining the capabilities and resources of the partners to perform a joint task that has the potential to create monetary or other benefits for the partner. This symbiosis creates competitive advantage. The perceived value to each of the firms need not be the same but each alliance partner must gain some benefits for an alliance to be the preferred option (Porter and Fuller 1986).

The strategic objectives of alliances are discussed extensively in the literature (Contractor and Lorange 1988; Gulati 1998; Harrigan 1986; Hennart 1991, 1988; Kogut 1988; Osborn and Hagedoorn 1997; Porter and Fuller 1986; Varadarajan and Cunningham 1995). The objectives are linked in that all are aimed at improving a firm's strategic positioning vis-à-vis its rivals (Kogut 1988). The objectives of an alliance can be broadly classified into several categories. Firms will often have concurrent strategic objectives in forming alliances.

The first objective is to gain economies of scale by pooling economic activities such as raw materials supply, manufacturing and marketing and distribution. A second objective is to reduce risk and promote stability. Alliances may be an attractive option for large, risky projects because neither partner bears the full cost of the venture activity. A third objective is legitimacy (Oliver 1990). Firms may seek established partners to capitalise on the partner's reputation. This objective may be prevalent in cases where small firms seek cooperative relationships with larger firms. Legitimacy concerns may also exist when firms try to enter international markets. A fourth objective is to gain access to another firm's knowledge or ability to perform an activity where there are asymmetries between firms. Porter and Fuller (1986) referred to this benefit as one of access: firms seek access to such things as distribution channels and specialised know-how. Using alliances to enter foreign

markets or to bring foreign products to local markets can give the firm access to resources that would not be available if the firm attempted the strategy alone. Firms may pool complementary resources in order to diversify into new product or geographic markets. Firms may also seek new technology in their core business area and therefore use an alliance to gain access to that knowledge.

The potential costs of alliance strategies must also be considered. First, there are the costs of coordinating the often divergent interests of partners (Killing 1983). Second, when proprietary expertise and market access are transferred to partner firms, alliances have the potential to create competitors (Reich and Mankin 1986). Third, alliances can create an adverse bargaining position when one partner captures a disproportionate share of the value created by an alliance (Hamel 1991; Inkpen and Beamish 1997).

2.3 Theoretical Perspectives

Strategic alliances have been studied from a number of theoretical perspectives that provide distinctive yet often overlapping reasons to explain the motives underlying the entry of firms into strategic alliances, the conditions under which strategic alliances are likely to be formed and the types of strategic alliances that are likely to be formed. These include transaction cost economics (Hennart 1988; Williamson 1985); perspectives focusing on strategic or resource needs of firms (Barney 1991; Garcia-Pont and Nohria 1999; Harrigan 1988; Nohria and Garcia-Pont 1991; Pfeffer and Salancik 1978); and social structural explanations (Gulati 1995, 1999, Gulati and Gargiulo 1999; Walker, Kogut and Shan 1997).

There are parallels with the internationalisation literature, in particular that strand developed in the Multinational Corporation (MNC) literature by Dunning (1988) where decisions to internationalise are based on choices in terms of ownership, location and internalisation. Indeed much current work in the internationalisation

area is focused on collaborative ventures (Buckley and Chapman 1997; Dunning 1995; Glaister and Buckley 1998; Inkpen 2001). There are also overlaps with 'channel choice' literature (Anderson and Coughlan 1987; Driscoll and Paliwoda 1997) where alliances can be seen as a halfway house between a free-market and an administered channel. Driscoll and Paliwoda (1997) use both strands to examine strategic alliances as one option in international market entry choice modifying Dunning's (1988) eclectic paradigm.

Underlying most theoretical bases of inter-firm relations is the assumption that the environment in which firms operate is not characterised by perfect competition where market-based exchanges are the most efficient means of consummating transactions. When imperfect conditions prevail, firms must choose between using market-based transactions governed by price mechanisms and the possibility of exploitation and internalising transactions through either alliances (quasi-integration) or direct ownership (integration) and governing them through the firm's internal hierarchical control structure.

Scholars have often considered strategic alliances as an alternative to internalisation on the one hand and market exchanges on the other (Buckley and Casson 1996; Hennart 1988). That is, for a given product or service a firm may choose to i) produce it on its own; ii) purchase it from spot markets; or iii) make it jointly with partner firms.

The transaction cost explanation for the formation of alliances is based on the approach proposed by Williamson (1975; 1985). This argues that the existence of a firm is due to failures in the market. The firm is chosen as a governance structure when the costs of carrying out certain exchange transactions in the open market are greater than organizing these transactions within the firm. From the transaction cost perspective, the primary objective of a firm is to minimise transaction costs through choosing appropriate governance structures for its transactions (Coase 1937; Williamson 1975, 1985).

The resource-based view, in contrast, emphasises value the maximisation of a firm through the pooling and utilization of valuable resources. It builds on the assumption of resource dependency theory that firms are not self-sufficient with respect to critical skills and resources and are therefore dependent on other firms (Pfeffer and Salancik 1978). The resource-based view examines the link between firm resources and sustained competitive advantage (Barney 1991).

The social structural or network perspective argues that patterns of observed inter-firm linkages reflect the prior patterns of inter-firm relationships (Gulati 1995, 1999; Gulati and Gargiulo 1999; Walker, Kogut and Shan 1997). A firm's ability to form new relationships is determined by the set of opportunities provided by its position in the prior network structure (Ahuja 2000). The network provides a firm with a resource of social capital.

The transaction cost, resource-based and network perspectives on the motivations for alliance formation are discussed in detail below.

2.3.1 The Transaction Cost Perspective

The original transaction cost theory argued that the properties of a transaction determined the governance structure and institutional arrangement of a firm (Williamson 1975, 1985). The three specific properties were asset specificity, uncertainty and infrequency of transactions. In the original transactions cost framework transactions that involved uncertainty about their outcome, recurred frequently and required substantial transaction-specific investments were more likely to occur in hierarchically organised firms than in the market (Williamson 1975, 1985). Conversely, exchanges that were discreet and unique and would not require transaction specific investments would take place in markets. Asset specificity refers to the "degree to which an asset can be redeployed to alternative uses and by alternative users without sacrifice of productive value" (Williamson 1988).

In the original framework (Williamson 1975) complete vertical integration was identified as an appropriate response to governance problems. These were associated with three factors: (i) safeguarding transaction-specific investments from subsequent opportunistic exploitation, (ii) adapting to relevant external environmental contingencies that may be far too numerous or unpredictable to be specified ex-ante in a contract and (iii) evaluating contractual compliance when facing performance ambiguity. Human behaviour was assumed to have two key features, bounded rationality and opportunism (Williamson 1975, 1985, 1999). Bounded rationality is intentionally rational behaviour that is limited because decision makers only recognise a limited number of alternatives to this behaviour and are aware of only a few consequences of these alternatives (Tsang 2000). Opportunism results when management is not in the best interests of the firm.

Transaction cost theory was developed by Williamson (1991a) and Heide (1994) to include the notion of an alliance or a 'hybrid mode of governance' (Williamson 1991a). An alliance is seen as a halfway house between a pure exchange and a hierarchical transaction. Strategic alliances combine the features of internalisation and market exchanges because they partially internalize an exchange. Contracts will still be needed, but since they are often incomplete, much of the activities will be left to joint coordination. Alliances have stronger incentives and adaptive capabilities than hierarchies, whilst providing more administrative control than markets. Williamson (1991a) argues that hybrid forms will be chosen when the asset specificity of the transaction concerned is of an intermediate degree, while extreme degrees of asset specificity are handled by markets or hierarchies. Gulati (1995) reiterates that alliances will be preferred:

“When the transaction costs associated with an exchange are intermediate and not high enough to justify vertical integration....”

Alliances can also be the chosen form when internalisation is more cost efficient “but constraints of various kinds prohibit full internalisation” (Ramanathan, Seth and Thomas 1997).

Based on the transaction cost perspective, internalisation theory proposes that the rational, profit-maximising multinational corporation (MNC) would tend to use wholly-owned subsidiaries to achieve its international strategic objectives. According to Calvet (1981), organising within the MNC provides channels for the transfer of knowledge and slows the dissipation of information to competitors. However, using transaction cost theory, persuasive arguments can be made for the formation of alliances as an alternative to the MNC (Beamish and Banks 1987; Contractor 1990; Dunning 1995; Hennart 1991; 1988; Kogut 1988; Madhok 1997). Madhok (1997) argued that markets may be unable to adequately bundle together the relevant tacit resources and capabilities. Beamish and Banks (1987) and Contractor (1990) proposed that alliances are preferable to MNCs when the transactional difficulties of opportunism, bounded rationality, uncertainty and small numbers condition can be efficiently dealt with in an alliance. Kogut (1988) argues that the “situational characteristics best suited to a joint venture are high uncertainty over specifying and monitoring performance, in addition to a high degree of asset specificity.” The high degree of asset specificity precludes arm’s-length market transactions. The high uncertainty over performance makes even a long-term contract difficult and costly to stipulate ex-ante the conditions and contingencies for monitoring performance and guarding against opportunism. A joint venture addresses this issue by providing a superior alignment of incentives through the mutual dedication of resources and sharing the residual value of the venture. Alliances also reduce the transaction and coordinating costs of arm’s-length market transactions (Dunning 1995). Specifically, an alliance can be a more rapid means of establishing a competitive position than through replication or internal development. This implies that alliances may be more likely to occur in industries undergoing rapid structural change.

Alliances may also be preferable to acquisition when acquiring the desired firm-specific assets also means acquiring other businesses that are foreign to the buyer (Chi 1994; Hennart 1988). Thus, an alliance can be more economically feasible and involve a less irreversible commitment than acquisition. Because there is no transfer of ownership rights, the relationship may be rescinded at relatively low cost. Hennart (1988) outlined specific circumstances of narrow imperfect markets that are likely to lead to internalisation between parents and alliances. These include the markets for some raw materials and components, types of knowledge, loan capital and distribution. Given the inefficient market for these goods, firms may attempt to bypass the market by forming a cooperative link with another firm.

2.3.1.1 Theoretical Critiques

Transaction cost theory has been criticised for its preoccupation on the minimisation of costs (Tsang 2000 citing Bell 1996). Bell (1996) argued that “it would be more correct to consider both the benefits and costs of governance structures when contemplating a transaction.” He argued that when choosing a governance structure, the firm, within the constraint of bounded rationality, would make a comparison of all the gains and losses that attach to one governance structure relative to others. Within the transaction cost perspective there is no account of the ‘payoff’ of the alliance in terms of the strategic values and development costs of the alliance (Bucklin and Sengupta 1993). In terms of strategic values, there are the marketing and creativity benefits of an alliance such as access to new markets, synthesis of firm skills and the synergy between partners. In terms of development costs there are the costs of co-ordinating the alliance with the rest of the business. Such anticipated costs arise from the likely interdependence of tasks across organisational boundaries and the complexity of coordinating activities to be completed jointly or individually. In an empirical study of 1,500 alliances, Gulati and Singh (1997) found considerations associated with managing coordination costs to dominate over concerns over appropriation in choice of alliance. In addition, transaction cost

accounts in general focus on single-party cost minimisation while alliances are inherently dyadic exchanges. This raises the question of whose costs are minimised (Zajac and Olsen 1993).

The transaction cost perspective's focus on a purely economic analysis ignores behavioural issues. Robins (1987) argues that the effort to explain structural change solely on the basis of microeconomic processes obscures the role of historical and social forces that influence the competitive environment. In addition, the emphasis on structural arrangements and tangible assets (Lorenzoni and Lipparini 1999) makes some implicit assumptions that organisation design can be equated with structure when organisation design includes variables besides the physical structure (Inkpen 2001). These include the people, task, reward systems and decision and information processes and in particular the intangible assets associated with learning and knowledge.

The structural emphasis of transaction cost economics means there is no account of processual issues resulting from their ongoing nature (Buckley and Chapman 1997). Alliances are usually not one-off transactions but, rather, entail continuing exchange and adjustments, as a result of which process issues become salient.

Scholars question an over-emphasis in transaction cost economics on asset specificity, without sufficient consideration of the firm's competencies and capability of coordinating productive resources that are not transaction specific (McWilliams and Gray 1995; Poppo and Zenger 1998; Tsang 2000). Thus, it has been argued that if competitive advantage emanates from valuable and inimitable resources (Barney 1991) then boundary choices should be explained by the possession and composition of resources that are a source of competitive advantage (Poppo and Zenger 1998).

Another major criticism of the transaction cost perspective is that the focus purely on the transaction does not address the question of choice of firm with which to ally. Pisano (1989) argues that "transactions cost economics assumes relations between

partners as a given and then seeks to explain how these relations will be formalised". Paulson (1976) argues that this is particularly significant since the "forces which bring an organisation to interact are not the same as those which determine with whom the organisation will interact". Transaction cost economics assumes that each transaction is discrete. "If it is recognised that any transaction is embedded in a history of prior relations and a broader network of relations then we need to revise our analysis of transaction costs" (Gulati 1995).

Dunning (1995) addresses this criticism in his extension of the transaction cost framework to incorporate the notion of strategic interdependence. As well as reducing the transaction and coordinating costs of market transactions, he argues that alliances may be used to leverage the skills, assets and experiences of partner firms. Figure 2.2 shows the development of the transaction cost framework from Williamson's (1975) development by Heide (1994) through to Dunning (1995). Williamson's original framework, developed by Heide (1994) presented an argument for the use of a strategic alliance, or a "hybrid form of governance" when the transaction costs associated with an exchange were of an intermediate level and not high enough to justify vertical integration. The influence of these transaction costs on alliance formation in comparison to vertical integration is dependent on the balance of the costs of loss of control and ownership reduction and the benefits of risk sharing and reduced capital outlays. Dunning's interpretation of the transaction cost perspective incorporates the notion of strategic interdependence and particularly the skills, assets and experience that both partners to the alliance and the need for these by both partners. When compared with the resource-based view below, the degree of complementarity is high.

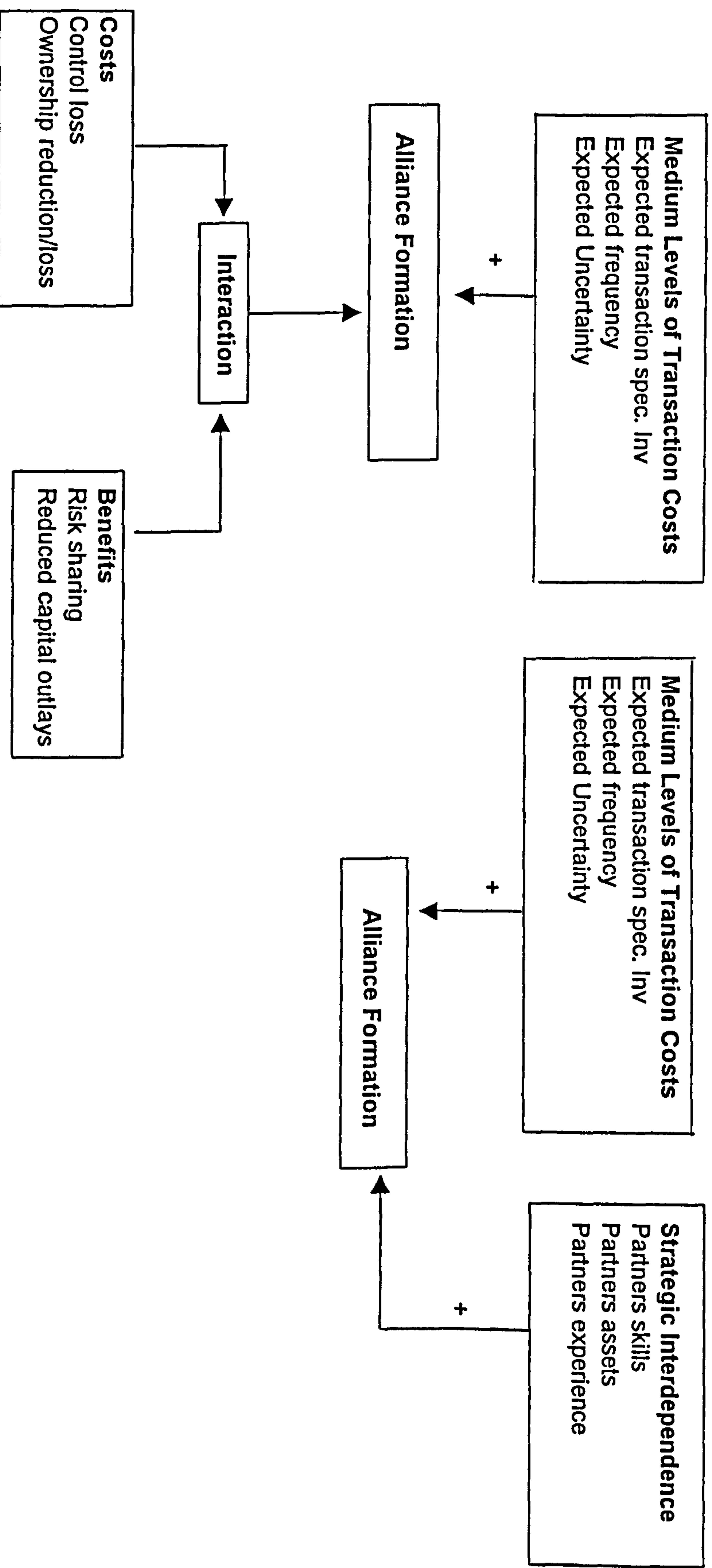
In evidence, Dunning (1995) cites research on international strategic alliances which have found that the principal incentives for alliance formation have been to lower transactions costs, develop new skills and to overcome or create barriers to entry in national or international markets (Freeman and Hagedoorn 1992; Gomes-Casseres 1993 and UNCTAD 1993, 1994; Hagedoorn 1990, 1993). According to research

Figure 2.2

The Transaction Cost Framework

Williamson (1975, 1985), Heide (1994)

Dunning (1995)



undertaken at MERIT (Hagedoorn 1993) the goals of most strategic alliances have been to gain access to new and complementary technologies, to speed up innovatory or learning processes and to upgrade the efficiency of particular activities e.g. research and development, marketing and distribution, manufacturing methods etc., rather than to enhance the overall prosperity of the participating firms, although this is likely to be an outcome of the former goals.

Powell (1990) suggested that alliances do not necessarily fall on the market-hierarchy continuum put forth by transaction cost economics but, rather, constitute a distinct form of governance that he calls the network form. He uses the term network to classify such dyadic ties because many such ties are deeply embedded in a multiplicity of relationships. This viewpoint is reiterated by Dunning (1995) who argues that alliances should be viewed as part of an organisational system of firms in which inter-firm and intra-firm transactions complement each other. Powell argues that if we are to go beyond the confines of a continuum of market and hierarchy in the study of alliances, it becomes imperative to begin considering some of the alternative dimensions along which we can examine such structures.

2.3.1.2 Empirical Evidence

Empirical studies of the transaction cost perspective have examined organisational form as being determined by properties of the underlying transaction, namely asset specificity, uncertainty and frequency. Thus, organisational form is the dependent variable whilst asset specificity, uncertainty and frequency are independent variables. Organisational form is often modelled as a binary variable for example “make” or “buy”. Of the independent variables, asset specificity is the most difficult to measure. Among the common proxies are component “complexity”, qualitatively coded from survey data, as a proxy for physical asset specificity (Masten 1984; McNaughton 1996); investment in facilities of equipment, coded from survey data, as a proxy for physical asset specificity (Anderson 1984; Anderson and Coughlan 1987;

Bucklin and Sengupta 1993; McNaughton 1996); worker-specific knowledge and training, coded from survey data, as a proxy for human asset specificity (Anderson and Coughlan 1987; Bucklin and Sengupta 1993; McNaughton 1996; Monteverde and Teece 1982); physical proximity of contracting firms, as a proxy for site specificity (Joskow 1985, 1987, 1988, 1990; Spiller 1985); and R&D expenditure, as a proxy for physical asset specificity. Other proxies, such as fixed costs or 'capital intensity', have more obvious limitations and are rarely used.

Frequency of interaction has been measured by service and maintenance requirements, coded from survey data (Anderson and Coughlan 1987); expected interactions in a month, coded from survey data (Anderson 1984; Bucklin and Sengupta 1993) and channel volume, measured as the value of annual sales (Klein, Fraser and Roth 1990; McNaughton 1996).

Both internal and external sources of expected uncertainty have been examined. Internal uncertainty has been measured by examining ease of monitoring performance and contractual compliance, coded from survey data (Bucklin and Sengupta 1993; McNaughton 1996). External uncertainty has been measured by examining firm's surprise at the actions of retailers, customers and competitors (Anderson 1985; Klein, Fraser and Roth 1990; McNaughton 1996).

Shelanski and Klein (1995) present a review and assessment of empirical studies based on the transaction cost perspective. They group studies into one of three categories: qualitative case studies, quantitative case studies and cross-sectional econometric analyses. Anderson and Coughlan's (1987) study of market entry decisions by 36 U.S. based firms in the international semiconductor industry is an example of the first category, while McNaughton's (1996) study of foreign market entry modes by Canadian computer software exporters is an example of the second, and Levy's (1985) study of vertical integration across industries is an example of the third. The bulk of the empirical literature in transaction costs economics is case studies of various kinds. This is primarily because the main variables of interest –

asset specificity, uncertainty and frequency – are difficult to measure across firms and industries. Typically, these characteristics are estimated based on surveys or interviews: for example, a manager might be asked to rate on a Likert scale of 1 to 7 the degree to which specialised facilities and equipment are needed to market this software (McNaughton 1996). Shelanski and Klein (1995) argue that there are several deficiencies in this type of data. First, they are subject to the general limits of survey data, that is that they are based on the respondents' stated beliefs, rather than as their beliefs or valuations as revealed through choice. Second, as these measures are based on ordinal rankings, it is hard to compare them from industry to industry. What is ranked as a relatively specialised asset in one firm might be rated differently in another firm or industry. Similarly, what one firm considers a comparatively uncertain production process may be the standard operating environment in another. Multi-industry studies therefore may contain variables that are labelled the same thing but are really incommensurable or, conversely, may contain variables that are identical but labelled differently.

Besides these measurement difficulties, empirical research in transaction costs economics is often hampered by confusion about the definitions and therefore the parameterizations of key variables. Shelanski and Klein (1995) found the primary conceptual problem to be the treatment of uncertainty in the literature. They argue that the effect of uncertainty on governance structure hinges on asset specificity and the consequent bilateral dependency. The failure of some studies to take this into account may explain conflicting results on the effects of uncertainty. They argue that Harrigan's (1986) finding that uncertainty reduced the probability of integration in a large, cross-sectional sample may be reconciled with opposite results by Levy (1985) and MacMillan, Hambrick and Pennings (1986) as Harrigan abstracts from asset specificity in her study. In Walker and Weber's (1987) study of automobile parts procurement, they test the interactive effects of uncertainty and competition by dividing the sample according to the level of supplier-market competition for that component, and then testing the role of uncertainty on each part of the sample separately. They find that sales volume uncertainty, as expected, increases the

probability of a “make” rather than “buy” decision, for those components produced in thin markets.

Asset specificity has been more successfully treated in the empirical literature than uncertainty. Relationship-specific physical, site and human capital investments have all been studied, both independently and comparatively. However, Shelanski and Klein (1995) argue that further refinement and analysis need to be done, particularly in terms of measurement. Proxies such as capital intensity or fixed costs are very imperfect and may not capture whether an investment has alternative value outside the transaction for which it was initially made. Another concern is that asset-specificity effects may be confused with market power (Shelanski and Klein 1995). While specific investment may lead to bilateral monopoly, the existence of a small-numbers bargaining situation is not by itself evidence of relationship-specific investment.

Shelanski and Klein (1995) provide extensive examples of empirical research into governance forms tested through a transaction cost perspective. They detail results from studies examining the various forms of organisational governance from vertical integration, complex contracting and “hybrid” modes, long-term commercial contracts, informal agreements and franchise contracting. They find that the majority of studies generally support predictions from the transaction cost perspective. However, they also find that in each area of transaction cost economics there are also results that contradict fundamental and important transaction cost economics arguments and that others “provide only weak or tangential support for the framework.” They argue that much work is still needed, both in terms of applying those approaches already developed to additional data and in further refining and developing the methods used to test transaction cost hypotheses.

Research methodology is another related issue. Parkhe (1993) is highly critical of the fact that researchers of international joint ventures have put too much emphasis on the use of deductive-quantitative approaches in their studies, which fail to grasp the

“complexity and fuzziness” of the subject. Tsang (2000) argues that given the current state of our knowledge about joint ventures, qualitative case studies aimed at understanding the core concepts and their inter-relationships would be more appropriate. He argues that interviews with managers would help understanding of how companies actually evaluate the costs and benefits of joint venturing. In the process, insights into the operationalisation and measurement of the concepts may be gained as well.

2.3.2 The Resource-Based View

The primary focus of research into alliance formation has been on understanding some of the resource-based considerations that promote the formation of alliances (Barney 1991; Berg, Duncan and Friedman 1982; Hagedoorn 1993; Mariti and Smiley 1983; Pfeffer and Salancik 1978). The emphasis on material resources and capabilities as catalysts for alliances resonates closely with the resource-based view of the firm which highlights the importance of material resource endowments (Wernerfelt 1984; Dierickx and Cool 1989; Barney 1991; Mahoney and Pandian 1992). While resource-based strategy research has typically focused on explaining sustained performance differences across firms, the role of resource heterogeneity in explaining strategic change and strategic actions is becoming more salient (Kraatz and Zajac 1999).

The resource-based view focuses on the strategic or resource needs of firms and the incentives or inducements to form strategic alliances. According to this perspective firms form linkages to obtain access to needed assets (Hagedoorn and Schakenraad 1990; Harrigan 1988; Nohria and Garcia-Pont 1991), learn new skills (Baum, Calabrese and Silverman 2000; Hennart 1988; Kogut 1988; Powell, Koput and Smith-Doerr 1996), manage their dependence upon other firms (Pfeffer and Salancik 1978) or maintain parity with competitors (Garcia-Pont and Nohria 1999).

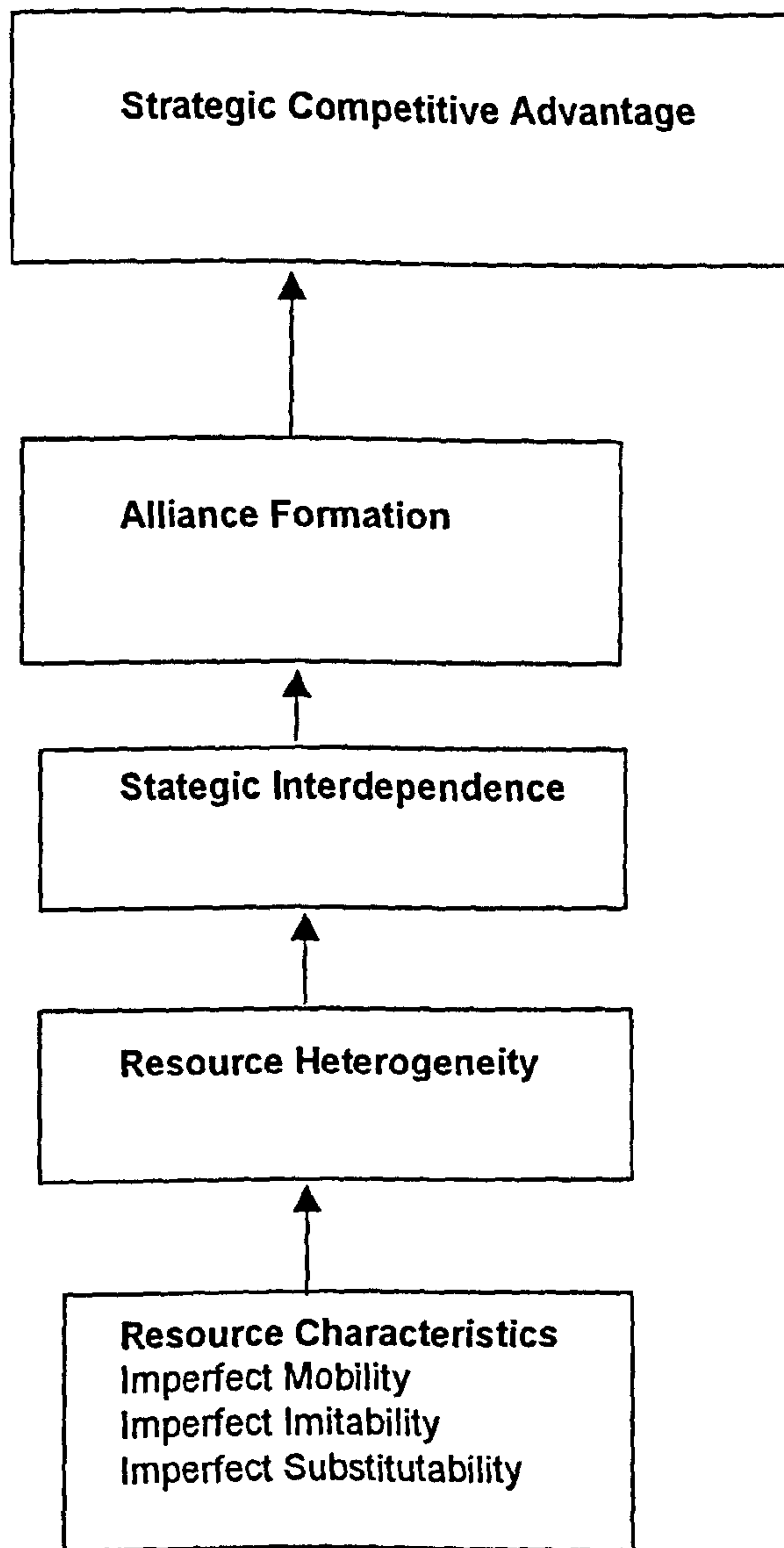
Building on the assumption that organisations are not self-sufficient and heterogeneous with asymmetric abilities to develop or acquire resources (Pfeffer and Salancik 1978), the resource-based view of the firm examines the links between firm resources and sustained competitive advantage (Barney 1991).

In contrast to the transaction cost perspective, which emphasises cost minimisation, the resource-based view emphasises value maximisation of a firm through pooling and utilizing valuable resources. Firm resources – assets, capabilities, organisational processes, firm attributes, information and knowledge – are controlled by a firm and enable it to conceive and implement strategies that enhance its efficiency and effectiveness (Daft 1983). The resource-based view suggests that valuable firm resources are usually scarce, imperfectly imitable and lacking in direct substitutes (Barney 1991; Peteraf 1993). Thus, the trading and accumulation of resources becomes a strategic necessity. When efficient market exchange of resources is possible, “firms are more likely to continue alone” (Eisenhardt and Schoonhoven 1996) and rely on the market. However, efficient exchanges are often not possible on the spot market. Certain resources are not perfectly tradable, as they are either mingled with other resources or embedded in organisations (Chi 1994). Thus, mergers, acquisitions and strategic alliances are used. Figure 2.3 illustrates the resource-based view.

Researchers have explored the resource-based view of alliances using closely associated concepts such as the resource dependency perspective (Heide 1994; Kogut, Shan and Walker 1992; Pfeffer and Salancik 1978), the property rights perspective (Ramanathan, Seth and Thomas 1997) and the organisational capability perspective (Madhok 1997). The resource-based view has become a paradigm, almost tautological (Foss 1995), as it has been increasingly used as an umbrella notion. The underlying rationale of the resource-based view is that a firm must aggregate, share or exchange valuable resources with other firms when they can't be efficiently obtained through market exchanges or mergers and acquisitions. By doing

Figure 2.3

**The Resource-Based View
Barney (1991); Peteraf (1993)**



this a firm can create the most value out of its existing resources by combining these with another firm's resources if this combination results in optimal returns.

Kogut's (1988) organisational learning model is part of the broad resource-based view. He argues that alliance formation is based on the resources of knowledge and technology. According to him, there are two reasons for forging alliances: i) to acquire the other organisation's know-how or ii) to maintain one's own know-how whilst benefiting from another's resources. Das and Teng (2000) extend this approach to all types of firm's resources to argue that there are two related but distinct motives for firms to use strategic alliances: i) to obtain other's resources and ii) to retain and develop one's own resources by combining them with others' resources.

Das and Teng (2000) argue that firm's use strategic alliances to obtain resources possessed by other firms that are valuable and essential to achieving competitive advantage and gain competitive advantage. Multinational companies may enter foreign markets by acquiring a local company. They may also seek the resources of their local partners, such as local facilities, knowledge and connections, by forming international joint ventures (Beamish 1987; Yan and Gray 1994). In new product development, strategic alliances are used to pool the technological know-how and expertise of different firms (Leonard-Barton 1992; Teece 1992). Furthermore, mergers and acquisitions are often used to create economies of scale in R&D.

The resource-based view suggests two conditions that favour alliances over mergers and acquisitions as a means of acquiring resources. First, strategic alliances are better when not all the resources possessed by the target firm are valuable to the acquiring firm. Second, since there is usually some degree of asset specificity, some of the less valuable or redundant resources in mergers and acquisitions cannot be easily disposed of without taking a loss (Ramanathan, Seth and Thomas 1997). When non-desired assets are not easily separable, strategic alliances allow the partner

firms to access only the assets each desires while bypassing non-desired ones (Hennart and Reddy 1997).

The motive of retaining resources is to keep ones own valuable resources securely in the firm. Kogut (1988) argues that firms may wish to maintain certain resources but lack the setup to make use of them. Through strategic alliances firms may be able to utilise human, physical or financial resources that are currently under-utilised internally by matching them with the resources of other firms. Nelson and Winter (1982) argue that in order to prevent their know-how from decaying, firms sometimes need to engage in alliances in order to avail themselves of opportunities to keep using these capabilities, or remembering by doing. The choice between alliances and mergers and acquisitions is about whether one should relinquish ones resources permanently or for a specified period only. Das and Teng (2000) argue that in this case strategic alliances will be preferred only when the discounted present value of the deployment of a firm's resources in the future is greater than the realised value of selling its resources in the present. The principal decision is the opportunity cost of the resources. Strategic alliances will be forged only when the realised value of those resources contributed to the alliance is higher than their value as realised through either internal uses or relinquishment.

2.3.2.1 Resource Characteristics and Alliance Formation

The resource-based view suggests that firm resource heterogeneity is not a short-term phenomenon, rather “a degree of heterogeneity tends to be sustained over time” (Peteraf 1993). Resource characteristics that have been identified in preventing firms from moving towards resource homogeneity are imperfect mobility, imperfect imitability and imperfect substitutability (Barney 1991; Chi 1994; Dierickx and Cool 1989; Peteraf 1993).

Imperfect mobility is the difficulty of moving resources from one firm to another. Dierickx and Cool (1989) argue that factor markets are often incomplete and imperfect and therefore many resources are either not tradable at all or not perfectly tradable. They cite resources such as firm reputation and organizational culture. Other resources, such as the tacit knowledge a firm has loses much of their value if moved from their current organisational context and used in conjunction with other resources.

Imperfect imitability and imperfect substitutability refer to barriers to obtaining similar resources from elsewhere (Barney 1991; Peteraf 1993). Lippman and Rumelt (1982) introduced the concept of causal ambiguity or the lack of transparency about what resources are responsible for competitive advantage. Causal ambiguity makes the connection between resources and competitive advantage less clear, and thus constrains a firm's ability to imitate its competitors and/or to employ substitutes. Reed and DeFillipi (1990) identify three resource characteristics that give rise to causal ambiguity: tacitness, complexity and specificity.

The resource-based view asserts that imperfect mobility, imperfect imitability and imperfect substitutability of firm resources are not only essential for sustained resource heterogeneity, but are also instrumental in the formation of strategic alliances. If all desirable resources were available to buy in factor markets firms would not get involved in strategic alliances which usually entail high governance costs (Osborn and Baughn 1990) and some sacrifice of organizational control (Lyles and Reger 1993). The underlying premise of this is that resources that are not perfectly mobile, imitable and substitutable can be obtained through alliances. For example, although reputation is not tradeable, it can be transferred to a strategic alliance formed by a firm, as in the Universal Card case between AT&T and TSYS (Sankar, Boulton, Davidson, Snyder and Ussery 1995).

The more imperfect the mobility, imitability and substitutability of a firm's resource is, the more likely that others will want to form alliances with it. For instance in the

pharmaceutical industry, small biotechnology firms will often ally with large pharmaceutical companies for R&D activities. These companies not only have financial resources, but also intangible resources such as marketing and operations know-how which are less mobile, imitable and substitutable.

2.3.2.2 Resource Types

Scholars have proposed a number of typologies of resource types. The simplest approach differentiates between tangible and intangible resources (Grant 1991). Barney (1991) classifies firm resources into physical capital resources, human capital resources and organizational capital resources. Hofer and Schendel (1978) list a firm's resources as physical, managerial, human, organizational and technological resources. Das and Teng (1988) analysed the different contingent "orientations" that firms tend to adopt for managing four specific types of resources – financial, technological, physical, managerial – in the alliance making process.

Miller and Shamsie (1996) suggest that, based on the notion of barriers to imitability, all resources may be classified into two broad categories: property-based resources and knowledge-based resources. Property-based resources are legal properties, owned by firms. They include financial capital, physical resources, human resources and so on. Owners enjoy clear property-rights to these resources, or rights to use the resources, so that others cannot take them away without the owner's consent. Thus they cannot be easily obtained because they are legally protected through property-rights in such forms as patents, contracts and deeds of ownership (Miller and Shamsie 1996).

Different property-based resources have different resource characteristics. Human resources tend to have a high degree of imperfect mobility. Although one can hire individual employees from a firm, trading an entire workforce of a company or division through the job market is not possible unless the whole firm/division is

acquired. Das and Teng (2000) argue that since human resources cannot be traded efficiently without being bundled with other resources, such as physical resources, their mobility is far from perfect.

Patents, contracts, copyrights, trademarks and registered designs are property-based resources that are particularly inimitable. Hall (1992) classifies these intangible resources as assets because they have clear property-rights. They are difficult to imitate, as they are often uniquely present in firms.

Physical resources are known for their imperfect substitutability. Whereas the same financial resources can be obtained through different channels, for example the stock market, physical resources such as oil fields, distribution channels, or business location are often specific to a business and thus not easily substitutable.

Knowledge-based resources refer to a firm's intangible know-how and skills. They are not easily imitable due to knowledge and information barriers. Others cannot easily imitate knowledge-based resources because they are vague and ambiguous. Tacit know-how, skills and technical and managerial systems not protected by patents fall into this category (Hall 1992). Technological and managerial resources are also imperfectly substitutable. Satisfactory substitutes and alternatives to superior technologies and managerial talents are often not available. However, these resources are relatively mobile because technologies and managerial talents may be acquired rather efficiently through the market. In contrast, organizational resources, such as culture and learning capacity are deeply embedded in a firm and are thus characterized by imperfect mobility.

The key difference between property-based and knowledge-based resources is that whilst property-based resources enjoy near-perfect legal protection, knowledge-based resources are more vulnerable to unintended transfers (Miller and Shamsie 1996). Once others get adequate access to knowledge-based resources, it is difficult to keep these resources within the confines of the firm for long. Consequently, alliance

partners will be concerned with losing their knowledge-based resources through an alliance (Hamel 1991; Mowery, Oxley and Silverman 1996).

2.3.2.3 Theoretical Critiques

Although the resource-based perspective provides insights into linkage formation behaviour, like the transaction cost perspective it does not provide a complete explanation. In common with researchers from the transaction cost perspective there is an assumption, either implicit or explicit, that the availability of opportunities to form an alliance is not a constraint and that the supply of alliance partners is infinitely elastic (Arora and Gambardella 1990; Hagedoorn and Schakenraad 1990). Ahuja (2000) argues that the validity of this assumption is debatable. Alliance formation inherently requires that not only must a firm want to form an alliance, but it should also be an attractive option to potential partners (Kogut, Shan and Walker 1992; Shan, Walker and Kogut 1994). Ahuja (2000) argues that by failing to explicitly address the issue of a firm's attractiveness to other firms the strategic needs perspective remains theoretically incomplete. Ahuja (2000) develops the resource-based view by examining both inducement and opportunity factors in alliance formation. A firm's alliance-formation opportunities are related to its possession of resources. The number of potential partners that are willing to collaborate with a firm is a function of the firm's attractiveness to other firms. A firm's attractiveness to potential partners in turn depends on the value that it can add to them by providing its partner with assets that have resource characteristics. The greater a firm's stock of resources, the greater the firm's attractiveness to partners and the greater the firm's collaboration opportunities.

2.3.2.4 Empirical Evidence

To assess the significance of strategic interdependence at the dyadic level, researchers have linked the formation of alliances to the distribution of various kinds of capabilities within the industry, such as production, marketing, distribution, regulatory approval and access to new technologies. At the inter-industry level, theorists have empirically tested the role of strategic interdependence by predicting the number of joint ventures across industries (Berg and Friedman 1980; Pfeffer and Nowak 1976). Recent efforts have focused more closely on the industry level and explored the role of resource configurations within an industry in predicting alliance formation. They have not only revealed distinct patterns, such as densely linked cliques, but have also tried to explain the patterns on the basis of strategic interdependence resulting from country-specific resource advantages (Shan and Hamilton 1991), the distribution of strategic capabilities (Nohria and Garcia-Pont 1991), human resources (Combs and Ketchen 1999; Rasheed and Geiger 2001), technical resources (Rasheed and Geiger 2001) and the relative size and performance of firms (Burgers, Hill and Kim 1993). This research suggests that industry patterns in the formation of alliances indicate that firms are driven to enter alliances with each other by critical strategic interdependence.

There are numerous facets of interdependence that have been tested empirically by a number of scholars (Burgers, Hill and Kim 1993; Eisenhardt and Schoonhoven 1996; Gulati 1995; Nohria and Garcia-Pont 1991; Shan and Hamilton 1991). Eisenhardt and Schoonhoven (1996) found that firms in vulnerable strategic positions were more likely to enter new alliances, consistent also with Oliver's notion of stability and the transactions cost concept of uncertainty. A number of authors have argued that competitive uncertainty motivates firms to enter into alliances with each other in order to reduce uncertainty by reducing competition (Contractor and Lorange 1988; Kogut 1988; Pennings 1981; Pfeffer and Nowak 1979; Pfeffer and Salancik 1978). This arises from competitive interdependence, which is when the competitive actions of a firm have a direct effect on the market position of its rivals, thereby risking a

response in kind (Hay and Morris 1979). The extent of competitive interdependence that a firm faces is a function of industry structure (Hay and Morris 1979). Burgers, Hill and Kim (1993) argue that competitive interdependence is low in fragmented industries and in monopolies and highest in oligopolies where a limited number of evenly balanced competitors confront each other. They argue that competitive interdependence produces competitive uncertainty because a firm never knows in advance whether its actions will invite retaliation, or whether its rivals will initiate competitive moves that directly impact upon its market share and require a response in kind. It is argued that the desire to co-opt one's competitors, thereby reducing competitive uncertainty, represents an important motive for entering into horizontal strategic alliances (Contractor and Lorange 1988; Kogut 1988; Pennings 1981; Pfeffer and Nowak 1976; Pfeffer and Salancik 1978).

Burgers Hill and Kim (1993) thus argue that within a single industry the competitive uncertainty facing a firm varies with its position within the industry's size distribution. Accordingly, so does the firm's incentive for entering into an alliance to reduce competitive uncertainty. Specifically they argue that the incentive to enter into an alliance to reduce competitive uncertainty is greatest for intermediate sized firms and least for smallest and largest firms in an industry. Actions by the smallest firms in an industry have limited impact on other firms. Thus the competitive moves of small players will be less likely to invoke a response in kind. Added to this, their small market share implies that they are limited in their ability to use horizontal alliances to reduce competitive uncertainty. Whilst actions by the largest firms in an industry will impact on other firms they are very able to survive sustained competition from rivals. This moderates the incentive to enter into alliances for the purposes of reducing competitive uncertainty. Competitive actions by intermediate firms are likely to elicit a response in kind from their rivals. Their lesser size and more limited resources than larger firms mean that they are less likely to be able to fight sustained competition from rivals. Thus, on average, the intermediate-sized firm faces a higher degree of competitive uncertainty. Therefore they have a greater incentive to enter strategic alliances to reduce competitive uncertainty.

Demand uncertainty motivates companies to enter into alliances and gain access to capabilities to cope with uncertainty (Burgers, Hill and Kim 1993; Kogut 1988; Nohria and Garcia-Pont 1991; Porter and Fuller 1986). To survive in an uncertain environment firms must be able to adapt quickly to changing demand conditions. However, organisational inertia and administrative constraints may make it difficult for firms to internally develop or purchase the strategic capabilities required to deal with rapidly changing demand conditions (Bartlett and Ghoshal 1989; Hannah and Freeman 1989). Burgers, Hill and Kim (1993) argue that firms can gain access to the requisite strategic capabilities by entering into alliances with firms that already possess those capabilities (Kogut 1988; Nohria and Garcia-Pont 1991; Porter and Fuller 1986).

However, firms will only enter into an alliance if there is a clear incentive as they are prone to failure (Harrigan 1988), difficult to manage (Killing 1983), demand attention from top management (Berg and Friedman 1980; Koot 1988) and decrease organizational autonomy (Aldrich 1979; Provan 1982). Burgers, Hill and Kim (1993) argue that within a single industry, poorer performing firms have more incentive to enter an alliance than more efficient ones. They argue that this is due to the fact that poorer performing firms are probably less able to deal with the adverse consequences of demand uncertainty than their more efficient competitors.

Shan and Hamilton (1991) described how country-specific resource advantages within the biotechnology sector have guided Japanese firms' choices of partners for specific kinds of alliances. Along the same lines, Nohria and Garcia-Pont (1991) documented how the specific strategic capabilities of automotive firms have moderated the pattern of alliances among them. This research suggests that at the dyadic level, firms are driven to enter alliances with each other by critical strategic interdependence. Gulati (1995) examined alliances formed by American, European and Japanese firms in three sectors: the automotive industry, the industrial automation sector and the new materials sector. His research confirms that

interdependent firms are more likely to seek each other out as alliance partners. Gulati (1995) developed the concept of organisational niche from population ecology theorists. They argue that populations can be differentiated into organisational niches, each of which includes firms possessing similar sets of resources and capabilities (Hannah and Freeman 1977). Members of different niches are likely to possess complementary sets of skills and resources, which in turn enhances their mutual interdependence on each other (Astley 1985; Baum and Singh 1994; Fombrun 1986;). Firms with differing capabilities (belonging to different niches) are likely to share greater interdependence than firms with similar capabilities (belonging to the same niche) and are thus more likely to form strategic alliances.

Allied to this is the notion of organisational compatibility. Bucklin and Sengupta (1993) argue that firms are motivated to form alliances with partners who have complementary goals and objectives as well as similarity in operating philosophies and corporate cultures (Achrol, Scheer and Stern 1990; Bucklin and Sengupta 1993; Ruekert and Walker 1987).

Similarly, other scholars have looked at firms' attributes, such as size, age and financial resources, as important predictors of their propensity to enter strategic alliances with each other (Barley, Freeman and Hybels 1992; Burgers, Hill and Kim 1993; Kogut, Shan and Walker 1992).

Several scholars have looked at relative financial attributes of firms within alliances, arguing that firms prefer partners with different financial attributes (Burgers, Hill and Kim 1993; Gulati 1995; Paulson 1976). Underlying this is the notion that differences in attributes indicate interdependence, but similarity of resources suggests competition. Thus firms would seek partners with different attributes who are unlikely competitors and will have complementary resources (Burgers, Hill and Kim 1993, Paulson 1976).

In a study of internet companies, Rasheed and Geiger (2001) found that firm resources did have a significant impact on decisions to outsource or internalise electronic value chain functions. Specifically, firms with greater reliance on sales intermediaries were found to deploy fewer technical e-commerce resources than firms less dependent on sales intermediaries. The number of intermediary procurement functions was also positively related to investment in web-based human resources.

In a study of 94 publicly held restaurant chains in the U.S., Combs and Ketchen (1999) found support for the resource-based view. They used three resource variables: slack capital, brand name reputation and top management team experience. They found that restaurant chains with unknown brand names and little slack capital used more interfirm cooperation than did their resource-abundant counterparts.

As with Transaction Cost Economics, the operationalisation of specific resource-based constructs has been a major problem in the literature (McGrath 1996). Almost all published studies on the resource-based view use proxies from secondary data, such as the constructs like physical resources and intangible resources (Chatterjee and Wernerfelt 1991) and resource imitability (Maijoor and Van Witteloostuijn 1996; Miller and Shamsie 1996). These proxies are highly industry-specific so that most of the measures developed cannot be used for cross-industry studies. No general survey measures for the key resource constructs have been established in the literature, principally because these constructs remain non-codifiable (Reed and DeFillipi 1990).

2.3.3 Network Theory

Network theorists have criticised the preceding perspectives for not taking into account the social network within which most firms are embedded (Giddens 1984;

Gulati 1995; Gulati 1999; Khanna, Gulati and Nohria 1998;). Gulati (1998) argues that whilst interdependence may explain tie formation between some firms it may not adequately account for alliance formation:

“This inadequacy is clear from the fact that not all possible opportunities for sharing interdependence across firms actually materialise as alliances. An account of alliance formation that focuses only on interdependence ignores how firms learn about new alliance opportunities and overcome the fears associated with such partnerships. Implicit in such accounts is the assumption that firms exist in an atomistic system in which information is freely available to all and opportunities for alliances are exogenously presented (Granovetter 1985)” Gulati (1998).

A central part of network theory is the risk inherent in alliance formation and information asymmetries between firms in the same industries. Firms entering alliances face considerable moral hazard concerns because of the unpredictability of the behaviour of partners and the likely costs to a firm from opportunistic behaviour by a partner if it occurs. Such concerns are further compounded by the unpredictable character of such relationships. Rapid changes in the environment may lead organisations to alter their needs and orientation, thus affecting their ongoing partnerships. To help organisations form alliances that effectively address their needs whilst minimising risks they must be aware of their potential partners and have an idea of their needs and requirements. Organisations also need information about the reliability of those partners, especially when success depends heavily on the partner’s behaviour (Bleeke and Ernst 1991).

Analysis of networks provides an understanding of the organisational processes that underlie alliance decisions. Social networks make potential partners aware of each other’s existence. Through such networks firms learn about each other’s existence and also each other’s needs, capabilities and alliance requirements at a given time.

Without such awareness, an alliance between two firms is less likely (Van de Ven 1976). Social networks of prior alliances play an important role in shaping future alliance formation (Kogut, Shan and Walker 1992).

It is argued that the information provided by the network of previous alliances counterbalances many of the risks associated with alliances. Information about potential partners can dispel the riskiness of alliances and be instrumental in the formation of new alliances and in firms' choices of partners (Eisenhardt and Schoonhoven 1996; Zajac and Olsen 1993). The information provided by networks serves as an important basis for trust between potential partners and several scholars have highlighted the role of trust in facilitating exchange transactions (Bradach and Eccles 1989; Gulati 1995; Gulati, Nohria and Zaheer 2000). Trust is defined as the confidence that a partner won't exploit the vulnerabilities of the other firm (Barney and Hansen 1994). Social networks promote trust and lower transaction costs in several ways.

First, networks enable firms to gather superior information on each other (Gulati 1995; Kogut, Shan and Walker 1992). Network ties are important sources of referrals that let partners know about each other's capabilities. They can facilitate due diligence so that each partner has greater knowledge about the other's resources and capabilities and higher confidence in mutual assets. Thus networks reduce information asymmetries that increase contracting costs.

Networks also make opportunism more costly because of reputational effects (Gulati 1995). The damage to a firm's reputation influences not just one specific alliance but also all other current and potential alliance partners. It also makes it more likely that opportunistic behaviour will be discovered and information will spread rapidly through the network. For example, when two firms have common third partners, each party's bad behaviour can be reported to the common partners, which serves as an effective deterrent to such behaviour (Burt and Knez 1995; Kreps 1990; Portes and Sensenbrenner 1993; Raub and Weesie 1990). Gulati (1995) argues that because

it both provides information and creates reputational circuits, social structure is likely to promote greater awareness and confidence among potential partners, which in turn is likely to lead to ties between them. Where there is trust, appropriation concerns are mitigated and organizations may not choose to rely on detailed contracts that are costly to write, monitor and enforce (Gulati 1995).

Social networks also improve the co-ordination between firms in an alliance. The presence of inter-firm trust is an extraordinary lubricant for alliances that involve considerable interdependence and task co-ordination between partners (Gulati, Nohria and Zaheer 2000). Firms with prior network connections are likely to have greater awareness of the correct rules, routines and procedures to follow. Therefore such a social structure enables them to work closely without the need for costly formal hierarchical controls (Anand and Khanna 2000; Gulati and Singh 1999; Gulati 1993; Westney 1988).

It is also argued that two firms' indirect connections through common partners can encourage alliance formation (Gulati 1995). First, indirect ties make firms aware of each other (Van de Ven 1976). Second, common ties can serve as an important basis for enforceable trust (Burt and Knez 1995; Kreps 1990; Portes and Sensenbrenner 1993; Raub and Weesie 1990). Each partner's awareness that the other has much to lose from behaving opportunistically enhances its confidence in the other.

Indirect ties can also influence alliance formation for technological reasons. Firms may prefer an alliance with another firm with whom they share many common partners to ensure compatibility across their product lines.

Granovetter (1992) identifies two distinct components of social structure that are influential in alliance formation: the relational components, made up of the direct relationships within which the firm is embedded and the structural component which encompasses the overall social network within which firms exist. The relational component of social structure provides direct experience-based knowledge about

current and prior alliance partners; the structural component provides indirect knowledge about potential partners that firms obtain from prior partners, their partners, the latter's partners and so on.

By providing access to information, relational structure serves two important functions, both of which are likely to enhance the possibility of further ties between firms. First, firms with relational connections are likely to have greater understanding of each other's needs and capabilities and are thus likely to be one of the first to spot new opportunities for an alliance. Second, information about a partner based on prior interactions can reduce the hazards associated with future transactions and thus increase the parties' interest in future ties (Gulati 1995; Heide and Miner 1992; Kogut 1989; Zucker 1986).

Membership in a network of prior alliances means that firms must have had alliances in the past. By participating in alliances, firms can develop capabilities with forming alliances that accrue as a result of historical processes of learning (Barney 1991; Dierickx and Cool 1989). Therefore another outcome for firms of being part of an alliance network is that they can develop managerial capabilities associated with forming new alliances. Alliances are complex organisational arrangements that can require multiple levels of internal approval, significant search in identifying partners, detailed assessments for ratifying contracts and considerable management attention to sustain the partnership (Ring and Van de Ven 1994; Gulati, Khanna and Nohria 1994; Doz 1996). Therefore the possession of alliance formation capabilities can be a significant catalyst for firms considering new alliance possibilities.

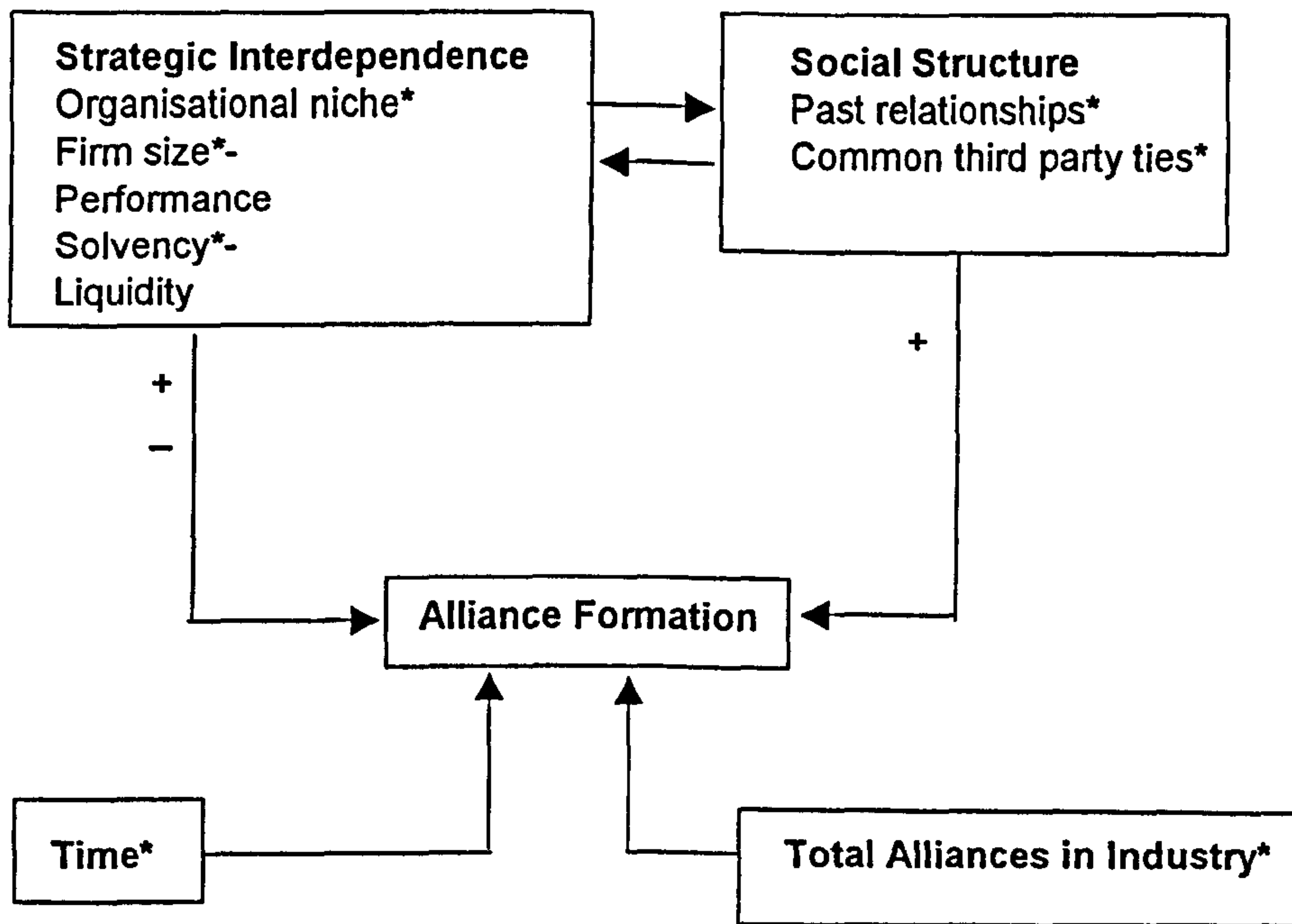
Networks can also take on a more substantive role in certain contexts (Ahuja 2000). In some industries the prevalence or dominance of a technical standard determines the subsequent competitive performance of firms. Being associated with the dominant technical standard can help a firm obtain legitimacy for its own products. In such circumstances being allied to the appropriate firms can itself be a necessary condition for the successful development and marketing of a firm's technology, thus

raising the exchange value of social capital in such industries (Galaskiewicz and Zaheer 1999; Kogut, Shan and Walker 1993).

Against these positive impacts of increased embeddedness is the negative influence of saturation (Kogut, Shan and Walker 1992). Every alliance that embeds a firm more deeply in the industry network also places a strain on its management and its absorptive capacity. Beyond a point the learning and risk reduction benefits of embeddedness diminish. However, the costs of maintaining alliances increase significantly as not only are firms required to manage individual alliances, but they are also required to coordinate management effort across alliances (Harrigan 1985). Further there is a natural limit to the time and effort that any firm can devote to managing its alliances. Given this, highly embedded firms may be reluctant to form further new alliances (Ahuja 2000). Thus the incentives to form alliances are likely to increase with embeddedness initially but beyond a point embeddedness will have a negative impact on the desire to form new alliances.

Gulati (1995, 1998, 1999) explores the interaction between strategic interdependence and social structural explanations of alliance formation (Figure 2.4). Gulati (1999) argues that network resources can be seen as a specific form of firm resources that can be considered to be “strengths that firms can use to conceive of and implement their strategies” (Barney 1991). They are distinct from the resources that reside securely within its boundaries and are the source of valuable information for firms. The amount of such resources available to firms can influence their strategic behaviour by altering the opportunity set available to them. He argues that whilst scholars developing the resource-based perspective have highlighted the important role of unique firm history and the importance of social factors, no attention has been given to network resources that emerge from firms’ participation in inter-firm networks (Barney 1991). He argues that as well as the many influences discussed above alliances can result from simultaneous strategic interdependence and social considerations. Figure 2.4 shows strategic interdependence and the need for heterogeneous resources to be a motivating factor in strategic alliance formation.

Network and Resource-Based Perspectives
Gulati (1995; 1998; 1999)



* significant

Gulati (1995; 1998; 1999) argues that strategic interdependence will be dependent on the organisational niche that potential alliance partners are members of and also the relative financial position of potential partners. However, the motivation to form an alliance will also be dependent on the awareness of the existence of potential alliance partners, which is dependent on the social structure or network that firms are embedded in (Gulati 1995; 1999). Gulati (1995; 1999) argues that common ties and past relationships are likely to amplify the possibility of alliances between interdependent firms more than they would do between other firms.

Dunning (1995) agrees that the growth of industrial networks has been a factor that has favoured more inter-firm co-operation. As networks of alliances become more important, the composition and behaviour of the group of firms becomes a more important determinant of the economic behaviour of the individual firms comprising the network. However, he argues that most of the literature on industrial networks has been from a marketing or organisational perspective rather than an economics perspective (Forsgren and Johanson 1991; Hakansson and Johansson 1993; Johanson and Mattson 1987, 1994; Johansson and Vahlne 1977). This has meant that internalisation theory, specifically transaction cost economics, has been seen as an alternative approach to network analysis; whilst to an economist, a network is simply a web of interdependent dyadic relationships.

2.3.3.1 Theoretical Critiques

The network perspective recognizes the role of strategic inducements to collaborate but focuses attention primarily on the sociological determinants of linkage formation opportunities (Gulati 1995, 1998; Gulati and Gargiulo 1999; Kogut, Shan and Walker 1992; Walker, Kogut and Shan 1997). It argues that the structure of the existing interfirm linkage network influences the path of future relationship formation by affecting the set of linkage opportunities available to prospective collaborators. Ahuja (2000) agrees that this perspective suffers from two limitations.

First, it does not explicitly address the possibility that there may be other determinants of the collaboration opportunities facing firms beyond social capital. Second, if linkage formation opportunities depend primarily on prior participation in the network, how can new actors who lack these relationships and the opportunities they embody ever form linkages or become central in networks?

Critics of the network perspective have argued that the process of network formation and transformation is underspecified (Emirbayer and Goodwin 1994; Gulati and Gargiulo 1999; Madhavan, Koka and Prescott 1998). Recent studies have moved to correct this deficiency but have used predominantly sociological arguments to explain the emergence of network structure (Gulati 1998; Gulati and Gargiulo 1999; Walker, Kogut and Shan 1997). These studies have also emphasized the dynamics generated by the developing network as the causal factor for network transformation rather than the behaviour of individual actors. Ahuja (2000) incorporates the resource-based perspective to inform network explanations explicitly recognising the motivations and ability of the individual actors in the network (Eisenhardt and Schoonhoven 1996; Madhavan, Koka and Prescott 1998).

2.3.3.2 Empirical Evidence

Researchers have examined the evolution of relations between firms with prior relational ties. Levinthal and Fichman (1988) described dyadic inter-organisational attachments that develop over time as firms accumulate experience in interacting with each other. Granovetter (1973) distinguished strong and weak ties by the frequency of interaction between actors. Krackhardt (1992) described trusting relations between actors, which he called “philos”, as the outcome of both their current and past interactions and positive affect between them. Others examined the role of networks in the cumulative frequency of future alliances by firms (Cook and Emerson 1978; Gulati 1995; Kogut, Shan and Walker 1992; Eisenhardt and Shoonhoven 1996); to alliances with new partners (Walker, Kogut and Shan 1997),

to the precise nature of inter-firm relationships (Gulati 1995; Gulati and Singh 1998) and to their effects on the structure and performance of alliance relationships (Zaheer and Venkatraman 1995; Dyer 1996).

In a study of firms in three worldwide sectors (new materials; industrial automation and automotive products) Gulati (1995) finds considerable support for social network factors in bringing firms together as alliance partners. He finds that inter-organisational networks are not only valuable conduits for information about specific organisational practices but also that they provide an important impetus for guiding the choice of partners in new ties. He finds effects from both direct and indirect network ties. He finds that previously allied firms are likely to engage in further alliances and also that previously unconnected firms are more likely to enter an alliance if they have common partners.

Research on inter-organisational relations among human service agencies discussed “domain consensus” as an important prelude to new ties (Levine and White 1961; Litwak and Hylton 1962). This consensus refers to agreement among participants about the role and scope of ties. With rich information exchange and the establishment of close interpersonal ties, firms with prior alliances are more likely to have domain consensus than those without prior alliances. Podolny (1994) argued that the greater the market uncertainty, the more firms are likely to engage in repeated market exchange with their prior partners. Others have also emphasised the role of inter-organisational relations in managing uncertainty (Burgers, Hill and Kim 1993; Pennings 1981).

New ties between prior partners can also result from repetitive momentum such that once two firms enter an alliance, they do so repeatedly in the future. Considerable empirical research supports the notion of repeated actions by firms (Amburgey, Kelly and Barnett 1993; Amburgey and Miner 1992; Miller and Friesen 1980). In the dyadic context, two firms might develop specific routines for managing an interface with each other, making it easier for them to initiate new alliances between

themselves (Cyert and March 1963; Nelson and Winter 1982). However, it is argued that this factor is affected by the time lapse between alliance formations. Researchers studying the dynamics of organisational change argue that firms are likely to engage in the activities of the recent past, but that the likelihood of an action diminishes as the time elapsed since the last similar action increases (Amburgey, Kelly and Barnett 1993).

Empirical studies of the network perspective have focused on the impact of the social network on organisational form. Direct ties have been examined by focusing on the prior history and current alliance activity of alliance partners. Proxies include the number of alliances a single firm has (Gulati 1999; 1995); the breadth of a firm's alliances (how widespread a firm's direct and indirect connections are to all possible partners in the network) (Gulati 1999); the extent of prior business relationships between the two firms, coded from survey data (Bucklin and Sengupta 1993; Contractor and Lorange 1988; Gulati 1995; Nohria and Garcia-Pont 1991); the strength of past relationships (Contractor and Lorange 1988; Gulati 1995; Nohria and Garcia-Pont 1991) and the stability and longevity of past relationships (Bucklin and Sengupta 1993). Indirect ties have been examined by measuring the number of prior third parties partners shared (Gulati 1995). In contrast to the resource-based view, most measures of direct and indirect ties have been based on survey data.

2.4 Exogenous Factors

Environmental uncertainty is a common construct in the above theories. The specific difference is between its position as an input. In transactions cost theory uncertainty is a determinant of the measurement of transaction costs. In the resource-based view it is a key antecedent variable. In Oliver's (1990) framework environmental uncertainty acts as a modifier of the potential effect of constructs on alliance formation. In Bucklin and Sengupta's (1993) framework it is an exogenous variable.

Environmental uncertainty is sometimes left as an open-ended construct or is defined. The two most common factors discussed in the literature as examples of environmental uncertainty are technology and globalisation. Many authors argue that the increasing rate of technological development has increased the propensity of firms to enter into strategic alliances (Dunning 1995; Jorde and Teece 1989; Schlender 1993; Varadarajan and Cunningham 1995). Schlender (1993) argues that technology has become so advanced and markets so complex that no single company is able to dominate a technology or business alone or to be best at the entire process. Dunning (1995) identifies five separate consequences of technological advances on the organisation of economic activity: (i) to raise the fixed, particularly the learning and innovatory, costs of a wide range of manufacturing and service activities; (ii) to increase the interdependence between distinctive technologies that may need to be used jointly to supply a particular product; (iii) to enhance the significance of multipurpose or core technologies, such as robotisation, informatics and biotechnology; (iv) to truncate the product life-cycle of a particular product and (v) to focus on the upgrading of core competencies of firms and on the way these are organised as a means of improving their global competitiveness.

Some of the industry-level factors linked with alliance formation include the extent of competition, the stage of development of the market and demand and competitive uncertainty (Burgers, Hill and Kim 1993; Eisenhardt and Schoonhoven 1996; Harrigan 1988; Shan 1990). Studies of firm-specific imperatives have focused on which types of firms in which industries enter what types of alliances and for what reasons (Fuller 1986; Ghemawat, Porter and Rawlinson 1986; Mariti and Smiley 1983; Porter and). This has been refined within a cost-benefit framework in which the costs and benefits from alliances are primarily strategic and technological and alliances occur when the benefits exceed the costs (Contractor and Lorange 1988; Harrigan 1985). Scholars have shown the role of resource contingencies such as strategic vulnerability and incumbency on the proclivity of firms to enter alliances (Eisenhardt and Schoonhoven 1996; Mitchell and Singh 1992). Others have

examined firms' attributes such as size, age, competitive position, product diversity and financial resources as important predictors of their propensity to enter strategic alliances (Barley, Freeman and Hybels 1992; Burgers et al 1993; Powell and Brantley 1992; Shan 1990; Shan, Walker and Kogut 1994).

Globalisation of markets has been cited as a key factor in the formation of international strategic alliances (Achrol 1991; Dunning 1995; Johansson 1995; Varadarajan and Cunningham 1995). As competition becomes more global in scope and the cost of competing in key global markets escalates, more and more firms are likely to find themselves lacking in resources to compete effectively in multiple national markets and across multiple product categories. Thus it becomes a factor in explaining resource dependency. Dunning (1995) argues that this pressure has increased in the 1980s and 1990s and cites three major responses in firm behaviour. First there has been a fairly general movement by firms towards shedding or disinternalising activities both along and between value chains and towards the specialisation on those activities that require resources and capabilities in which firms already have (or can acquire) a perceived competitive advantage. At the same time, because of the interdependence of technological advances, firms find that they need to assure access to the products over which they have now relinquished control. Firms may also wish to exercise some influence over the quality and price of these products, and over the innovation of new products. This means that disinternalisation is often replaced by controlled inter-firm co-operative arrangements. Such agreements are particularly noticeable between firms and their subcontractors in the more technologically advanced and information-intensive sectors (Hagedoorn 1993). Linked to this is the increase in emergence of 'hollow corporations', without in-house research, manufacturing and distribution (Jorde and Teece 1989).

Second, because of competitive pressures, the huge and rising costs of R&D and speedier rates of obsolescence, firms, especially those in high technology sectors, have been increasingly engaged in cross- border alliances (Freeman and Hagedoorn

1992). Jorde and Teece (1989) argue that the greater accessibility of new technology and thus the decrease in importance of technology as a barrier has been a factor encouraging co-operation between firms.

The third response from firms has been to try to widen the markets for their core products, so as to benefit fully from economies of scale. Of the 4,192 alliances identified by Freeman and Hagedoorn (1992), 32% were geared towards improving access to markets.

Johansson (1995) argues that globalisation is a critical new phenomenon that explains the relative newness of strategic alliances. His thesis is that globalisation created the need for common standards, presence in multiple markets and the reduction in the value of proprietary technology as a competitive edge. Technology is becoming diffused more quickly and product life cycles are getting shorter. These are the reasons for the emergence of strategic alliances. His propositions are that distribution and manufacturing alliances are an efficient response to the need to be in multiple markets and products i.e. a response to competitive intensity and the degree of market globalisation. R&D alliances are mainly a response to the need for up-to-date technology as a necessary but not sufficient factor for success i.e. technology diffusion.

Achrol (1991) agrees that strategic alliances are an outcome of changing market and environmental conditions (as Johansson 1995). However, contrary to other authors he sees globalisation leading to diversity rather than homogeneity with technology providing opportunities for mass customisation. He sees the emergence of global partnerships of skills and resources (Miles and Snow 1984) and flatter organisations.

2.5 Relationship between Theoretical Schools

The previous section presented a discussion of three broad perspectives that have been used in the literature as explanations of alliance formation, namely the transaction cost perspective, the resource-based view and the network perspective. Each offers differing explanations for alliance formation. It is our contention that each offers only partial explanations for alliance formation and that rather than be seen as different theories they should be seen as ones that have high degrees of complementarity. This conclusion is shared by a number of authors who have attempted to synthesise these theories. A number of authors have examined the relationship between the transaction cost perspective and the resource-based view (Combs and Ketchen 1999; Gray and Wood 1991; Rasheed and Geiger 2001; Tsang 2000). Others have examined the relationship between the resource-based view and the network perspective (Ahuja 2000; Bucklin and Sengupta 1992; Gulati 1995; Gulati 1998; Gulati 1999). They argue that the shortfalls in each individual theory can be counteracted by synthesizing perspectives.

2.5.1 Comparison of the Transaction Cost Perspective and the Resource-Based View

Many scholars have used the resource-based view and transaction cost perspective as independent entities. For example, much of the research on vertical integration and international entry mode is grounded in transaction cost economics (Anderson and Coughlan, 1987; Monteverde and Teece, 1982), whereas the study of the evolution of competitive advantage is usually grounded in the resource-based view (Barnett, Greeve and Park 1994; Levinthal and Myatt 1994). This distinction may be due to the emphasis within the resource-based view on identifying which resources require enhancements; whereas transaction cost economics focuses on how to manage these resources once identified (Wernerfelt 1989).

Other researchers have highlighted the complementarity between the perspectives (Combs and Ketchen 1999; Gray and Wood 1991; Rasheed and Geiger 2001; Tsang 2000). Transaction cost economics' focus on specific assets is similar to the resource-based view's focus on strategic resources in that both are difficult to trade or imitate (Chi 1994; Peteraf 1993). This can help to explain why high performance among firms with certain diversification postures can be explained as a product of efficient organisational governance (Hill, Hitt and Hoskinson 1992; Teece 1982) or the exploitation of strategic resources in new markets (Chatterjee and Wernerfelt 1991; Markides and Williamson 1996; Robins and Wiersema 1995). The complementary view is also reflected in Gray and Wood's (1991) suggestion that neither resource nor economics-based perspectives adequately explain collaboration but rather that both perspectives are needed. In a recent empirical study, Combs and Ketchen (1999) found that neither perspective was sufficient in itself to explain cooperative behaviour rather that firms reacted to contingencies identified by both perspectives.

The relationship between the resource-based view and the transaction cost perspective can also be conflictive (Combs and Ketchen 1999; Connor and Prahalad 1996). Specifically, Combs and Ketchen (1999) argue that resource constraints may point managers toward inter-firm cooperation in situations where cooperation is not an efficient response to exchange conditions. Also that firms who use alliances according to the predictions of the resource-based view may perform differently than those whose use of alliances is best explained by transaction cost economics.

Table 2.1 highlights the key features of the two perspectives. Within the transaction cost perspective, the choice of governance structure is determined by cost minimization. A major weakness of transaction cost theory as argued by Zajac and Olsen (1993) is that it over-emphasises cost minimization and neglects the value creation aspect of a transaction. Resource-based theory, in contrast, assumes that firms try to maximize long-run profits through exploiting and developing their resources. Thus resource-based theory takes both values and costs into account.

Table 2.1 Transaction Cost Perspective and the Resource-Based View – Key Features

Transaction Cost Perspective	Resource-Based View
Minimising costs	Maximising value
Focus on resources directly associated with a specific transaction	Focus on all resources within a firm
Opportunism and bounded rationality curtailed by monitoring	Bounded rationality's impact on capabilities
Focus on how rents are divided between firms	Focus on the size of the total rent pool – inefficient governance structure may reduce the size of the total pool

Source: Adapted from Tsang (2000)

Transaction cost theory predicts entry modes on the basis of failures in the external market, under the assumption of opportunism. The resource-based view argues that market failure is due to heterogeneity of firm resources (Capron, Dussauge and Mitchell 1998). As argued by Madhok (1997):

“The licensing market does not fail because of opportunism but, rather, because of superior capabilities of the multinational licensor in deploying its know-how and limitations to the capabilities

of the other firm licensee in efficiently and effectively acquiring and integrating the particular knowledge.”

Viewing the firm as a mechanism for internalising market transactions, transaction cost theory assigns a minor role to the entrepreneur whose main function is to coordinate production within the firm. The stress on cost minimization implies that “economizing is more fundamental than strategizing” (Williamson 1991b). On the other hand the resource-based view has an image of the entrepreneur who identifies and takes advantage of productive possibilities (Penrose 1959).

In transaction cost theory each market entry is treated as a transaction and the governance structure chosen is mainly determined by the extent of asset specificity involved in the transaction concerned (Anderson and Gatignon 1986). The resource-based view does not just consider the resources that are directly associated with a transaction, but raises the level of analysis from the transaction to the firm. The implications of the transaction for the firm’s other resources are also examined. It suggests that “a particular entry decision cannot be viewed in isolation. It must be considered in relation to the overall strategic posture of the firm” (Hill, Hwang and Kim 1990).

The resource-based view also focuses on the extent to which a resource is embedded in the firm’s extant context rather than its specificity with respect to another resource. The functioning and thus the value of a highly firm-specific resource deteriorates when it is transferred to another firm because the support of the original firm’s other resources which are conducive to its functioning is lacking in the new environment. Table 2.2 compares the transaction cost and resource-based rationales for the choice between internalisation, market exchanges and alliances.

Table 2.2 Ownership Decisions based on Transaction Cost and Resource-Based Perspectives

	Transaction Cost	Resource-Based
Logic behind the ownership decision	“Minimising the sum of production and transaction costs” (Kogut 1988)	Maximising firm value through gaining access to other firm’s valuable resources (Madhok 1997, Ramanathan, Seth and Thomas 1997)
Mergers/acquisitions/internal development	High transaction costs (i.e. high asset specificity, uncertainty and frequency of the transactions and high costs for controlling opportunistic behaviour) and/or low production costs (i.e. coordinating and learning) (Kogut 1988)	“A firm will favour acquisitions over joint ventures when the assets it needs are not commingled with other unneeded assets within the firm that holds them, and hence can be acquired by buying the firm or a part of it.” (Hennart and Reddy 1997) “If the market is munificent or the firm is pursuing a strategy for which it has extensive resource capabilities, there is much less incentive to cooperate. Firms are more likely to continue alone.” (Eisenhardt and Schoonhoven 1996)
Market transactions	Low transaction costs and/or high production costs	When the “purchase of the resource’s service from the firm that possesses it” (Chi 1994) can be efficiently conducted through the market.

<p>Strategic alliances</p>	<p>Medium transaction and production costs i.e. “when the transaction costs associated with an exchange are intermediate and not high enough to justify vertical integration...” (Gulati 1995) “JVs are formed when transactional hazards suggest that internalisation is efficient..., but constraints of various kinds prohibit full internalisation...” (Ramanathan, Seth and Thomas 1997) “The situational characteristics best suited for a joint venture (rather than a contract) are high uncertainty over specifying and monitoring performance, in addition to a high degree of asset specificity.” (Kogut 1988).</p>	<p>Alliances are preferred “when the critical inputs required to pursue the opportunities are owned by different parties and when these inputs are inseparable from the other assets of the owner firms.” (Ramanathan, Seth and Thomas 1997) “Collaborations are a useful vehicle for enhancing knowledge in critical areas of functioning where the requisite level of knowledge is lacking and cannot be developed within an acceptable timeframe or cost.” (Madhok 1997)</p>
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Source: Das and Teng (2000)

A major motive behind alliance formation is the possibility of creating Ricardian rents. The key to the existence of Ricardian rents is the presence of scarce resources that generate higher profits than other resources of the same type (Rumelt 1987). Partners in an alliance usually contribute complementary resources to create synergy and thus Ricardian rents. Both the resource-based view and transaction cost theory would advocate alliance formation where there is the possibility of creating Ricardian rents but there is a clear distinction between the motives. There are two issues involved in a rent-seeking activity: the size of the rent pool and its distribution

(Madhok 1996). Transaction cost theory focuses on how a rent pool is distributed amongst the firms involved. Opportunistic behaviour is an attempt to obtain a larger share than that to which the firm is entitled. Transaction cost considerations are to guard against such behaviour ex-ante by choosing a suitable governance structure. On the other hand, by stressing the value-creating aspect of a transaction, the resource-based view is more concerned with the size of a rent pool. An improper governance structure may reduce the size of the pool.

The resource-based view is not only concerned with the efficient utilization of a firm's resources but also with their efficient development. The objective is to acquire resources that are needed and to dispose of those that do not fit into a firm's core competence (Prahalad and Hamel 1990). A firm's whole portfolio of resources is taken into account when such alliances are formed. Firms may seek a governance structure that is not efficient for the specific transaction in terms of a transaction cost perspective but which is the best option for the firm as a whole (Kogut 1988; Osborn and Baughn 1990). By focusing on local efficiency and evaluating each transaction in isolation (Gulati 1998; Johanson and Mattsson 1987), transaction cost theory generally fails to recognize these reasons for alliance formation.

Transaction cost theory focuses on one-time entries based on a set of relatively static conditions. The resource-based view, in contrast, has a dynamic and longitudinal focus. Its focus is on the multiple entries that take place, each building on capabilities and learning from previous experience (Chang 1995; Chang and Rosenzweig 2001; Kogut 1997). The transaction cost approach is on the exploitation of firm-specific advantage. The resource-based view focuses on this exploitation and its development (Madhok 1997).

Many firms enter into alliances with specific learning objectives in mind. Hamel, Doz and Prahalad (1989) argue that strategic alliances provide firms with "a window on their partners' broad capabilities". Here the resource-based perspective may benefit from the concept of opportunism used in transaction cost theory, because an

alliance partner may try to secretly learn and internalize the skills of the other partner more than what was stipulated in the alliance agreement (Tsang 2000). In many Japanese-Western alliances, such opportunistic behaviour of Japanese partners has made them stronger relative to their Western counterparts (Hamel 1991; Reich and Mankin 1986).

As noted by Heide (1994), a major implication of strategic interdependence is the identification of dependence and uncertainty as the key antecedent variables underlying the formation of inter-firm relationships. Thus there is a large overlap with transaction cost theory. Uncertainty as a key antecedent variable in common to both theories.

2.5.2 Comparison of the Transaction Cost Perspective, Resource-Based View and Network Theory

The Network perspective has been put forward as an alternative to both the resource-based view and transaction cost economics as an explanation of collaboration between firms. As has been noted above, the focus of the resource-based view and transaction cost economics has been on inducements to form alliances either from a value-maximisation or cost minimisation standpoint. The transaction cost perspective argues that the governance structure of a firm's operations is determined by that which minimises the cost of a transaction. The resource-based view argues that collaboration is driven by the resource needs of firms to ensure value maximisation. Both focus on the strategic or resource needs of the focal firm and alliance formation as a response to inducements or incentives to collaborate (Baum, Calabrese and Silverman 2000; Hagedoorn and Schakenraad 1990; Nohria and Garcia-Pont 1991; Pfeffer and Salancik 1978).

The focus of network theory, in contrast is on the opportunities for firms to form alliances and the process of alliance formation (Gulati 1995, 1999; Gulati and Gargiulo 1999; Walker, Kogut and Shan 1997). Network theory argues that the patterns of inter-firm alliances reflect the prior patterns of inter-firm relationships (Gulati 1995, 1999; Gulati and Gargiulo 1999; Walker, Kogut and Shan 1997). According to this view, a firm's ability to form new relationships is determined by the set of opportunities provided by its position in the prior network structure (Ahuja 2000). The key features of the network perspective in comparison to the resource-based view are illustrated in Table 2.3.

Table 2.3 The Resource-Based View and Network Theory – Key Features

Resource-Based View	Network Theory
Focus on inducements to form alliances - availability of opportunities to form an alliance is not a constraint	Focus on opportunities to form alliances
Focus on the technical and commercial determinants of alliance formation	Focus on the sociological determinants of alliance formation
Treatment of alliances as discrete independent events	Alliance seen in context of total network

Source: Adapted from Ahuja (2000)

Critiques of the transaction cost perspective have argued that the focus purely on the transaction does not address the question of choice of firm with which to ally (Gulati 1995; Paulson 1976; Pisano 1989). Although the resource-based view focuses on the match of strategic resource needs, and thus the resources of the potential partner firm are assessed, it has been criticised for often assuming that the supply of alliance partners is infinitely elastic (Arora and Gambardella 1990; Hagedoorn and Schakenraad 1990). The focus of both perspectives on the focal firm's needs means that there is no consideration for whether it is an attractive alliance partner (Kogut, Shan and Walker 1992; Shan, Walker and Kogut 1994).

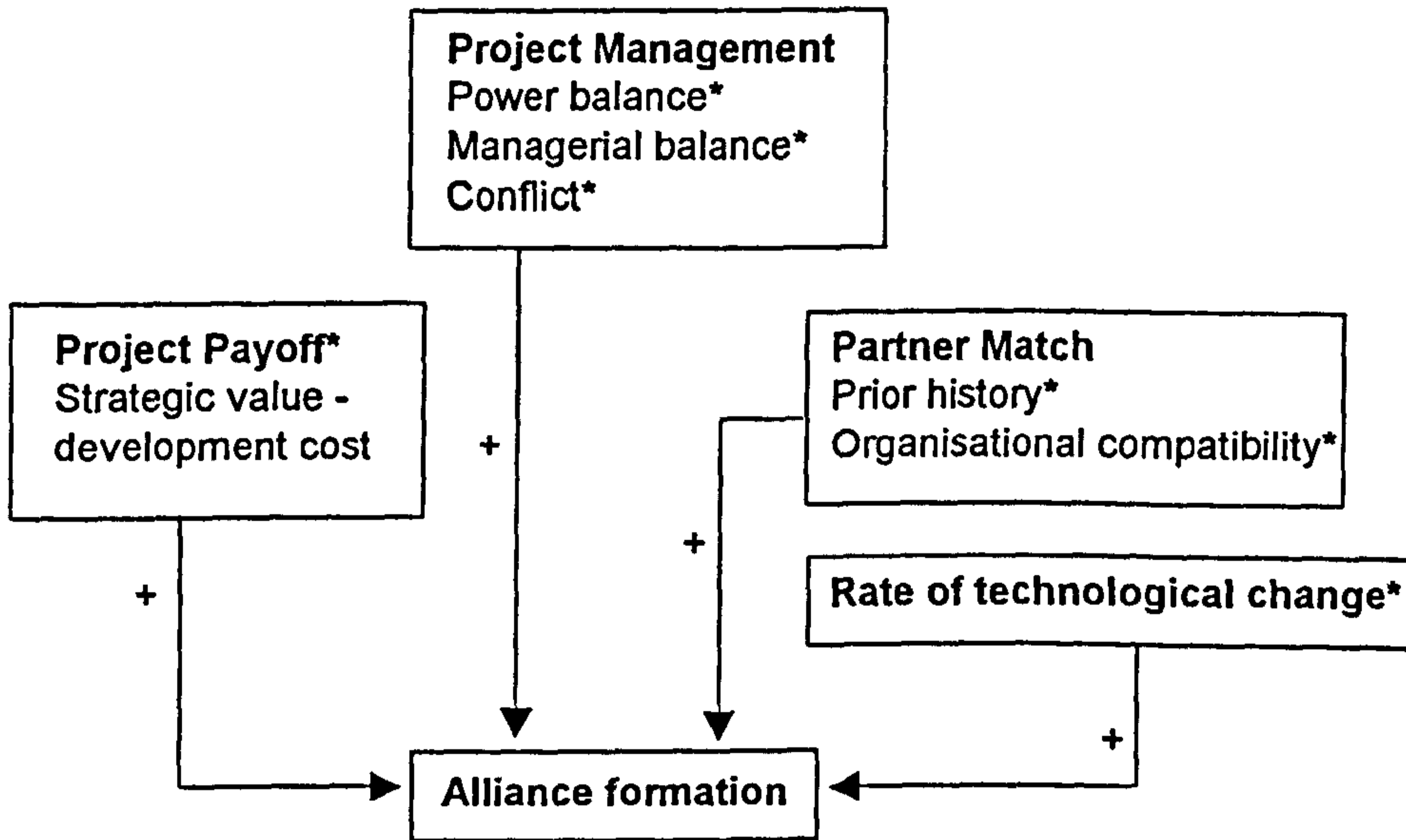
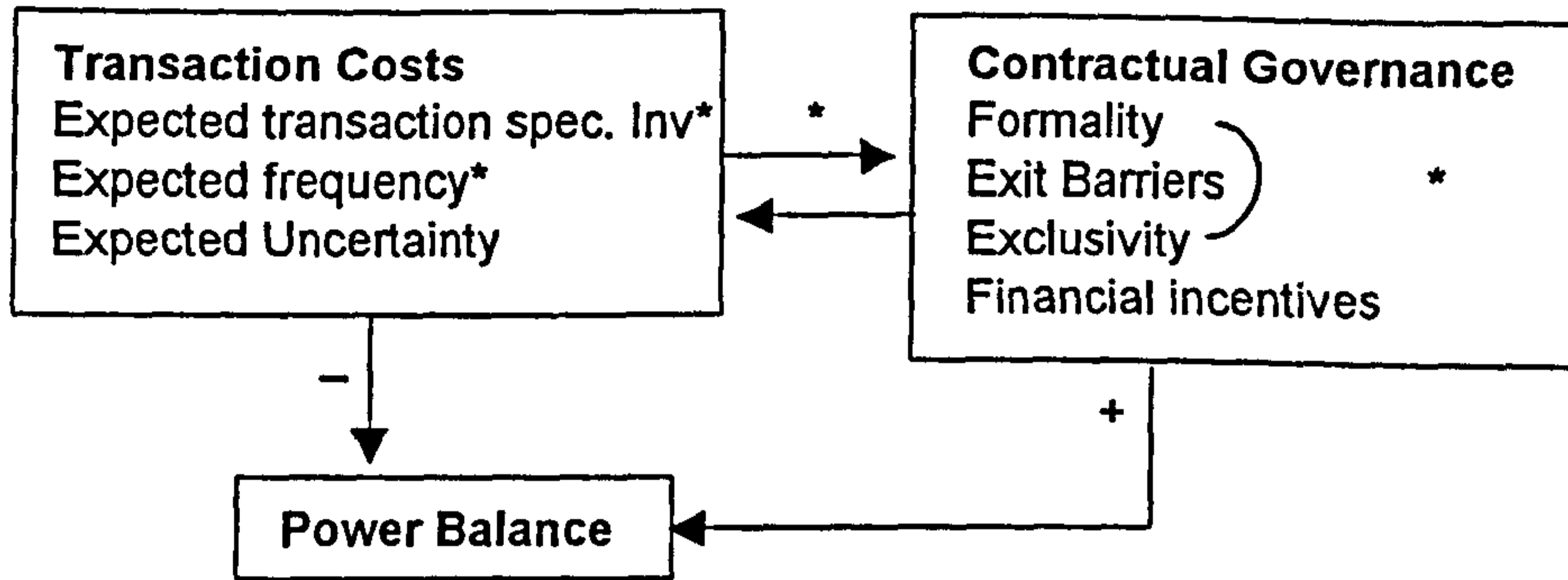
The network perspective recognises the role of strategic inducements to collaborate but focuses attention primarily on the sociological determinants of linkage formation (Gulati 1995, 1998; Gulati and Gargiulo 1999; Kogut, Shan and Walker 1992; Walker, Kogut and Shan 1997). It argues that the structure of the existing inter-firm linkage network influences the path of future collaboration by affecting the set of alliance opportunities available to prospective collaborators. It does not explicitly address the possibility that there might be other determinants of the collaboration opportunities facing firms beyond social capital. Second, it does not address the question of how new actors who lack prior participation in the network can form alliances or become central in the network.

Recently, some scholars have attempted to integrate the resource-based view and the network perspective to take account of both inducements to form alliances and opportunities to form alliances (Ahuja 2000; Eisenhardt and Schoonhoven 1996; Gulati 1999).

Bucklin and Sengupta (1993) incorporate network perspectives in their framework under the umbrella term 'partner match' (Figure 2.5). Their study focused on the success of alliances rather than motivations for alliance formation but their constructs can be extrapolated. They found alliance success to be dependent on a balance of

Figure 2.5

Resource-Based and Transaction Cost Perspectives
Adapted from Bucklin and Sengupta (1993)



* Significant

power between alliance partners, partner match and a positive payoff of the project. Project payoff was determined by the strategic value of the project net the development cost of the project (Benson 1975; Frazier 1983; Schermerhorn 1975). Partner match was determined by prior history and organisational compatibility. They found that organisational compatibility enhanced the effectiveness of inter-organisational dyads. Organisational compatibility was measured in terms of similar goals and objectives; similar operating philosophies and similar management styles building on work by Achrol, Scheer and Stern (1990); Ruekert and Walker (1987); and Van de Ven and Ferry (1980). Bucklin and Sengupta (1993) also found prior business relations to have a positive effect on the alliance, following work from Heide and John (1990). They also found that power balance was affected by the presence of high transaction costs and that these problems can be offset through contractual governance procedures.

Gulati (1995) finds strategic interdependence and social structural explanations for alliance formation. In addition he finds that these causative factors interact and that dynamics occur among interdependence, social structure and alliance formation. In later work, Gulati (1999) synthesises the two perspectives by conceptualising the concept of the social network that a firm exists in as a network resource.

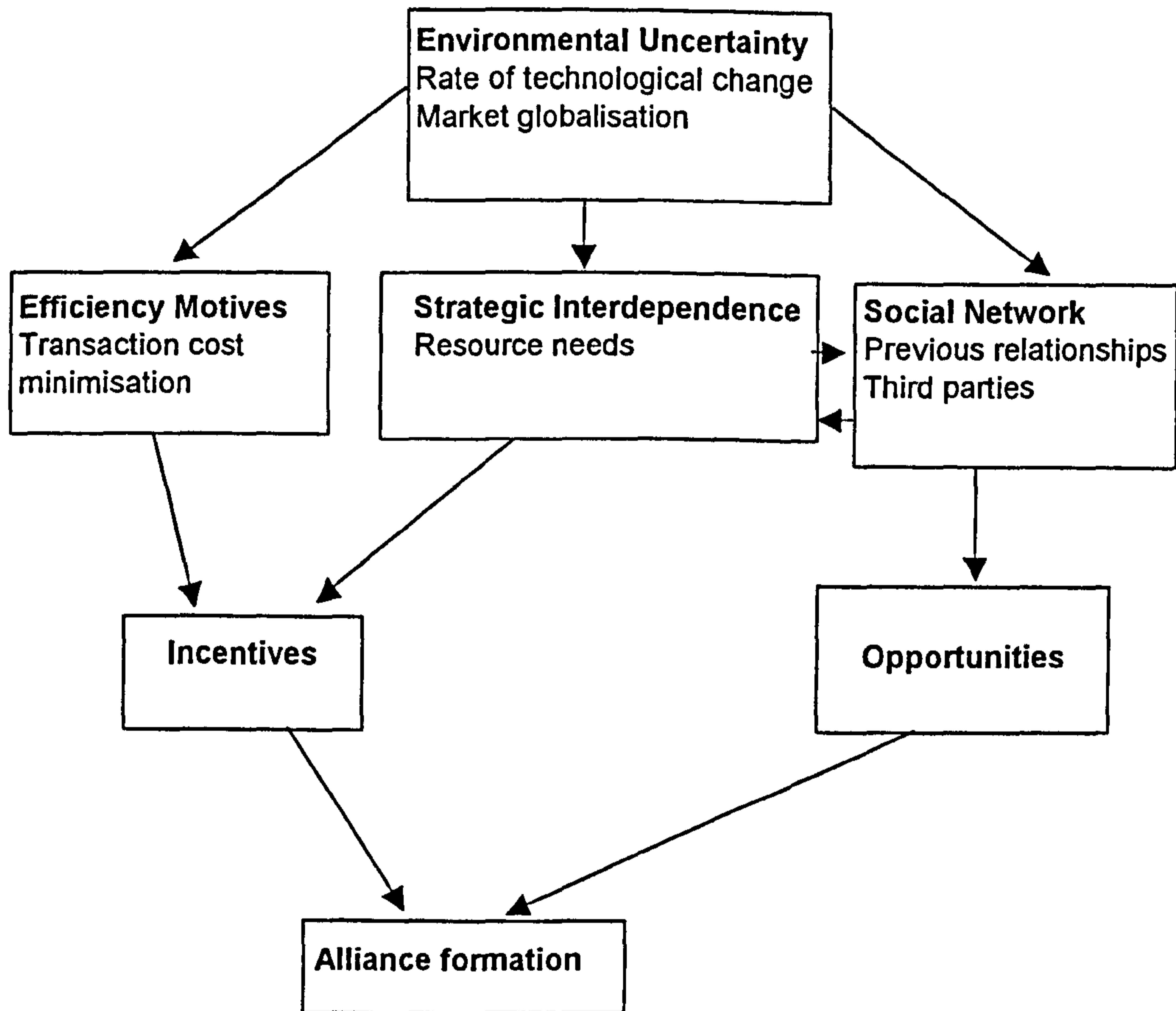
In a recent study of the global chemicals industry, Ahuja (2000) found support for the thesis that alliance formation is systematically related to both inducements to collaborate and opportunities for collaboration. He also found that possession of technical, commercial and social capital significantly influences both alliance formation inducements and opportunities facing firms.

2.6 Synthesis of Approaches

Figure 2.6 presents a proposed framework for the investigation of the motivations for alliance formation in the fresh produce industry. It is a development of the previous

Figure 2.6

International Alliance Formation in the Fresh Produce Industry



frameworks with a synthesis of overlapping constructs. In addition it introduces constructs to take account of supply-side uncertainties missing from previous models.

It defines an international strategic alliance after Parkhe (1991 and 1993) as a:

“relatively enduring inter-firm cooperative arrangement, involving flows and linkages that use resources and/or governance structures from autonomous organisations based in two or more countries, for the joint accomplishment of individual goals linked to the corporate mission of each sponsoring firm.”

It takes as its basis the resource-based view, with contributions from both the transaction cost perspective (Combs and Ketchen 1999; Gray and Wood 1991; Kay 1992; Rasheed and Geiger 2001; Tsang 2000) and the network perspective (Ahuja 2000; Eisenhardt and Schoonhoven 1996; Gulati 1999). It has been argued here that the resource-based view encompasses and develops the transaction cost perspective in relation to strategic alliance formation. Specifically, it raises the level of analysis from a transaction to that of the firm; it introduces a dynamic and longitudinal perspective; and the resource based view develops the focus from the transaction cost perspective of exploitation of firm-specific advantage to one of that exploitation and development. The inclusion of the network approach adds a still broader perspective. Whilst the resource-based view focuses on the inducements to form an alliance the network approach adds the important focus on the opportunities for firms to form alliances with alliances seen in the context of the total social network rather than as is the case with the resource-based view as discrete independent events.

The transaction cost perspective provides a detailed means of examining the cost minimisation motives of alliance formation. We argue that firms are motivated to form alliances when their transaction costs are of an intermediate level but not high enough to justify vertical integration. These transaction costs are determined by asset specificity, uncertainty and frequency of transactions. Transactions between UK

producers and producers from overseas in the fresh produce industry occur frequently, often daily in what can be a highly volatile market. Levels of asset specificity are also increasing, with the quality demands of end customers meaning that facilities are becoming more specialised and tailored to individual customer needs. Thus it is hypothesised that reducing transaction costs will be a motivating factor in alliance formation in this industry.

The resource-based view examines the influence of resource heterogeneity on alliance formation and the acquisition of valuable resources as a means of achieving strategic competitive advantage. It argues that firms will pool resources through collaborative arrangements when they cannot be acquired through market exchange or internalisation. As noted above, the UK fresh produce industry is characterised by short-term supply inflexibility and seasonality. The increasing demands from end-customers for year-round, dedicated produce with specific product characteristics, means that resource needs are a critical feature of this industry. It is hypothesised that resource needs will be a motivating factor in alliance formation in this industry.

The network perspective takes account of the social network that a firm operates within and the important influence of that network on the motivations to form alliances and the opportunities to form alliances. The two key features of the social network are previous relationships and the influence of third parties. It is hypothesised that previous relationships will have an important bearing on the motivations for alliance formation through the service they provide in both providing information about potential partners and the reliability of those partners, thus dispelling risk and also in serving as a basis for trust between alliance partners. The influence of third parties will also be examined and the role of the network in making opportunism more costly through reputational effects.

It is hypothesised that key environmental factors also influence alliance formation, notably globalisation of markets and technological development. As competition becomes more global in scope and the cost of competing in key markets escalates,

firms are increasingly lacking in resources to compete effectively and are forming alliances. The fresh produce industry is becoming increasingly globalised and it is hypothesised that market globalisation will therefore be a contributory factor in the motivation to form alliances. The increasing rate of technological development and technological needs in all industries and the reduction in product life cycles has increased the propensity of firms to enter into strategic alliances. Whilst technological needs in the UK fresh produce industry are relatively low in comparison to other industries they are increasing from a low base in an industry where relative size of businesses are small with more than half with turnovers of less than £100,000 (Business Monitor 2000), and where levels of investment are typically low. Thus the ability of firms to respond to increasing technological needs independently are curtailed and it is hypothesised that technological needs will be a contributory factor in alliance formation.

In addition, there has been a change in channel structures and power relationships in the supply chain and the process of channel management, specifically the increased market share and power of a decreasing number of large retail businesses over the rest of the marketing channel. There has been a reduction in the number of suppliers to any one retailer and increasing global competition to supply them. The influence of the network that firms operate within on alliance activity has been researched empirically by a number of scholars (Cook and Emerson 1978; Gulati 1995; Gulati and Singh 1998; Kogut, Shan and Walker 1992; Eisenhardt and Schoonoven 1996; Walker, Kogut and Shan 1997).

CHAPTER THREE

ALLIANCE SUCCESS

3.0 Introduction

The purpose of this chapter is to examine the contribution that can be made by the research literature on strategic alliances into the success of international alliances in the UK fresh produce industry. International alliances are often described as inherently unstable organizational forms that are prone to failure (Inkpen 2001). Alliances involve significant costs in terms of coordination, reconciling goals and creating competitors. Porter (1990) argues that these costs make many alliances transitional rather than stable arrangements and therefore alliances are rarely a sustainable means of creating competitive advantage. This argument has been supported empirically with several studies finding instability rates in international strategic alliances ranging from 25% to 75% (Bleeke and Ernst 1991; Chowdhury 1988; Geringer and Herbert 1991; Kogut 1988; Rule and Keown 1998). Based on the finding that twenty-four of the forty-nine international alliances they studied were considered failures by one or both partners, Bleeke and Ernst (1991) suggested that most alliances will terminate, even successful ones.

However, as noted in Chapter 2, despite this evidence, there has been unprecedented growth in the number of strategic alliances between firms (Das and Teng 2000; Doz and Hamel 1998; Gomes-Casseres 1996; Gulati, Nohria and Zaheer 2000; Inkpen 2001; Parkhe 1998; Varadarajan and Cunningham 1995; Yoshino and Rangan 1995). An increasing number of these alliances are international in nature, involving partners from more than one country (Parkhe 1998).

There has been less development in the literature on the factors behind successful alliances, than on the motivations for alliance formation. The theoretical frameworks again vary from inter-organisational exchange literature (Cook 1977; Pfeffer and

Salancik 1978) to transactions costs economics (Williamson 1975). In addition a number of perspectives are not clearly identified but are often implicitly from a political economy framework. There have been numerous factors cited in the alliance literature as contributing to alliance success. Gulati (1998) lists various factors that scholars have identified as explanations of alliance performance: flexibility in alliance management; trust; information exchange; management of conflict; continuity of boundary-spanning personnel and managing partner expectations.

Measurement of alliance performance is a factor that has divided alliance researchers for decades. The difficulties of measuring performance is rooted in both theoretical and methodological challenges (Inkpen 2001). Because alliances are formed for a variety of purposes (Contractor and Lorange 1988; Hennart 1988) and often in highly uncertain settings, performance evaluation becomes a very difficult task (Anderson 1990).

This chapter presents an overview of research into the success of strategic alliances. The chapter starts with a discussion of the definition and measurement of a successful alliance and examines the best measure of alliance success to be used in our study. This is followed by a discussion of the factors advanced both theoretically and empirically as determinants of alliance success. Following a critique of previous empirical work we present a framework for measuring success that will be used in this study and defend our choice of determining factors.

3.1 Definition and Measurement of Alliance Success

There has been considerable debate in the literature about the definition and measurement of a successful alliance (Cameron 1986; Chakravarthy 1986; Eccles 1991; Glaister and Buckley 1998; Glaister and Buckley 1999; Goodman and Pennings 1980; Jacobson 1987; Lewin and Minton 1986; Varadarajan and

Ramanujam 1990; Venkatraman and Ramanujam 1986). Many authors have advocated the use of traditional financial measures of success such as return on investment, growth or profits and the extent to which other indicators are relevant, such as maximising shareholders' wealth; customer satisfaction (Lecraw 1983; Tomlinson 1970). However, other authors have argued that an alliance's success cannot be viewed in isolation from the nature of the organisation's environment; the resource capabilities of the partnering firms and the motivations for the alliance formation in the first place (Anderson 1990; Bleeke and Ernst 1991; Bucklin and Sengupta 1993; Glaister and Buckley 1999). They argue that a focus on individual measures does not adequately reflect the extent to which the alliance has achieved its aims and objectives (Geringer and Herbert 1991).

Bucklin and Sengupta (1993) argue that many benefits are difficult to track quantitatively. For example, individual efforts and general economic conditions can increase sales of products. Tracking what portion of this incremental business is due purely to the alliance, they argue, is difficult, if not impossible to accomplish. Anderson (1990) notes that international alliances may be used in highly uncertain settings, with a very long-term performance horizon and no current performance baselines for comparison. In high risk or uncertain settings short-term financial measures would tend to indicate poor performance, although the alliance may be making satisfactory progress towards long term goals, or achieving current non-financial goals.

The failure of financial and objective measures to reflect adequately the extent to which an international alliance has achieved its aims is stressed by Geringer and Herbert (1991), who argue that despite poor financial results, liquidation or instability, an international alliance may have met or exceeded the partnering firms' objectives and so be considered successful. By contrast an alliance may be viewed as unsuccessful despite good financial results or continued stability. Anderson (1990) takes this point further by arguing that partner firms should recognise that most international alliances should be evaluated more subjectively over a longer time horizon than is typically used. Resort to formal, financial measures of performance

is likely to lead to early termination before an international alliance has had time to realise its potential. In this respect international alliances require a more balanced, often subjective approach if their promise is to be realised.

A further complication arises from the dyadic nature of alliances. Sometimes performance is asymmetric, with one firm achieving its objectives while the other firm fails to do so. An example is alliances in which one partner had raced to learn the other's skills while the other did not have any such intentions (Hamel, Doz and Prahalad 1989; Hamel 1991; Khanna, Gulati and Nohria 1998). In an equity joint venture (EJV), there are a number of different viewpoints of the venture, including the parent firms and the EJV management, which means that there might be different views on which aspects of the performance to measure and how successful these measures indicate the performance to be (Glaister and Buckley 1998). The EJV may be performing well, but at the expense of one parent's interests, for example because the EJV chooses not to source inputs from this parent. From this parent's perspective the EJV is performing poorly. Glaister and Buckley (1988) argue that in principle performance evaluation should incorporate multiple viewpoints. In empirical work, Schaan (1983) and Beamish and Banks (1987) both measured alliance performance by a managerial assessment where the alliance was only considered successful when both partners were satisfied.

Empirical studies examining international alliance performance have mainly dealt with equity joint ventures. In these studies a large number of criteria have been used to assess performance (Chowdhury 1992). In summarising prior empirical research Geringer and Herbert (1991) point out that early studies relied on a variety of financial indicators such as profitability, growth and cost position (Tomlinson 1970; Lecraw 1983). Others have examined the stock market reaction to the announcement of alliance formation (McConnell and Nantell 1985; Woolridge and Snow 1990). Other studies have used objective measures of performance such as survival of the alliance (Franko 1971; Geringer 1990; Harrigan 1986; Killing 1983; Park and Russo 1996); its duration (Day 1995; Harrigan 1986; Kogut 1988; Parkhe 1991); instability of its ownership (Franko 1971; Gomes-Casseres 1987); shifts in competitive strength

(Hamel, Doz and Prahalad (1989) and renegotiation of the alliance contract (Blodgett 1992).

Concerns about the ability of financial and objective measures to gauge effectiveness of alliance performance have led other scholars to use perceptual measures of satisfaction with alliance performance (Beamish 1985; Bleeke and Ernst 1991; Bucklin and Sengupta 1993; Dussauge and Garrette 1995; Glaister and Buckley 1999; Harrigan 1985, 1988; Killing 1983; Parkhe 1993; Schaan 1983). Perceptual measures are able to provide information regarding the extent to which the alliance has achieved its overall objectives. Gulati (1998) argues that such approaches enable the collection of a host of measures, on which performance can be assessed, as well as an examination of dyadic asymmetries in perceptions.

Bleeke and Ernst (1991) measure success by the extent to which both partners achieve their ingoing strategic objectives and both recover the financial cost of capital. They acknowledge that using purely financial criteria for success is distinctly American and that most Japanese and European companies have longer term less financially orientated measures. Bucklin and Sengupta (1993) developed a qualitative measure of performance, the 'perceived effectiveness of the relationship'. This measure has been developed in organisation theory (Van de Ven 1976) and applied to interorganisational relationship dyads (Ruekert and Walker 1987; Van de Ven and Ferry 1980). Because mutual performance is the criterion at issue, they define perceived effectiveness to be the extent to which both firms are committed to the alliance and find it to be productive and worthwhile.

In a study of international strategic alliances between UK and partner firms in Western Europe, the U.S. and Japan, Glaister and Buckley (1998) examine the relationship between subjective and objective performance measures. Their subjective measure was the satisfaction of alliance firms with the overall performance of the alliance, the objective measures were alliance survival, stability and duration. They found the strongest link to be between alliance survival and satisfaction with the alliance, confirming earlier work by Geringer and Herbert

(1991). In a development of this, Glaister and Buckley (1999) develop two subjective measures of performance: first, the UK parent's subjective level of satisfaction with the alliance's overall performance, second, as a check on the UK parent's overall satisfaction rating, an alternative measure based on a cost-benefit measure. In their study of alliances in the global aerospace industry, Dussauge and Garrette (1995) used the judgement of industry analysts and company executives to derive performance measures. Company executives were asked to evaluate all projects and not only alliances in which their company had been involved. They argue that the choice of a subjective performance measure is supported by research that has shown that objective and subjective measures of performance are positively correlated (Geringer and Herbert 1991).

Table 3.1 summarises the various measures used for alliance success in the literature as one of three evaluation criteria: i) financial measures; ii) non-financial objective measures; and iii) perceptual or subjective measures. However, within each category there are still questions of interpretation, so that even seemingly objective measures can be interpreted in different ways. Thus, if alliance success was measured in terms of profits, there are still a number of permutations that would affect the measurement. The measurement would depend on how profitability was defined and whether it was in terms of the focal firm alone or both partners, specific alliance activities or total firm profits and over what period of time profitability was to be measured.

Table 3.1 Determinants of Alliance Success

Measures	Variables
Financial	Return on investment; growth; profits; shareholder's wealth; recovering cost of capital
Objective	Age; durability; improving strategic positioning; shifts in competitive strength; enhancing learning; renegotiation of contract
Perceptual	Satisfaction with alliance; perceived effectiveness of alliance

Source: developed from literature

3.2 Factors Leading to Success

A large number of factors have been cited in the literature as having an impact on alliance success. These range from the nature of the industry environment within which the alliance operates to the quality of the management of the alliance itself. They cover both ex-ante factors, that is those variables that pertain at the time of alliance formation and ex-post factors, those variables which apply during the operation of the alliance. The latter focuses particularly on the nature of the alliance management process and partner-alliance interdependency. Most studies of alliance performance have linked levels of performance, however defined and measured to particular explanatory factors describing given attributes of the observed alliances.

Bucklin and Sengupta (1993) incorporate strategic and organisational factors as well as environmental factors into their framework. They categorise influencing factors into three groups. First, factors grouped under the term 'Project Management' reflecting the distribution of ownership, control and conflict resolution. Second, 'Project Payoff' reflecting alliance partners ex-ante views about the benefits and costs of the alliance. Third, 'Partner Match', reflecting the capability of the alliance partners to cooperate and work with each other.

In our discussion of the factors leading to success below, we provide a discussion of the main factors cited in the literature and examine empirical support for their importance.

3.2.1 Partner Asymmetries

3.2.1.1 Power Imbalance

The analysis of power in alliance relationships has been examined in two distinct ways. First, some researchers have looked at it in terms of control of the relationship (Killing 1982; 1983). This perspective has emerged from analysis of joint ventures by multinational corporations in less developed countries where the focus is on the location of control in the relationship. The second perspective is of power in terms of market power defined according to financial resources and market presence (Bleeke and Ernst 1991; Bucklin and Sengupta 1993; Cook 1977; Harrigan 1988; Prahalad 1989). Here the focus is on the balance of power between alliance partners and the consequences of alliances between partners with similar or different levels of market power.

Cook (1977) argues that firms prefer exchanges with equally powerful firms because there are fewer costs attached to the exchange process. Such costs arise as the consequence of difficulties in reaching agreement and the potential for exploitation when such unions are formed. Muller (1970) argued that organisations with superior

power will act to exploit that power. Extrapolating from this Bucklin and Sengupta (1993) argue that if dependencies are out of balance in a relationship, the weaker party will take precautions to limit its vulnerability. This could take the form of competing alliances, efforts to diminish the role of its partner with customers or failing to employ all the resources required. Recognising the potential for this behaviour, the more powerful partner may be loath to put the maximum effort required into the project. Therefore, they argue, that power imbalance is detrimental to alliance effectiveness and that the performance of an alliance is dependent on partners' ability to mitigate any power imbalance between them. They find that imbalances in power and in the managerial resources that each partner provides are significant drawbacks to alliance operations and have an important role in limiting alliance success.

This factor has been shown to be important in other empirical studies (Bleeke and Ernst 1991; Dussauge and Garrette 1995; Hamel, Doz and Prahalad 1989; Harrigan 1985, 1988). In a study of international strategic alliances in the U.S., Europe and Japan, Bleeke and Ernst (1991) found equal strength to be a highly significant factor in alliance success. They found that many strong companies actively seek weaker companies to partner in order to control the venture. Weaker companies often seek a strong partner to get them out of trouble or to build their skills. Bleeke and Ernst (1991) found that when one partner is weak, managing the alliance becomes the core focus rather than improvements needed in other parts of the business. When unbalanced partnerships do succeed, it is usually because the strong partner brings the capability that is crucial to the alliance, pulling the weaker partner along for a while before acquiring it or finding another partner. In a 5-year study of high technology firms in Europe, the United States and Japan, Hamel, Doz and Prahalad (1989) found that for both parties to gain from an alliance, the size and market power of both partners should be modest compared with industry leaders. They argue that this forces each side to accept that mutual dependence may have to continue for many years. They argue that long-term collaboration must be so critical to both partners that neither will risk antagonizing the other.

In a large sample study, Harrigan (1988) examined the influence of partner asymmetries on joint venture success. Performance was measured on the basis of joint venture duration, survival and managers' assessments. The results of the study suggest that alliances between similar firms tend to be more successful than asymmetric partnerships. Beamish (1985) examined joint ventures set up by multinational companies in less-developed countries. He found that shared or local-dominant control was positively related to performance.

In a study of joint ventures in developed countries, in contrast, Killing (1982, 1983) found a balance of power to have a negative affect on alliance success. He compared joint ventures in which one partner had a dominant position to one where all partners are equal. He concluded that dominant joint ventures were more successful than balanced partnerships.

3.2.1.2 Managerial Imbalance

Another dimension of partner asymmetries is that members of an alliance are likely to be sensitive to the contributions made by their partners (Rule and Keown 1998). Ouchi (1980) observed the difficulties encountered in the measurement of equity by clan organizations because of ambiguous performance measures for individual members. In these organizations, participant evaluation took place through the subtle reading of signals such as the effort and time allocated by members to work on activities. Bucklin and Sengupta (1993) argue that within an alliance framework, participants will look intensely at the resource contributions made by partner firms as a factor affecting their continued willingness to participate in the alliance. They found that imbalances in managerial resources each partner provides to the alliance are significant drawbacks to the success of an alliance. Achrol, Scheer and Stern (1990) found that differences in perceived position or status among the managerial levels at which interaction occurs amongst alliance partners could lead to cultural and political conflict. Doz (1988) found that differences in the locus of management among partners in technology alliances could lead to communication difficulties. In

a study of UK parents of international alliances with partner firms from western Europe, the U.S. and Japan, Glaister and Buckley (1998) found the perception of appropriate behaviour/performance in the activities undertaken by the foreign partner during the alliance was positively related to alliance performance.

3.2.1.3 Competitive Rivalry

Strategic alliances are inherently incomplete contracts in which the property rights associated with alliance output and profits may not be well defined (Baum, Calebrese and Silverman 2000). As a result, collaborators risk opportunistic exploitation by their partners, including leaking proprietary knowledge to partners or otherwise losing control of important assets (Hamel 1991; Williamson 1991). Although appropriate use of governance mechanisms might ameliorate these concerns (Larson 1992; Oxley 1997), intra-alliance rivalry retains the potential to severely disrupt an alliance and to harm a participating firm. This is particularly true when alliances are at risk of deteriorating into learning races (Khanna, Gulati and Nohria 1998) in which a firm attempts to extract as much knowledge as possible from its partner while divulging as little as possible. It is likely that such rivalries are fiercest and most damage in collaboration amongst potential competitors (Baum, Calebrese and Silverman 2000). If competitive rivalry dominates the co-operative relationship between the partners, the desire of one to win may reach a higher level of priority than sustaining the benefits of the alliance (Glaister and Buckley 1999). It can therefore be argued that the extent to which the partners actively compete in markets has the potential to de-stabilise the alliance relationship and worsen alliance performance. Also, where parent firms actively compete this may also affect respondents' attitudes to the nature of the alliance and its perceived level of success. Thus it would be expected that where partners actively compete the level of satisfaction with alliance performance would be lower than where the partners do not actively compete.

Despite the fact that much alliance activity over the last two decades has been between competing firms (Glaister and Buckley 1998), there has been little empirical research exploring this issue. Mowery, Oxley and Silverman (1996) found that alliances involving partners who competed in the same primary SIC exhibited lower levels of knowledge transfer than alliances between non-competing partners. Nakamura, Shaver and Yeung (1996) found that competing alliances were unlikely to involve 'complementary specialisation', where each partner focuses on a subset of activities and then combines the results with those of the other partner. In a study of U.S. semiconductor manufacturers in a research consortium, Grindley, Mowery and Silverman (1994) found that the firms were unable to undertake their initial joint research agenda because of fears concerning information leakage and learning races.

However, Glaister and Buckley (1999) find no support for the hypothesis that competitive rivalry has a deleterious effect on alliance performance. They argue that it is possible that alliance partners can successfully delineate boundaries between competition and collaboration in order to achieve desired performance outcomes for the alliance.

3.2.2 Project Payoff

Organisations undertake co-operative ventures after careful considerations of costs and returns related to resource deployment (Benson 1975; Bucklin and Sengupta 1993; Glaister and Buckley 1999; Schermerhorn 1975). Frazier (1983) posited a framework of exchange in which expected rewards and required investment in a relationship determined implementation and future outcomes. Specifically, Spekman and Sahwney (1990) note that the motivation for firms to enter into alliances is to obtain strategic competitive advantage. To the extent that the inherent market opportunities of some alliances are greater than that of others, better results should follow. Also, some alliances require far higher resource input once they have been set up (Bucklin and Sengupta 1993). In the case of joint marketing activities,

expenditures include such items as salesforce training and employment, and advertising. If joint product development is also needed, additional resources must be allocated to develop the necessary technologies. To the extent that the development process stretches over years, additional expenses will be incurred. The time dimension increases risk because of the potential for changes in market needs. If an alliance must put significant resources to work over time, the potential for return on such investment is attenuated. Bucklin and Sengupta (1993) develop this into a variable called 'project payoff' which is defined as the strategic value of the alliance net of development cost. Project payoff defines alliance partners' ex ante views about market opportunity and cost. Bucklin and Sengupta (1993) argue that alliances with well-defined market opportunities and well-defined costs are more likely to perform well. They find strong empirical support for their argument. They stress the importance of project selection, in terms of both market opportunity and resources required. Market objectives must be clearly defined, the value added from improving product complementarities well understood from the end user's perspective, and resource requirements accurately anticipated by both parties.

Glaister and Buckley (1998) link project payoff to ex-ante analysis of the alliance potential in their empirical research. They find that there is a strong relationship between in-depth analysis of an alliance prior to formation and alliance success. However they argue that this may be due to a significant relationship between expected payoff and the depth of analysis prior to alliance formation. Specifically, they argue that where potential alliances have ex-ante expected high payoffs, then firms may spend more time planning and analyzing these alliances. Conversely, where expected payoffs are low, firms may invest less time and effort in assessing the potential alliance.

3.2.3 Partner Match

3.2.3.1 Organisational Culture

A key factor cited in the success of international alliances is cultural distance (Barkema and Vermeulen 1997; Fedor and Werther 1995; Rule and Keown 1998; Shenkar and Zeira 1992). Internalisation theory posits that the greater the cultural distance between the home base of the partners, the more an alliance is more likely to fail. It argues that similar cultural values can reduce misunderstanding between partners and that culturally distant alliances experience greater difficulties in their interactions. The greater the differences in their organizational and administrative practices the less likely it is that alliances will be successful.

Much of the empirical research in this area has focused on a particular aspect of culture (see below) such as corporate culture, national culture or societal culture. Criticising this approach as partial and failing to provide an overall assessment of interfirm interactions some researchers have developed a typology of the major dimensions of cultural distance (Parkhe 1991; Fedor and Werther 1995). Parkhe (1991) identifies three distinct cultural factors: societal culture; national context; and corporate culture. He argues that "the influence of a society's culture permeates all aspects of life within the society, including the norms, values, and behaviours of managers in its national companies." International strategic alliances bring together people who may have different patterns of behaving and believing and different cognitive blueprints for interpreting the world (Black and Mendenhall 1990). Parkhe (1991) uses approaches to conflict resolution and problem solving as illustrative examples. He argues that international strategic alliances must routinely deal with conflicts. In some cultures this is viewed as healthy and an inevitable part of interfirm relationships (Cosier and Dalton) yet in others, conflict and open confrontation is deemed distasteful. Similarly, in some cultures, problems are there to be actively solved whereas in others life is seen as a series of preordained situations that are to be fatalistically accepted (Moran and Harris 1982).

Differences in national context can also hamper effective collaboration. A company's national context includes the surrounding industry structure and institutions, government laws and regulations. Parkhe (1991) compares the national context of Japan, the U.S. and Europe. He argues that in Japan, companies have a long history of co-operation in some areas while competing in others. In the U.S. in contrast, the federal government has traditionally viewed co-operation between companies with suspicion. In Europe, "inter-firm cooperation has historically been hampered by fragmented European markets, cultural and linguistic differences, diverse equipment standards and business regulations and nationalist and protectionist government policies."

Corporate culture includes those ideologies and values that characterize particular organizations (Beyer 1981; Peters and Waterman 1982). These firm-specific differences are often interwoven with the partners' societal cultures and national contexts (Parkhe 1991). Harrigan (1988) argues that corporate culture homogeneity among partners is even more important to strategic alliance success than symmetry in their national origins.

Fedor and Werther (1995) develop a diagnostic framework for assessing the importance of cultural factors in international strategic alliances. Their framework incorporates basic firm strategies and internal management systems as factors that combine to form firm culture. The essential elements of each firm's 'basic strategy' are: primary mission (basic elements of company culture); goals and objectives (time-based targets); strategies (means of developing and defending competitive position); performance measures; and correction mechanisms.

The essential elements of a firm's 'internal management systems' are: common language (common meanings); boundaries (division of 'insiders' and 'outsiders' in any group); hierarchical relationships (distribution of power and status); peer relationships.

Fedor and Werther (1995) stress that success is not necessarily a product of 'cultural similarities' between partners rather 'cultural fit'. Successful international alliances often depend on each of the partners finding something unique to contribute to the alliance, including different cultural assumptions and perspectives. They cite an alliance between Quaker Oats (a UK food company) and Chiari and Forti (an Italian food company). Both use considerably different reward systems with their salesforce teams – the former formal and quantitative, the latter informal and qualitative. However Quaker Oats did not try and interfere with Chiari and Forti's system because it suited the unique circumstances of the Italian food distribution system. They argue that it is essential to identify and preserve special features of partner's cultures that are a source of competitive advantage. Hedlund (1994) and Teece (1997) argue that similarities between partners may affect alliance performance because they facilitate the appropriability of tacit and articulated knowledge which ultimately increases the likelihood of successful alliance performance.

A number of studies have found that cultural compatibility is a significant factor in alliance success (Brown, Rugman and Verbeke 1989; Camerer and Vepsalainen 1988; Hoffman and Schlosser 2001; Lane and Beamish 1990). Lane and Beamish (1990) argue that cultural compatibility between partners is the most important factor in the endurance of an international alliance. As an example they argue that communications between culturally distant partners can be difficult, compounding the co-ordination problems that exist in any partnership, leaving alliances vulnerable to managerial conflicts and early dissolution. Other studies have found that negotiations between businesspeople of different cultures often fail because of problems related to cross-cultural differences (Adler 1986; Black 1987; Graham 1985; Tung 1984). Harrigan (1988) studied the influence of sponsoring-firms asymmetries in terms of strategic directions on performance. Hall (1984) analysed the effects of differing management procedures on alliances. Other researchers have examined the influence of variations in corporate culture (Killing 1982) and national setting (Turner 1987) on successful collaboration.

Bucklin and Sengupta (1993) argue that organisational compatibility reflects complementarity in goals and objectives as well as similarity in operating philosophies and corporate cultures. In an empirical study of U.S. computer and semi-conductor firms, they find that compatibility of the partners is critical to alliance success.

Other studies have found contradictory conclusions. In a study of Japanese-U.S. joint ventures, Park and Ungson (1997) found cultural distance was not a significant factor in joint-venture dissolution rates. Luo (1997) also found no significant relationship between partners' sociocultural distance and joint venture performance. Harrigan (1988) found that cross-border joint ventures can overcome early difficulties caused by cultural differences and Barkema, Bell and Pennings (1996) found that learning between partners can offset cultural differences. In a study of 75 alliances between UK parents and partner firms in Western Europe, the U.S. and Japan, Glaister and Buckley (1999) did not find cultural distance to be a significant factor in determining the success of the alliances. They argue that there may be benefits from choosing a partner with a dissimilar culture and if partners recognize and appreciate the differences in culture and regard this as an opportunity to learn new things and expand the capabilities of the organization then this may be a source of strength to the alliance.

Hamel (1991) argues that the capability of a firm to learn from its partners may be a tacit resource underlying a firm's competitive advantage. This is confirmed in empirical studies. For MNC's, the intensity and diversity of learning from local partners facilitates local knowledge acquisition and strengthens firm performance in host countries (Luo and Peng 1999; Makino and Delios 1996). For local firms, learning from MNC parents is likely to enhance survivability and performance (Fahy, Hooley, Cox, Beracs, Fonfera and Snoj 2000; Lyles and Salk 1996).

A related issue is that the success of an alliance is dependent on the relative analysis of the appropriateness of the partners involved (Beamish 1987; Berg, Duncan and Friedman 1982; Bucklin and Sengupta 1993; Geringer 1991; Harrigan 1985; Killing

1983). When firms first become engaged in alliance negotiations they are likely to have different strategic objectives, asymmetric capabilities as well as other important differences. These differences will condition firm's choice of whether to enter an alliance, the structure of the alliance and choice of partner (Harrigan and Newman 1990). Glaister and Buckley (1999) find strong support for this factor in their research. However they argue that the significance of this relationship may be due to the fact that when potential alliances have ex-ante high expected payoffs, then firms may spend more time planning and analysing these alliances. Conversely when payoffs are low, firms may invest less time and effort in assessing the potential alliance.

3.2.3.2 Flexibility

The flexibility of the alliance to adapt to the changing needs of partners and the available resources and skills of the partner firms (Bleeke and Ernst 1991; Doz 1996; Dyer and Singh 1997) has also been related to alliance success. It is argued that it is inevitable that the objectives, resources and relative power of the alliance partners will gradually change over time (Bleeke and Ernst 1991). As markets shift, new technologies emerge and customers' needs change, the functions needed from the alliance may change. Also the strategies, skills and resources of the partners will change. Once alliances are underway, there may be new opportunities that become apparent. Bleeke and Ernst (1991) argue that a key factor in successful alliances is in the ability and willingness of the partners to allow the alliance to evolve flexibly. They found that flexibility was needed to overcome problems that many alliances encounter early on. In their study of 49 strategic alliances in the U.S., Europe and Japan they found 67% ran into trouble in the first two years, and those that had the flexibility to evolve were better able to recover. They found many had trouble meeting initial goals, often because the expectations or projections at the outset were overly optimistic. They found a strong link between flexibility and success. Nearly 40% of the alliances in their sample gradually broadened the scope of their initial charter. Of the alliances that had evolved, 79% were successful and 89% ongoing.

In contrast, of the alliances whose scope remained unchanged, only 33% were successful and more than half of them terminated.

The importance of partners' ability to initiate necessary changes to the partnership as it evolves on a firms' performance has been illustrated empirically by a few other authors (Doz 1996; Dyer and Singh 1997), but it is an area where little empirical research has been undertaken. As noted by Yan (1998) in reference to research on international joint ventures:

“the usefulness and relevance of international joint venture research rests on its ability to suggest managerial actions that address instability, rather than simply document the frequency of already terminated, thus “unstable” international joint ventures. While researchers have called for more “process-oriented research on how the deals are managed once they are made” (Westney 1988), the process of international joint venture development has received “the least amount of systematic attention in the existing literature”, representing “a critical omission in the development of a more complete theory of international joint ventures” (Parkhe 1993).”

3.2.3.3 Prior History

Scholars have argued that previous relationships are also an important determining factor on the success of an alliance (Bucklin and Sengupta 1993; Glaister and Buckley 1999; Gulati 1998; Heide and John 1990; Parkhe 1993; Saxton 1997). Saxton (1997) argues that prior relationships allow partner firms to know each other better and thus are likely to have a greater understanding of the respective capabilities and resources they are seeking to access and the likely behaviour of the expected partner. Because of prior relationships firms often form alliances with firms they have had relationships with in the past.

Continuing business relationships often become overlaid with social content that generates strong expectations of trust and forbearance (Granovetter 1985; Gulati 1995). Gulati (1995) has examined trust between alliance partners and the choice of organizational form of alliance. He argues that repeated alliances between firms over time can lead to the emergence of inter-firm trust. Experience can thus engender trust among partners which in turn can limit the transaction costs associated with future alliances. Trust obliges partners to behave loyally and is incrementally built as firms interact. Thus two firms with prior alliances are likely to trust each other more than other firms with whom they have had no alliances (Gulati 1995) and prior knowledge of potential partners can lead to alliances that begin their existence with an existing stock of 'relationship assets' (Fichman and Levinthal 1991). Parkhe (1993) hypothesized that the performance of an alliance would be negatively related to the extent to which the partners perceive each other as behaving opportunistically and in an empirical study found the presence of a prior history of co-operation limited partners' perception of expected opportunistic behaviour in new alliances. He also suggested (Parkhe 1991) that unplanned alliance termination is more likely when firms are working together for the first time.

Empirical support for the influence of prior history on alliance success is mixed. One of the first set of studies on the factors associated with alliance terminations found that alliances between firms with a prior history of ties were less likely to terminate (Kogut 1989). Levinthal and Fichman (1988) and Seabright, Levinthal and Fichman (1992) found that the duration of exchange relationships is influenced by 'dyadic attachments' between firms which are influenced by the history of interaction between the organizations. In a study of supplier relationships in the automotive industry, Gulati and Lawrence (1997) found that more embedded tie relationships performed better than alternative sourcing arrangements and were particularly effective in situations of high uncertainty. Heide and John (1990) found a positive association between the historical length of an alliance relationship and expected continuity of future interaction. Bucklin and Sengupta (1993) found strong support for prior history between partners as a contributory factor in alliance success. They argue that it clearly helps to develop prior relationships with prospective

partners before engaging in formal alliances to ensure effective working relationships.

However, Glaister and Buckley (1999) did not find any significant support for this proposition. They conclude that prior relationships are not a good predictor of successful alliance performance. They argue that this finding is similar to Saxton (1997) who reported that prior affiliation was linked to initial satisfaction but not to longer term benefits to partners. Saxton (1997) explained this by noting that although prior affiliation may affect the "propensity to engage with a firm... it does not have a commensurate impact on subsequent performance." Glaister and Buckley (1999) concluded that while prior relationships may encourage the initial formation of the alliance it is the broad set of ongoing long-term relationships that endure between the partners that promotes successful alliance outcomes.

3.2.3.4 Trust

International alliance research over the past decades has repeatedly argued that mutual trust is essential for successful alliances (Arino and de la Torre 1998; Beamish and Banks 1987; Buckley and Casson 1988; Harrigan 1986; Hoffman and Schlosser 2001; Inkpen and Beamish 1997; Madhok 1995; Mohr and Spekmen 1994; Parkhe 1993; 1998a; 1988b; Rule and Keown 1998; Yan 1998; Zaheer, McEvily and Perrone 1997). Williamson (1985) states that, other things being equal, exchange relationships featuring trust will be able to manage greater stress and will display greater adaptability. Zand (1972) argues that the lack of trust will be deleterious to information exchange, to reciprocity of influence, and will diminish the effectiveness of joint problem solving. Anderson and Narus (1990) suggest that once trust is established, firms learn that joint efforts will lead to outcomes that exceed what the firm would achieve had it acted solely in its own best interests. Yan (1998) argues that "lack of trust between the partners at the international joint venture formation can be a major source of structural instability". Child and Faulkner (1998) note that trust is particularly fragile in international alliances because risk and uncertainty

involved in domestic alliance formation are heightened in the alliance context by cross-national differences between partner firms.

Numerous definitions of trust have been proposed in the literature depending on the type of organizational or social setting. Trust in economic exchanges has been defined as the "expectation that parties will make a good faith effort to behave in accordance with any commitments, be honest in negotiations and not take advantage of the other, even when the opportunity is available" (Hosmer 1995) or in a similar vein "the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party" (Mayer, Davis and Schoorman 1995).

Aulakh, Kotabe and Sahay (1996) argue that although trust exists between individuals it can be extended to exchanges between organizations because inter-organisational relationships are managed by individuals in each organization (Bradach and Eccles 1989; Hosmer 1995). Trust in inter-firm relations includes a set of expectations between the partners regarding each other's behaviour and each partner's fulfillment of its perceived obligations in the light of such anticipation (Madhok 1995; Thorelli 1986). Aulakh, Kotabe and Sahay (1996) argue that the expectations of behaviour between exchange partners has structural and behavioural components (Hosmer 1995; Madhok 1995). The structural component refers to the form of trust fostered by mutual hostages and complementarity of resources contributed by the partners (Madhok 1995). The behavioural component of trust refers to the confidence aspect in exchange relationships, the "firm's belief that another company will perform actions that will result in positive outcomes for the firm as well as not take unexpected actions that result in negative outcomes."

The literature identifies three interrelated roles of trust in interorganisational exchanges. First, as an important deterrence to opportunistic behaviour (Bradach and Eccles 1989). Aulakh, Kotabe and Sahay (1995) argue that as interorganisational partnerships try to balance individual gains with joint partnership performance, there

is a strong probability that partnership goals are sacrificed for individual benefits, especially when such behaviour is not transparent to the partner firm. However, if trust is embedded in the partnership, opportunistic behaviour is unlikely to occur because partner firms will pass short term individual gains in favour of the long term interests of the partnership (Axelrod 1986; Beamish and Banks 1987; Stitchcombe 1986).

Second, trust can be a substitute for hierarchical governance. Trust-based interorganisational exchanges rely on mutuality of interests between partner firms rather than formal authority structures based on ownership (Bradach and Eccles 1989; Dwyer, Schurr and Oh 1987). Trust allows for bilateral governance which accomplishes individual goals for independent organizations through joint accomplishments, shared beliefs and mutual concern for long-term benefits (Heide 1994; Ouchi 1980).

Third, there is also evidence that building trust in interorganisational partnerships has important market performance and efficiency implications (Bleeke and Ernst 1991; Parkhe 1993; Wilkins and Ouchi 1983).

The role that trust plays and the degree of trust required varies by relationship and is dependent on three elements of trust, namely uncertainty, vulnerability and control (Parkhe 1998). Specifically, the greater the uncertainty surrounding future events and a partner's responses to those future events, the greater the potential loss through an alliance and the lower the control exercised by one alliance partner over the other, the greater the trust required.

Barney and Hansen (1994) identified three types of trust: weak form, semi-strong form and strong form. Weak form trust arises when there are limited opportunities for opportunism. Partners can have mutual confidence that others will not exploit their vulnerabilities because they have no significant vulnerabilities. Semi-strong form trust can be called "trust through governance" (Barney and Hansen 1994). Trust can emerge even when significant vulnerabilities exist, if parties to an alliance

are protected through various governance devices. These can be market based (eg. market for reputations) or contractual (e.g. contracts or reciprocal agreements). Strong form trust is "hard-core trustworthiness" (Barney and Hansen 1994). Trust emerges in the face of significant vulnerabilities, independent of whether or not governance devices exist, because opportunistic behaviour would violate values, principles and standards of behaviour that have been internalized by alliance partners.

In terms of a specific alliance, Parkhe (1998) identifies a number of factors that will determine the importance of trust. The first factor is the nature of the industry and the nature of transactions within the industry. He argues that if the industry is atomistic, with numerous small companies competing more or less anonymously, and if reputation effects are weak or absent, then trust will be less important.

The second factor is the type of alliance. Using Contractor and Lorange's (1988) typology of co-operative arrangements (Chapter 2, page 12) he argues that the lower the degree of interlocking interests between alliance partners, the lower the vulnerabilities and the less important trust will be. Thus an equity joint venture has high interorganisational dependence and thus trust between partners is very important, whereas start-up assistance agreements have negligible interorganisational dependence and thus trust is far less important.

The third factor is the sources of uncertainty. Parkhe (1998) argues that uncertainty is an inherent feature of alliances and external uncertainty cannot generally be controlled but that internal uncertainty can be minimized by openness and information sharing between partners.

Despite the extensive literature examining the importance of trust in interorganisational exchange relationships there has been little research to identify the determinants or antecedents of interorganisational trust (Aulakh, Kotabe and Sahay 1995; Parkhe 1998). Aulakh, Kotabe and Sahay (1995) identify the antecedents of trust in a study of cross-border marketing partnerships of U.S. firms.

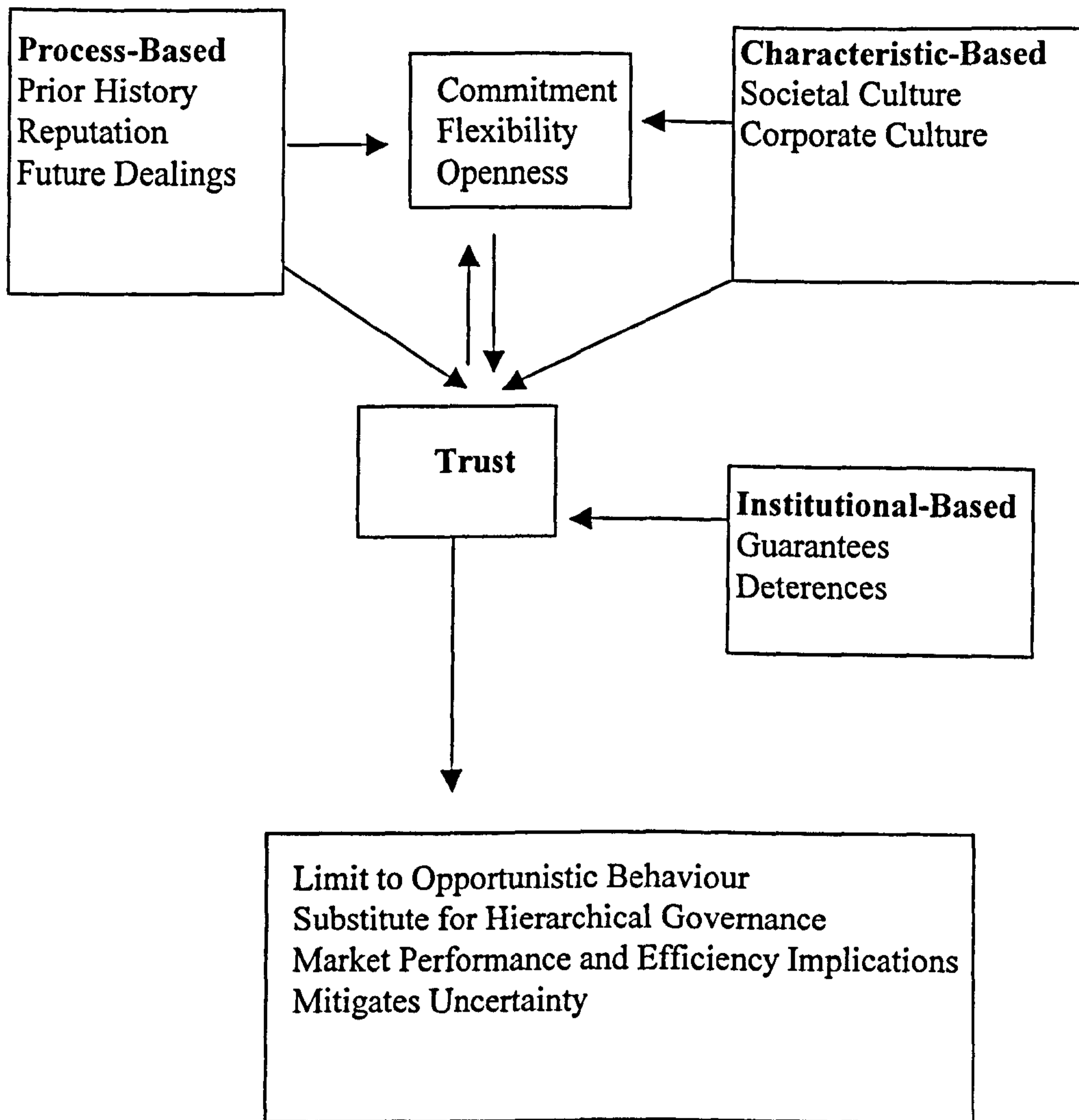
Focusing on behavioural antecedents of trust, they find that initiating and fostering norms of continuity expectations, flexibility and information exchange between the partner firms are positively related to trust in the partnership. They also find that continuity expectations and flexibility enhance the partnership's market performance.

Parkhe (1998) differentiates between three sources of trust, namely, process-based, characteristic-based and institutional-based (Figure 3.1). In process-based trust production, trust develops from the exchange process itself, based on past or expected future interactions. Specifically, he argues that trust is dependent on a partner's past co-operative history, the firm's reputation and the extent to which the alliance partners anticipate mutually advantageous interdependence extending into the foreseeable future. He argues that a growing co-operative history and concrete personal relations help to strengthen the socio-psychological bonds that generate trust. Also that a firm's reputation creates trust by imposing self-restraint on actions, as a company strives to preserve and protect what it has painstakingly built. The stronger the reputation, the greater the tacit assurance of continuing trustworthy behaviour in the future and the greater the trust generated. Also that process-based trust is greater "the longer the shadow of the future", that is the stronger the connection between current actions and future consequences.

Characteristic-based trust production refers to the societal and corporate culture of partner firms (Parkhe 1991). Parkhe (1998) argues that similarity in cultures between partner firms can generate homogeneous expectations and common assumptions regarding a partner and partnership, inducing characteristic-based trust and facilitating cooperative success.

Institutional based trust production refers to the formal mechanisms put into the partnership by alliance partners to signal their trustworthiness. These include guarantees and intermediary mechanisms. Parkhe (1998) argues that firms signal a baseline level of trustworthiness by belonging to professional associations and

Figure 3.1 The Antecedents and Outcomes of Trust



Source: Derived from Parkhe (1998) and Aulakh, Kotabe and Sahay (1996)

individuals signal competence and trustworthiness via professional certification and credentialing. Intermediary mechanisms include measures that aim to create trust through self-imposed exit barriers and penalties for inappropriate behaviour. Examples of the former are reciprocal agreements such as guaranteed purchase of each other's products at guaranteed prices or commitment of other types of non-recoverable investments in the alliance such as physical asset specificity, site specificity, human asset specificity and dedicated assets (Williamson 1985). Examples of the latter are contractual safeguards or legal stipulations in the partnership that inflict penalties for omission of co-operative behaviours or commission of violative behaviours.

Alliance trust is an evolving rather than static concept. Over time, as the partners and partner managers learn about each other and the alliance becomes an operating entity, the level of trust between partners will change. Trust needs familiarity and mutual understanding and therefore depends on time and context (Nooteboom, Berger and Noorderhaven 1997). As the relationship ages, previous successes, failures and partner interactions will influence the level of trust in the alliance (Inkpen 2001). Two firms with prior alliances are likely to trust each other more than other firms with whom they have had no alliances (Gulati 1995). Parkhe (1993) hypothesized that the performance of an alliance would be negatively related to the extent to which the partners perceive each other as behaving opportunistically and in an empirical study found that the presence of a prior history of co-operation limited partners' perception of expected opportunistic behaviour in new alliances.

Yan and Gray (1994) argue that given the dynamic nature of trust, there is a feedback from performance to trust. Poor performance may cause distrust between the partners, which in turn leads to poor long-term alliance performance (Killing 1983). A firm may predict expected alliance performance, based on past alliance results. If alliance performance is worse than expected, alliance partners are likely to question the competence and capabilities of their partners and the level of trust in the relationship will diminish. In turn, performance may diminish, feeding back in a vicious circle.

There is empirical support for the influence of trust on alliance success. In a study of a failed joint venture, Arino and de la Torre (1998) concluded that in the absence of a reserve of trust, alliances that encounter threats to stability will not be sustainable. In their empirical study, Aulakh, Kotabe and Sahay (1996) found support for continuity expectation, flexibility and information exchange and monitoring mechanisms as important determinants of trust and performance in international alliances. They found that trust moderates opportunistic behaviour. They also found a geographical basis for trust. In a study of computer firms Mohr and Spekman (1994) also found trust to be a key factor in relationship success.

There is also empirical support for the influence of trust on performance. Using perception of opportunistic behaviour as a proxy for trust, Parkhe (1993) found a strong relationship between perception of opportunistic behaviour and alliance performance. Inkpen and Currall (1997) found support for the argument that trust has an indirect effect on performance. In their qualitative study of U.S. – China joint ventures, Yan and Gray (1994) identified trust as a mechanism that moderated the relationship between formal management control and venture performance. Park and Ungson (1997) and Saxton (1997) found a positive relationship between antecedents of trust and alliance outcomes.

3.3 Limitations of Empirical Research

The performance of alliances has received less attention than other areas of research into alliances because of some onerous research obstacles, which include measuring alliance performance and the logistical challenges of collecting the rich data necessary to assess these issues in greater detail (Gulati 1998). Numerous studies have reported dramatically high failure rates of alliances and scholars have sought to identify the precise conditions for alliance success (Bleeke and Ernst 1991; Bucklin

and Sengupta 1993; Dussauge and Garrette 1995; Glaister and Buckley 1999; Kanter 1989).

As argued above, a significant criticism of empirical studies examining the success of strategic alliances has concerned theoretical and methodological problems. The lack of clarity and consistency in conceptualizing and operationalising strategic alliance success has been a concern of many researchers (Anderson 1990; Blodgett 1992; Geringer and Herbert 1991; Glaister and Buckley 1998; Gomes-Casseres 1987; Inkpen and Beamish 1997; Yan and Gray 1995). As discussed above, a wide number of measures of success have been used in previous empirical research ranging from pure financial measures such as levels of profitability, to objective measures such as alliance survival, to more subjective or perceptual measures such as satisfaction with the alliance by one or both partners. However, as has been argued above, the measures can be conflicting and an alliance may be deemed successful according to one interpretation of success, but unsuccessful according to another. A number of scholars have argued that alliance performance cannot be accurately assessed without taking into account the nature of the environment, the resource capabilities of the firms and the motivations for alliance formation in the first place (Anderson 1990; Bleeke and Ernst 1991; Bucklin and Sengupta 1993; Glaister and Buckley 1999). This has led other scholars to use perceptual measures of satisfaction with alliance performance (Beamish 1985; Bleeke and Ernst 1991; Bucklin and Sengupta 1993; Dussauge and Garrette 1995; Glaister and Buckley 1999; Harrigan 1985, 1988; Killing 1983; Parkhe 1993; Schaan 1983). They argue that such approaches enable the collection of a host of measures, on which performance can be assessed.

The problems of using an objective or financial measure of success without taking into account the environmental context of alliance formation and the reasons for alliance formation can be illustrated by looking at the studies of international joint venture success. A large number of these studies, with a few notable exceptions (Killing 1983; Blodgett 1992) have focused on alliance termination as a measure of lack of success. However, it is conceptually problematic to treat all terminated

alliances as unstable because terminations may signify a successful completion of the partnership (Gomes-Casseres 1987) or be anticipated and pre-agreed by the partners at inception (Inkpen and Beamish 1997). Also, as noted by Yan (1998), one cannot assume that all alliances that have not terminated are successful. As he puts it "because they do not change from stable to unstable the night before their termination."

Even financial measures are open to interpretation. As noted above, measuring success by profitability would depend on how profitability was defined and whether it was in terms of the focal firm alone or both partners, specific alliance activities or total firm profits and over what period of time profitability was to be measured. Bucklin and Sengupta (1993) in criticizing the use of pure financial measures to assess alliance success note "in addition to joint marketing efforts by alliance partners, individual efforts and general economic conditions may result in increased sales of products. Tracking what portion of this incremental business is due purely to the alliance is difficult, if not impossible, to accomplish."

A second major criticism of previous empirical research is that it has failed to provide a coherent theoretical explanation for the environmental and organizational forces that lead to alliance success (Yan 1998). Most prior empirical research on the determinants of alliance performance, with a few exceptions (Bucklin and Sengupta 1993; Dussauge and Garrette 1995) has tested the influence of particular isolated factors. However, as argued by Dussauge and Garrette (1995), factors shown to improve performance are not necessarily present in the same cases and some factors may even be mutually exclusive. Also, as noted above, the significance of factors is directly related to the measure of success used in the empirical study. Thus in the empirical research reviewed above, there is conflicting findings from researchers as to the significance of power balance, competitive rivalry, culture, prior history and trust on alliance success. To take power balance as an example, Harrigan (1988); Bucklin and Sengupta (1993) and Bleeke and Ernst (1991) all found that success was significantly related to a balance of power between alliance partners; whilst Killing (1982; 1983) found the exact opposite, that is that a balance of power had a negative

affect on alliance success. He compared joint ventures in which one partner had a dominant position to one where all partners are equal. He concluded that dominated joint ventures were more successful than balanced partnerships.

These studies used a variety of measures of alliance success. Harrigan (1988) measured success according to alliance duration, survival and manager's personal assessments of the alliance. Killing (1982, 1983) used measures based on manager's assessments. Bucklin and Sengupta (1993) developed a measure based on the "perceived effectiveness" of the relationship. Bleeke and Ernst (1991) measured success according to whether both partners had achieved their strategic objectives and whether both had recovered their financial costs of capital. Both measures were based on financial results.

Instead of relating differing levels of performance to isolated attributes of alliances Dussauge and Garrette (1995) try to find a relationship between performance and patterns of inter-firm collaboration. They develop a taxonomy synthesizing factors identified as influencing performance. They argue that most of the factors influencing performance are either strategic or organisational and more specifically that it is the fit between strategy and structure rather than isolated strategic and organisational factors that have a significant impact on firm performance. They build a taxonomy of alliances on the basis of the variables describing strategic and organisational features suggested as influencing alliances. They find organizational structure to be the over-riding influence on alliance performance.

Bucklin and Sengupta (1993) incorporate strategic and organisational factors as well as environmental factors into their framework. They categorise influencing factors into three groups. First, factors grouped under the term 'Project Management' reflecting the distribution of ownership, control and conflict resolution. Second, 'Project Payoff' reflecting alliance partners ex-ante views about the benefits and costs of the alliance. Third, 'Partner Match', reflecting the capability of the alliance partners to cooperate and work with each other.

Gulati (1998) criticises most prior work on alliance performance for not considering the impact of the social networks within which most firms exist on the relative performance of their alliances. He argues that the extent to which an alliance is embedded in a social network will influence its performance for several reasons. By being proximately situated in an alliance, the partnering firms are likely to have greater confidence and trust in each other, both because they have greater information and because the network creates a natural deterrent for bad behaviour that will damage reputation. Trust also promotes ease of interaction and a flexible orientation on the part of each partner. Gulati (1998) argues that all of these can create enabling conditions under which the success of an alliance is more likely.

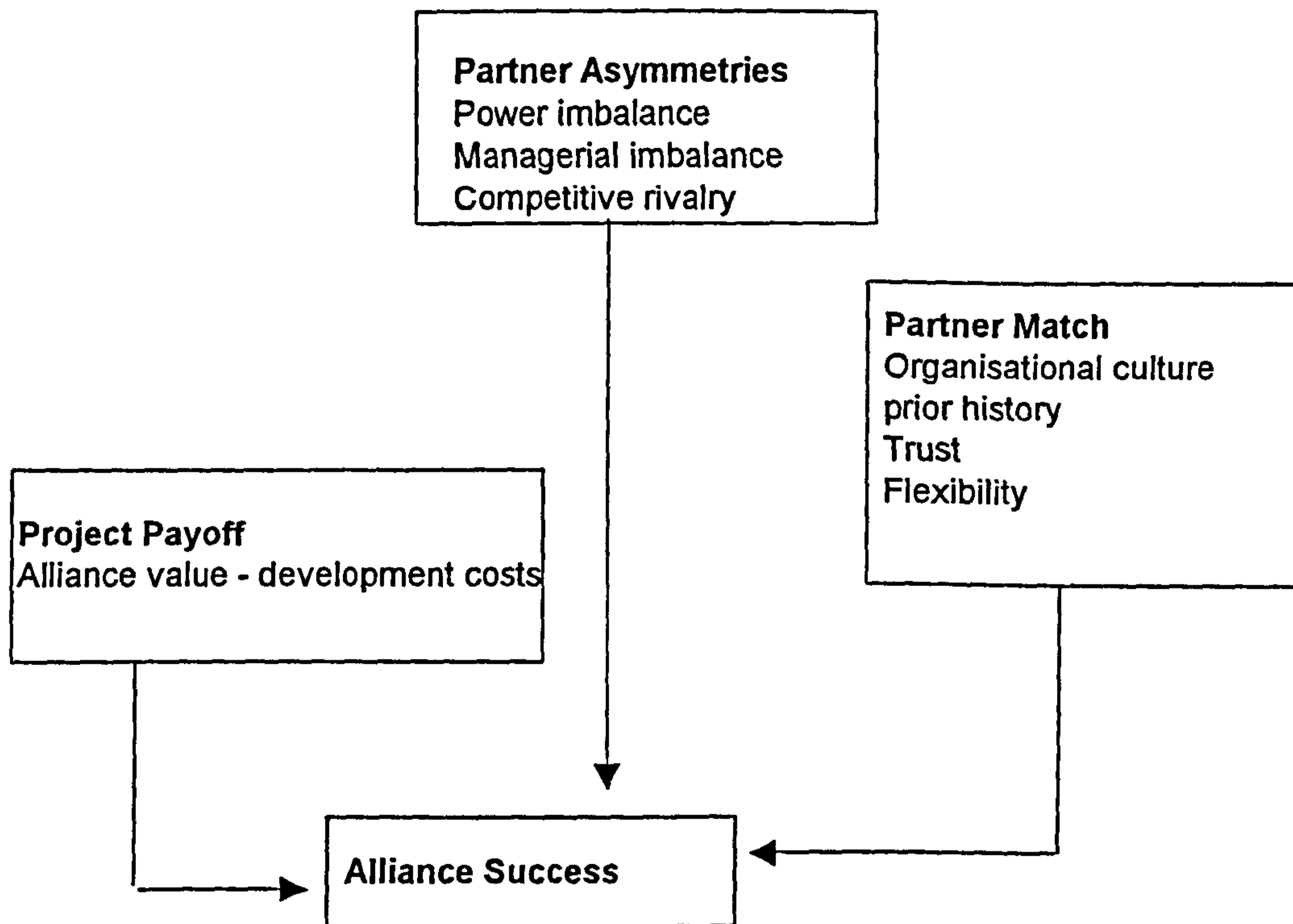
3.4 Synthesis of Approaches

Figure 3.2 is a proposed framework for the investigation of alliance performance. A key criticism of previous empirical work in this area is the measures that have been used to measure alliance success. As argued above the resultant factors found to affect success are dependent on the measure of success used. It has been argued that previously contradictory findings on the influence of certain factors on alliance success may be due in part to the measures of success used (Dussauge and Garrette 1995). We have argued that alliance performance cannot be accurately assessed without taking into account the nature of the environment, the resource capabilities of the firms and the motivations for alliance formation in the first place (Anderson 1990; Bleeke and Ernst 1991; Bucklin and Sengupta 1993; Glaister and Buckley 1999). In the light of this we are using a perceptual measure of satisfaction with alliance performance (Beamish 1985; Bleeke and Ernst 1991; Bucklin and Sengupta 1993; Dussauge and Garrette 1995; Glaister and Buckley 1999; Harrigan 1985, 1988; Killing 1983; Parkhe 1993; Schaan 1983). Specifically we define success after Bucklin and Sengupta (1993) as one where the alliance partners are satisfied with the performance of the alliance and the extent to which the alliance has achieved its overall objectives.

Figure 3.2

Alliance Success Factors in the Fresh Produce Industry

Adapted from Bucklin and Sengupta (1993); Glaister and Buckley (1999)



Alliance success is defined qualitatively as where the alliance partners are satisfied with the performance of the alliance and the extent to which it has achieved its overall objectives.

The use of a perceptual measure of alliance performance is likely to be particularly applicable to alliances in the fresh produce industry. A key driver for alliance formation by UK producer firms is securing year-round supplies of produce. Forming a supply relationship with a UK grower is a major way of accessing the UK market. A key driver for alliance formation by the partner firm is thus likely to be entry into a new and profitable market. It is also likely that there are other motivating factors behind alliance formation such as improvements in strategic positioning; spreading overhead costs; spreading risk; adding value to the business; aiding new product development; expanding expertise and accessing technical innovation amongst others. The importance of these individual benefits is likely to differ amongst firms according to their resource capabilities and the external environment. Measuring the success of these alliances with either purely financial or objective measures such as age of the relationship is thus not likely to provide full explanatory power.

Our approach examines the importance of strategic and organizational success factors advocated by both Bucklin and Sengupta (1993) and Dussauge and Garrette (1995). Taking on board Gulati's (1998) critique it assesses the importance of the social network that the alliance is part of. It also takes into account the important distinction between ex-ante and ex-post factors as outlined by Glaister and Buckley (1999).

Specifically, partner asymmetries examines the impact of differences in power and managerial imbalance and competitive rivalry on alliance performance. It is hypothesized that imbalances in power and in the managerial resources that each partner provides are drawbacks to alliance operations and have an important role in limiting alliance success. The balance of power is also likely to be affected by the dependence of both parties on the alliance. The extent to which partners actively compete in markets has the potential to de-stabilise the alliance relationship and worsen alliance performance. The boundaries between competition and collaboration between partner firms in international strategic alliances in the Fresh Produce industry are becoming increasingly blurred with improvements in

technology lengthening production windows for both UK firms and their overseas partners. It is thus hypothesized that competitive rivalry will have a negative impact on alliance performance.

Project payoff in this context examines the net value of the alliance once development costs have been taken into account. It is hypothesized that alliances with well-defined market opportunities and well-defined costs are more likely to perform well.

Partner match includes the variables organizational culture, prior history and trust. Organisational culture takes into account factors associated with firm strategies and internal management systems. It is hypothesized that alliances are more likely to be successful if firms are seeking similar goals and objectives as well as similarity in operating philosophies and corporate cultures. It is hypothesized that similar cultural values can reduce misunderstanding between partners and that culturally distant alliances experience greater difficulties in their interactions. Flexibility is also assessed in terms of the ability of partners to initiate changes to the alliance and the ability of the alliance to evolve and develop as the objectives of the alliance change and the resources of the partner firms' change. Alliance flexibility is hypothesized to be an important key to success in alliances in the UK fresh produce industry. This is an industry where short-term supply and demand conditions are volatile and thus the needs of the alliance may change.

It is hypothesized that prior history will have a positive impact on performance in several ways. First, prior history means that firms are likely to have a greater understanding of respective resources and capabilities and likely partner behaviour. The likelihood of misunderstanding between partners and conflict is therefore likely to be reduced. The influence of prior history on trust and the positive effects of trust on alliance performance will also be assessed. Trust is expected to be an important factor in alliance performance in the UK fresh produce industry, an industry where collaborative relationships tend to be non-contractual, devoid of formal checks and balances and thus with incentives to behave opportunistically.

CHAPTER FOUR

THE UK FRESH PRODUCE INDUSTRY

4.0 Introduction

This chapter describes the fresh produce industry in the UK at the time our research was undertaken, specifically in 1999/2000. The purpose of this chapter is to provide an understanding of the industry context that the firms in our sample were operating in at the time of our study. As such it focuses on factors pertinent to those firms. It is not an overview of the industry as a whole. The specific factors identified in the literature as motivations for alliance formation and determinants of alliance success are examined within the context of this industry. There are some factors that are common to all firms within the industry. There are others which vary between industry sub-sectors. Differences between sub-sectors of the industry are discussed where appropriate. There is a detailed discussion of our sample in Chapter eight. References to our specific sample will be made where appropriate.

4.1 Resource Dependencies

4.1.1 Supply

The definition of fresh produce covers field and protected vegetables, potatoes, fruit and flowers. Most producers in the UK grow more than one product, but specialise within a product category. Thus a fruit producer will tend to specialise in fruit but might grow a number of different crops and varieties. However some will grow products across these categories such as both field and protected vegetables. The firms interviewed in our study were representative of all the main fresh product groups. Most firms grew more than one product, but the majority specialised within

a product category. Twelve of the 17 firms specialised in either field vegetables, protected vegetables, potatoes, fruit or flowers. The precise product mixes of the firms in our study are discussed in detail in Chapter 8.

4.1.1.1 Production Systems

There are a variety of systems for the production of fresh produce in the UK. Protected vegetables are grown using a range of protected structures such as nets, plastic or glass. Glasshouse production is the most controllable system and sophistication of structures used varies. The most advanced systems provide protection against any pathogen, utilizing computer technology to fine-tune the feeding of plants with nutrients and fertilizers, to control temperatures with both heating and automatic ventilation and to control humidity and carbon dioxide levels. More basic systems provide shelter against the elements and usually some form of heating with feeding and watering controlled manually. Most salad crops in the UK are grown under protected structures. These include tomatoes, cucumbers, lettuce, celery and sweet peppers. Mushrooms are also grown under protected structures. Ten of the firms in our study used protected structures for at least some of their production. Salad production in the UK mainly uses hydroponic growing systems, using such media as rockwool or perlite instead of soil. This gives producers far more control over the quality and yield potential of crops grown than when using soil.

Potatoes are grown using a mixture of open-field and basic protection such as plastic tunnels. The use of protection is determined by geographical location. The more southerly the production, the more likely that producers will use some form of protection against the sun. Seven of the firms in our study grew potatoes.

Field vegetables are grown using open-field production. This is the least controllable means of production and is highly dependent on external factors such as sunlight levels, volumes of rainfall and incidences of pests and diseases. Field vegetables

grown in the UK include roots and onions (beetroot, carrots, parsnips, turnips and swedes, onions); brassicas (Brussels sprouts, cabbage, cauliflower, calabrese); legumes (broad beans, runner and dwarf beans, peas); asparagus; celery; leeks; lettuce; rhubarb and watercress. Nine of the firms in our study used open-field production for some of their produce.

Top fruit is grown in the open on trees grafted on to rootstocks. There were 2 fruit producers in our study.

Most producers make use of some chemical controls to protect their crops against pests and diseases. However there have been moves, driven by both producers and customer demands to limit the use of chemical control in production and increase the use of biological control. More and more producers now use integrated crop management systems (ICM) which embrace many disciplines including integrated pest management (IPM). These systems bring together current experience and knowledge of the integration of biological and chemical methods of pest, weed and disease control. The principal objective is to minimize pesticide usage through diligent and responsible crop monitoring to utilize biological agents where possible. The National Farmer's Union (NFU) has collaborated with 6 of the 7 major UK multiple retailers to devise ICM protocols for different crops. The protocols describe existing 'best' agricultural practice and are updated as improvements are developed from new technology or specific research and development programs. The protocols are crop-specific and provide detailed guides covering environmental considerations, pesticide usage and operational controls such as staff training and control and monitoring of pest and disease levels. A major element of the protocols is that quality control of the final product is the responsibility of all participants in the production process. The main aspects of the protocols are summarized in Appendix 3.

4.1.1.2 Production

Field Vegetables

At the time of our study, the area of land devoted to field vegetable production in the UK had been steadily declining (Table 4.1). The area of planted crops fell from 176,000 hectares in 1990 to 148,000 hectares in 1999, a decrease of 16%. The most significant crops in terms of planted area are peas, carrots, cauliflower and onions.

The planted area of peas declined markedly from 53,000 hectares in 1990 to 38,000 hectares in 1999, a decrease of 28%. The reduction in planted area of cauliflower was even more marked from 17,000 hectares in 1990 to 12,000 hectares in 1999, a decrease of 29%. The planted area for carrots declined slightly, from 14,000 hectares in 1990 to 12,000 hectares in 1999 whilst that of onions actually increased over the period.

The total volume of field vegetables produced has remained relatively constant over the period with volumes produced in 1990 and 1999 of 2.6 million tonnes reflecting a general increase in crop yields. Volumes of individual crops produced year on year have been more variable as individual yields have varied (Table 4.2). Carrots are the largest vegetable crop grown in the UK with production of 702,000 tonnes in 1999. Onions are also significant with production of 406,000 tonnes in 1999. Other important crops include winter cabbage, field lettuce, peas and cauliflower. Carrot production has increased significantly over the period from 492,000 tonnes in 1990 to 702,000 tonnes in 1999, an increase of 43%. This increase, in spite of a decline in planted area, reflected a significant increase in yield from 34 tonnes per hectare to 58 tonnes per hectare. Onion production also increased over the period, a result of both an increase in yield and an increase in production area. Declining product categories include most brassicas, particularly cabbage and cauliflower. Cauliflower production almost halved over the period from 295,000 tonnes in 1990 to 168,000 tonnes in 1999. Pea production in the UK, although still a significant proportion of total output, has more than halved since 1990.

Table 4.1 Field Vegetables: Planted Area in the UK, Hectares

	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00
Selected Crops										
Carrots	14,301	15,552	13,980	12,486	13,033	13,115	13,629	11,485	11,018	12,207
Onions	9083	8791	8766	9038	8973	10348	11780	11158	11827	11777
Brussels Sprouts	7655	7873	7846	7117	7034	6127	5678	5537	5097	5656
Cabbage	14113	13847	12459	12343	11841	13916	12909	9806	10094	9485
Cauliflower	17025	18099	17723	17249	16761	17648	15616	13382	14356	11968
Calabrese	5464	5796	4880	5487	5822	6594	6959	7204	7230	7543
Peas	53621	50236	45293	42550	41104	43986	43919	40276	42089	39253
Lettuce	7695	7414	6557	5777	6390	6743	7189	6110	6299	6068
Total Field Vegetables	175,515	175,332	164,367	156,264	154,800	161,988	161,398	151,254	154,628	147,854

Source: DEFRA (2000), *Basic Horticultural Statistics for the United Kingdom*, Department for the Environment Food and Rural Affairs (DEFRA).

Table 4.2 Field Vegetables: Production, '000 tonnes

Selected Crops	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00
Carrots	492	536	532	605	567	525	680	591	626	702
Onions	247	257	241	348	271	279	343	354	401	433
Brussels Sprouts	91	100	98	102	94	74	83	74	71	80
Cabbage	407	396	380	384	356	376	348	279	286	268
Cauliflower	295	317	309	312	268	247	217	191	192	168
Calabrese	30	35	38	51	53	49	63	66	67	70
Peas	246	231	217	215	187	206	223	176	159	150
Lettuce	198	193	174	145	179	192	188	158	152	156
Total Field Vegetables	2644	2733	2669	2839	2609	2547	2772	2493	2574	2641

Source: DEFRA (2000), *Basic Horticultural Statistics for the United Kingdom*, Department for the Environment Food and Rural Affairs (DEFRA).

The value of total UK field vegetable production varied year on year, dependent on volumes and prices but at £616 million in 1999, was 12% lower than its value in 1990 of £691 million (Table 4.3). The most significant crops in terms of value are again carrots, onions, peas and lettuce, but also calabrese (as a result of a high price/tonne). Average farm-gate prices for most field vegetables, whilst varying on a year to year basis, have not increased in the last 10 years representing a significant decrease in prices received in real terms (Figure 4.1). Prices of carrots, onions, Brussels sprouts and winter cabbage were significantly lower in 1999 than they were in 1990.

Field vegetable production is seasonal. Production periods are highly specific to individual crops. Carrot production, for example, is fairly evenly distributed between July and March. Brussels sprouts production is concentrated over a much shorter period, from October to January. Figure 4.2 shows the monthly marketing patterns for the principal UK field vegetables.

Monthly producer prices for most vegetable crops vary greatly, reflecting both short-term supply and short-term demand variations. Figure 4.3 shows that producer prices for all fresh vegetables varied by more than 10% from one month to the next over the period 1998-1999. The variation for individual vegetable crops was even more marked with producer prices for onions peaking in July of both years and then falling by over 40% by December.

Table 4.3 Field Vegetables: Value of Home Production Marketed in the UK, £ '000s

	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00
Selected Crops										
Carrots	110,411	66,382	57,456	75,490	87,474	107,352	82,846	72,859	98,669	86,768
Onions										
Brussels Sprouts	36,667	33,349	27,123	30,812	31,625	34,820	25,976	24,055	28,008	24,649
Cabbage	72,277	56,155	63,082	55,666	58,411	93,953	62,956	50,131	63,258	47,942
Cauliflower	70,389	78,033	62,272	68,153	59,429	70,049	51,626	43,076	41,352	36,609
Calabrese	21,941	19,824	23,155	29,694	31,607	32,833	37,165	45,894	42,944	45,131
Peas	55,748	48,814	42,449	49,969	39,056	44,047	56,702	42,229	40,133	44,042
Lettuce	84,120	79,637	81,381	51,097	93,119	109,753	77,791	90,713	71,208	79,820
Total Field Vegetables	691,171	608,288	557,016	613,416	687,217	765,023	649,004	658,807	668,485	616,160

Source: DEFRA (2000), *Basic Horticultural Statistics for the United Kingdom*, Department for the Environment Food and Rural Affairs (DEFRA).

Figure 4.1

Average Farm-gate Prices, Selected Field Vegetables

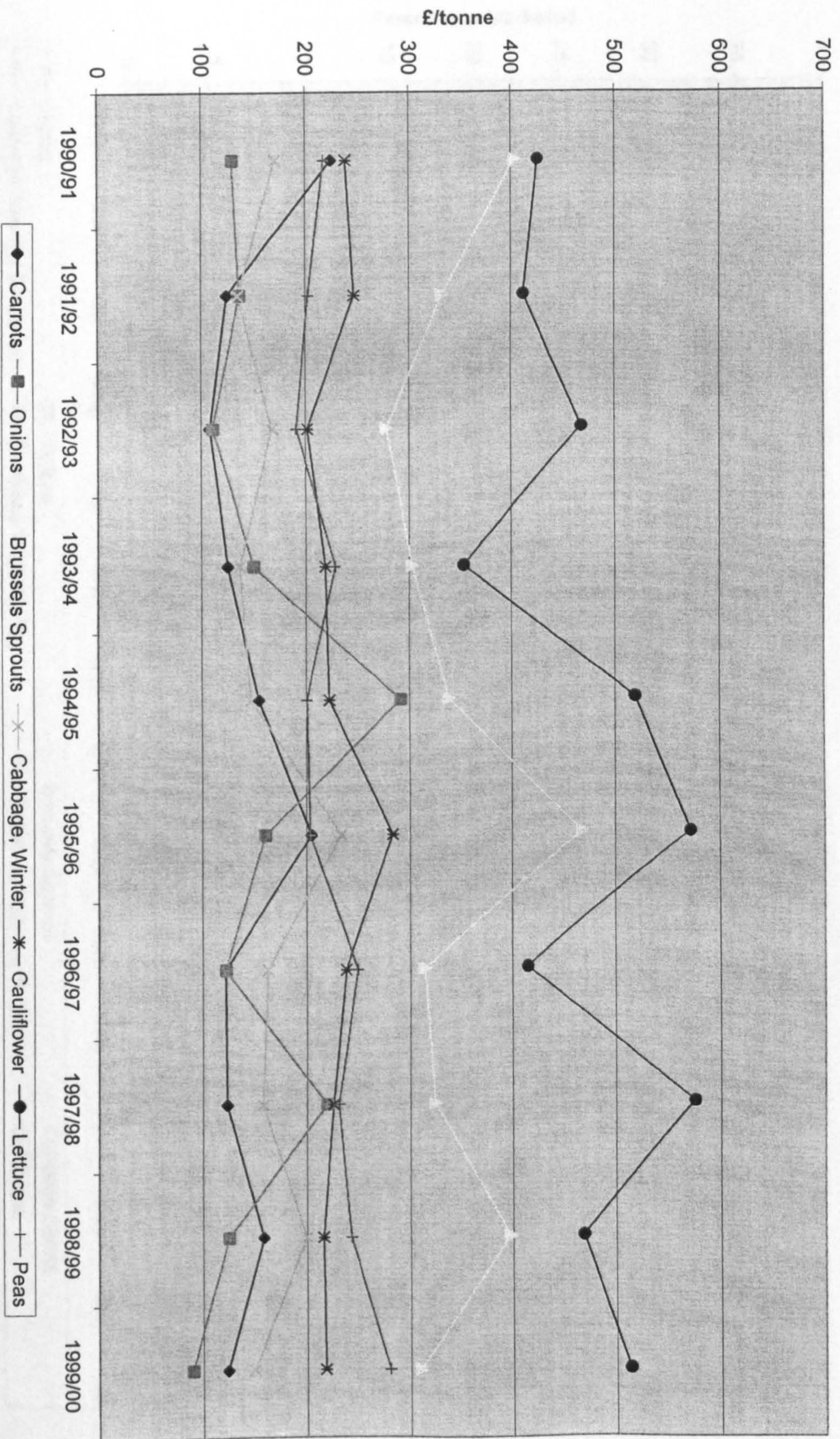


Figure 4.2

Monthly Marketing Patterns, Principal Field Crops

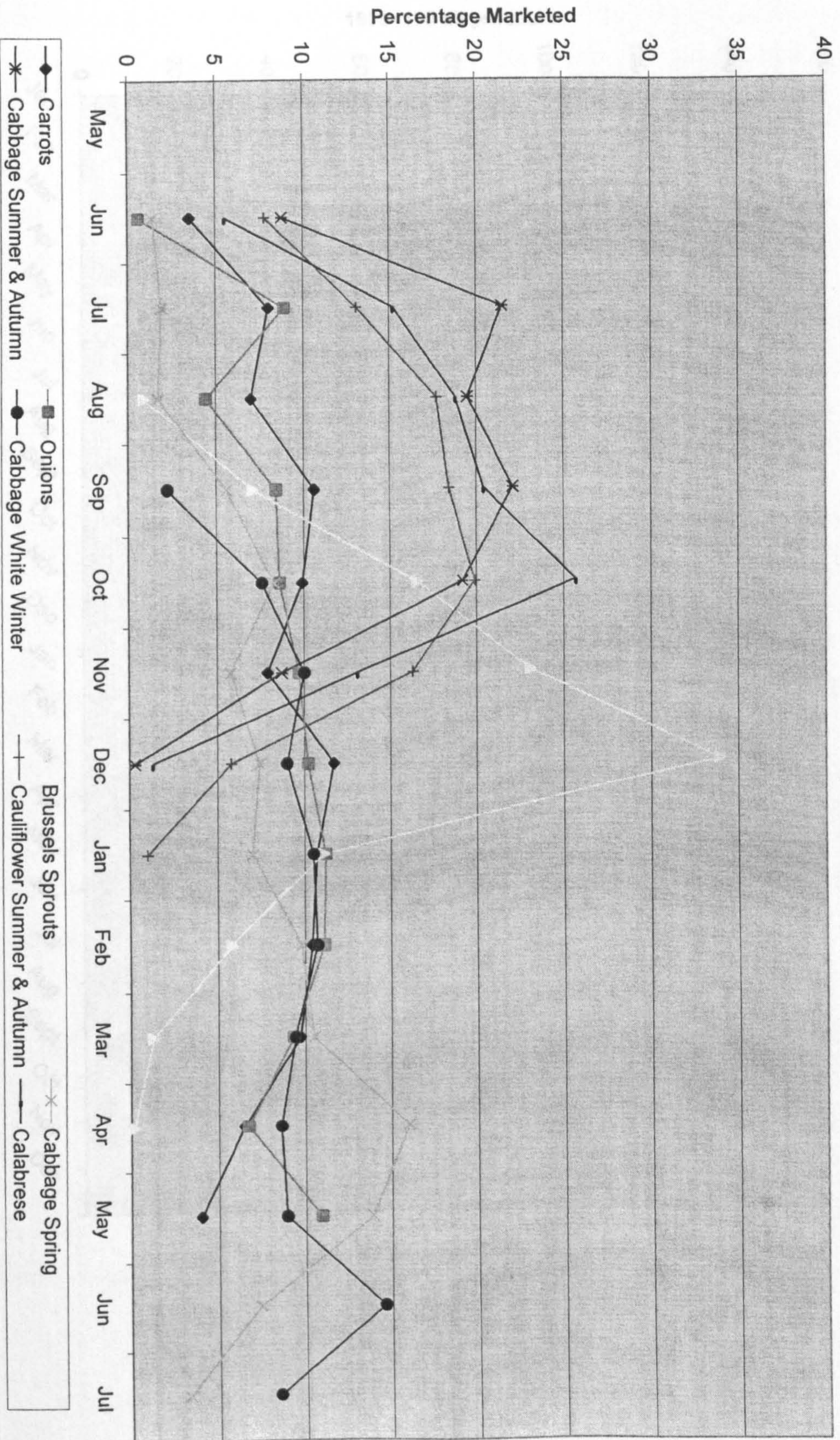
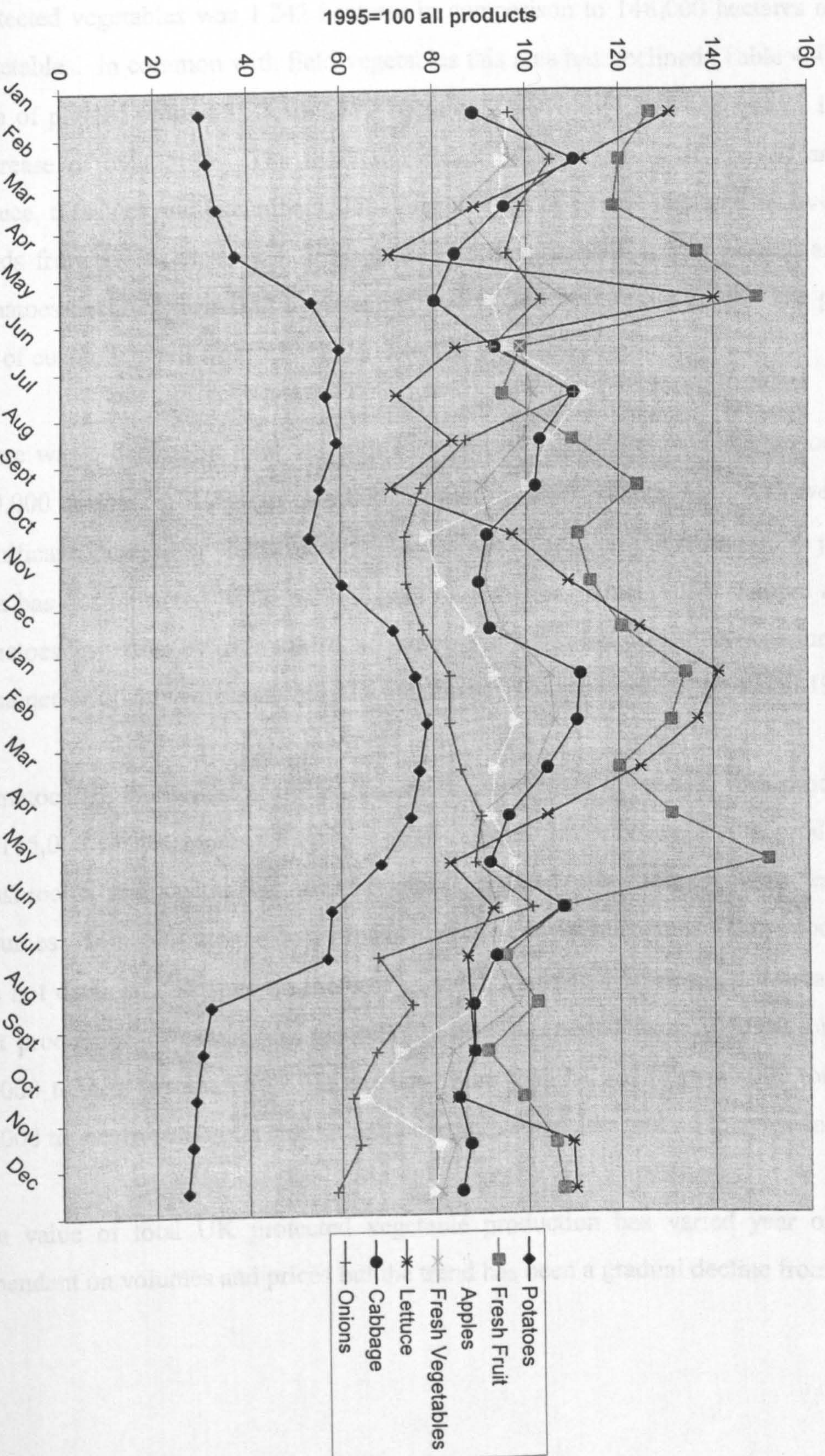


Figure 4.3

Index of Producer Prices of Selected Horticultural Products, 1998-1999



Protected Vegetables

The area of land devoted to protected vegetable production in the UK is relatively small in comparison to field vegetables. As the focus of our study, the planted area for protected vegetables was 1,241 hectares in 1998, which increased to 1,486,000 hectares of field

Protected Vegetables

The area of land devoted to protected vegetable production in the UK is relatively small in comparison to field vegetables. At the time of our study, the planted area for protected vegetables was 1,242 hectares in comparison to 148,000 hectares of field vegetables. In common with field vegetables this area has declined (Table 4.4). The area of planted crops fell from 2,817 hectares in 1990 to 1,242 hectares in 1999, a decrease of over 50%. The most significant crops in terms of planted area are lettuce, tomatoes and cucumbers. The planted area of lettuce declined by over two-thirds from 1,536 hectares in 1990 to 563 hectares in 1999. The planted area for tomatoes declined from 388 hectares in 1990 to 260 hectares in 1999. The planted area of cucumbers fell from 257 hectares to 187 hectares.

There was a decline in total volumes of protected vegetables over the period from 419,000 tonnes in 1990 to 349,000 tonnes in 1999 (Table 4.4). However, a significant increase in yields of certain crops has meant that the reduction in planted area has not impacted to the same extent on volumes. Thus whilst planted area of tomatoes has fallen by over a third, an increase in yields has meant that volumes have remained relatively constant with 115,000 tonnes produced in both 1990 and 1999.

Tomatoes are the largest protected vegetable crop grown in the UK with production of 115,000 tonnes representing over 1/3rd of total protected vegetable production. Mushrooms and cucumbers are the other principal protected crops in terms of volumes. Tomatoes are the only protected crop of any significance where production has not declined. Despite an increase in yield, the reduction in planted area meant that production of cucumbers fell steadily over the period from 101,000 tonnes to 84,000 tonnes. Production of lettuce has more than halved from 50,000 tonnes to 20,000 tonnes, a result of a similar reduction in planted area and no increase in yield.

The value of total UK protected vegetable production has varied year on year, dependent on volumes and prices but the trend has been a gradual decline from £367

Table 4.4 Protected Vegetables: Planted Area, Quantity and Value of Home Production Marketed in the UK

Planted Area Hectares	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00
Tomatoes	388	375	335	286	281	277	283	282	263	260
Cucumbers	257	264	213	243	191	192	190	186	183	187
Lettuce	1,536	1,431	1,253	1,064	978	887	723	666	596	563
Total Area	2,817	2,661	2,327	2,075	1,928	1,808	1,554	1,418	1,286	1,242
Production '000 tonnes										
Tomatoes	115	115	108	98	98	103	110	111	107	115
Cucumbers	101	104	90	104	83	88	86	82	84	84
Lettuce	50	47	44	37	33	30	27	24	21	20
Total	419	407	384	373	346	362	360	349	346	349
Value £:000										
Tomatoes	81,820	73,057	59,062	59,270	68,232	61,807	82,046	60,986	63,552	66,199
Cucumber	55,243	50,838	48,563	59,411	49,661	68,310	53,124	46,415	42,370	38,471
Lettuce	41,747	38,338	38,385	33,918	23,565	25,835	37,899	29,259	23,422	23,223
Total Value	366,551	342,144	320,310	318,232	313,015	341,396	369,359	324,423	324,206	316,476

Source: DEFRA (2000), *Basic Horticultural Statistics for the United Kingdom*, Department for the Environment Food and Rural Affairs (DEFRA).

million in 1990 to £317 million in 1999 (Table 4.4). The most significant crops in terms of value are again mushrooms, tomatoes and cucumbers. Average farm-gate prices for protected vegetables have been more variable than for field vegetables (Figure 4.4). Prices of tomatoes and cucumbers are significantly lower than prices in 1990. Prices for protected lettuce have varied year on year but shown an upward trend at the same time as volumes supplied were decreasing. Farm-gate prices for mushrooms have also increased slightly.

Protected vegetable production is seasonal. Most production is over the summer months, from April to September (Figure 4.5). Lettuce production is highest from March to May.

Monthly producer prices for protected crops also vary greatly, reflecting both short-term supply and short-term demand variations (Figure 4.3). Figures available for producer prices of lettuce show variations of more than 10% from one month to the next over the period 1998-1999 and in some cases prices falling by almost half from one month to the next.

Potatoes

Potatoes are the most significant vegetable crop grown in the UK. At the time of our study, the area of land devoted to potato production in the UK was 178,000 hectares (Table 4.5). This is more than the area for all field and protected vegetables combined. The planted area has remained at the same level over the period 1990-1999. Yields have varied year-on-year and shown a slight upward trend from 37 tonnes/hectare in 1990 to 40 tonnes/hectare in 1999. Production has varied in line with yields and again marketed production increased over the period from 5.6 million tones to 5.9 million tones (Table 4.5).

Figure 4.4

Principal Protected Vegetables: Average Farm-gate Prices

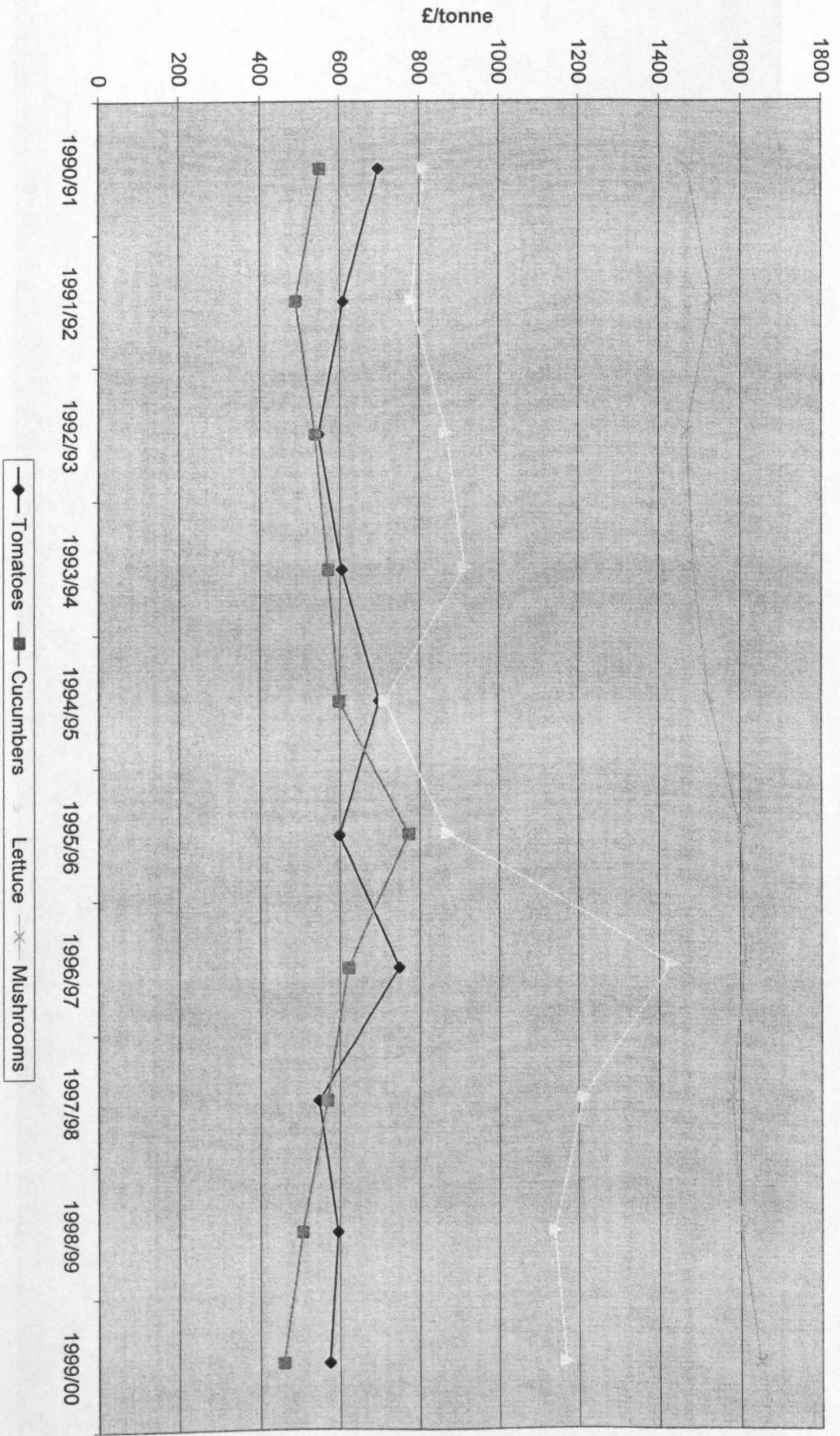


Figure 4.5

Table 4.5 Principal Protected Area, Quality and Value of Tissue Production, Marketing in the UK

Principal Protected Crops: Monthly Marketing Patterns

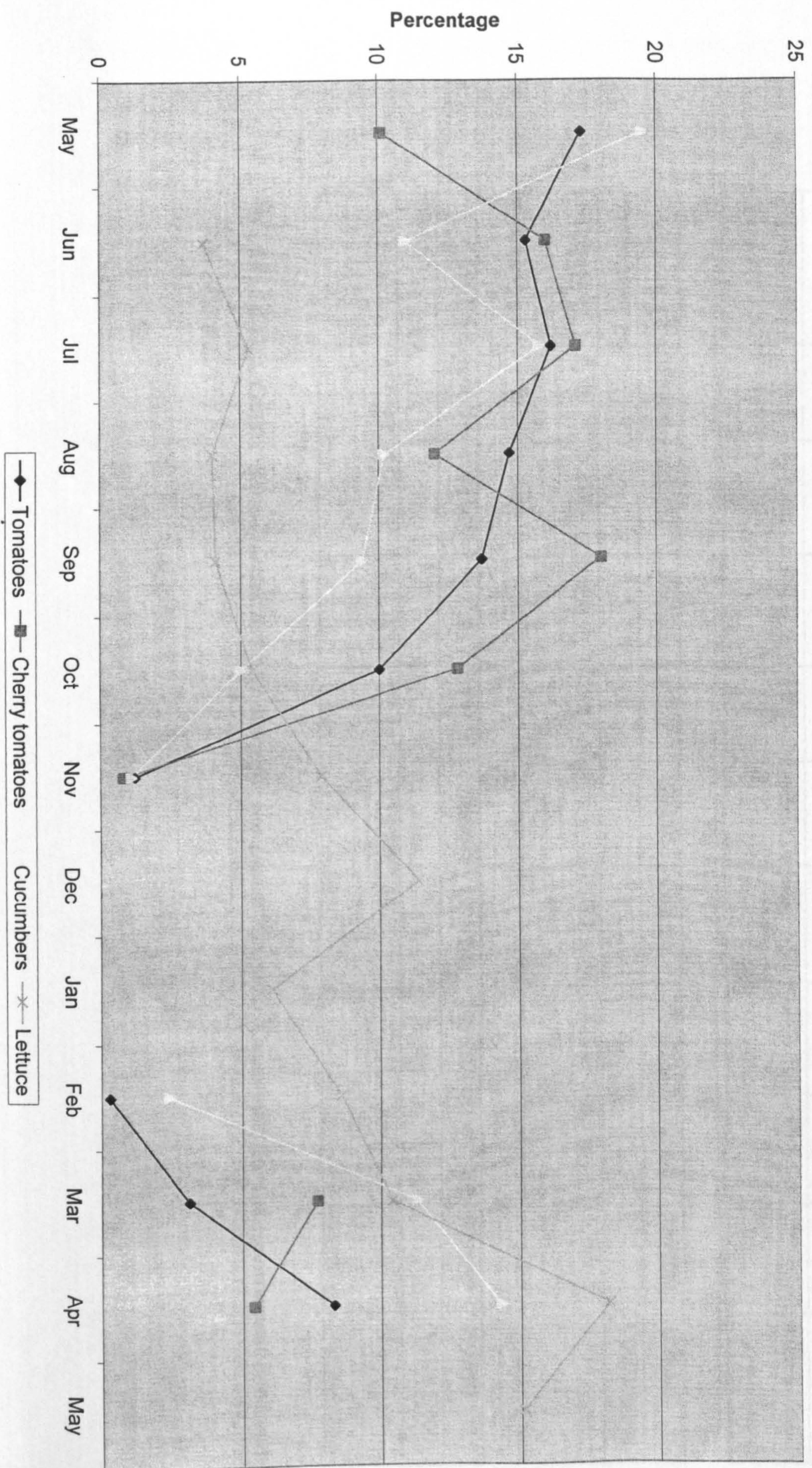


Table 4.5 Potatoes: Planted Area, Quantity and Value of Home Production Marketed in the UK

	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00
Planted Area										(Hectares)
All Potatoes	177	177	181	171	164	172	178	166	164	178

	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00
Production										('000 tonnes)
All Potatoes	5,581	5,359	6,621	5,987	5,753	5,393	5,875	5,714	5,265	5,934

	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00
Value										(Value £'000)
All Potatoes	483,284	516,985	381,148	520,193	1,015,248	800,181	389,111	462,571	837,446	433,817

Source: DEFRA (2000), *Basic Horticultural Statistics for the United Kingdom*, Department for the Environment Food and Rural Affairs (DEFRA).

The value of potato production has shown large variations year on year reflecting price rather than volume differences (Table 4.5). Whilst the value in 1999 of £434 million was only slightly lower than that in 1990 of £483 million it is a significant decrease on values in other years, most notably in 1994 of £1 billion. Average potato prices have varied markedly over the period (Figure 4.6). Prices in 1999 of £73/tonne were less than half of the prices the previous year of £159/tonne.

There are large short-term variations in producer prices for potatoes (Figure 4.3). Prices increased steadily over 1998, with the producer price in December 1998 more than double the price at the beginning of the year. Prices then fell steadily month on month until by December 1999, prices were more than halve their value at the beginning of the year.

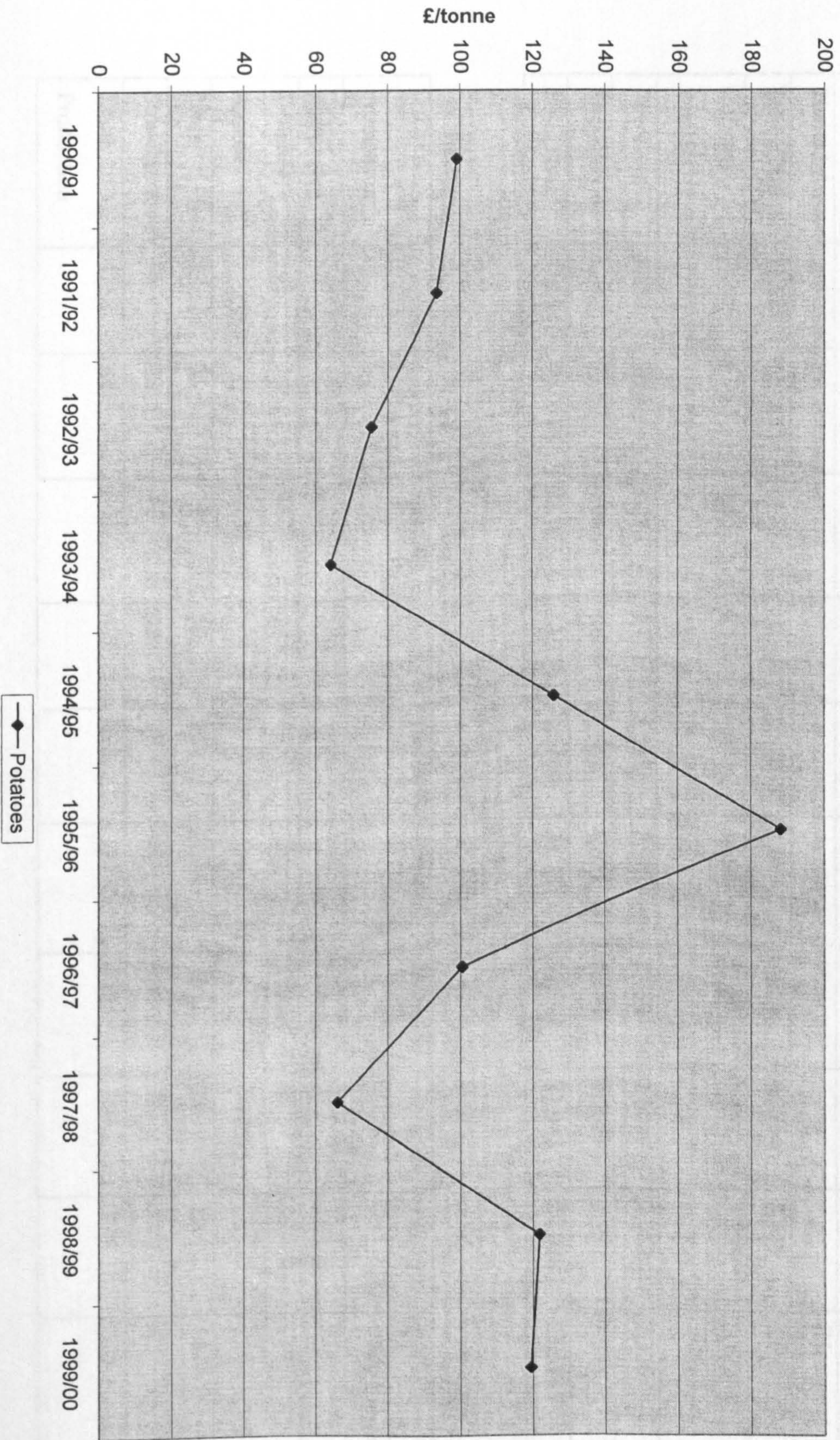
Fruit

Total production area for fruit had been steadily declining at the time of our study. Production area fell by 33% between 1990 and 1999, from 41,204 hectares in 1990 to 28,515 hectares in 1999 (Table 4.6). The most significant fruit crops in terms of planted area are apples, strawberries and pears. The planted area for apples declined by 6,000 hectares over the period 1990-1999. This is mainly a result of grubbing grants for apples, whereby farmers are paid to grub up existing orchards. There was also a significant decline in the planted area for soft fruit from 12,882 hectares in 1990 to 7,677 hectares in 1999.

The total volume of fruit produced in the UK varied year-on-year over the period 1990-1999, reflecting large variations in yield as well as a reduction in planted area. However, the trend has been a decline in volumes over the period from 415,000 tonnes in 1990 to 348,000 tonnes in 1999 (Table 4.6). Apple production dominates UK fruit production. Dessert apple production in the UK in 1999 was 134,000 tonnes. Culinary apple production was 119,000 tonnes. Combined they represent

Figure 4.5

Average Farm-Gate Prices for Potatoes



Source: Basic Horticultural Statistics for the U.K. (1990/91-1999/00)

Table 4.6 Fruit: Planted Area, Quantity and Value of Home Production Marketed in the UK

	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00
Planted Area										(Hectares)
Desert Apples	11,787	11,344	11,064	10,699	10,103	8,849	8,252	8,276	8,059	7,695
Culinary Apples	7,005	6,957	6,632	6,325	6,075	5,594	5,384	5,197	5,205	5,122
Pears	3,251	3,201	3,273	3,121	3,032	2,941	2,739	2,625	2,463	2,325
Strawberries	5,342	5,009	4,966	4,648	4,661	4,623	4,494	4,207	3,537	3,341
Total Area	41,204	40,061	38,925	37,339	36,160	33,751	33,014	31,943	29,928	28,515

	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00
Production										('000 tonnes)
Desert Apples	143	150	178	180	168	119	116	71	113	134
Culinary Apples	143	148	182	147	145	130	108	82	99	119
Pears	33	35	23	39	26	35	40	24	28	18
Strawberries	48	42	41	48	38	42	40	33	35	42
Total Production	415	444	502	475	428	378	370	250	308	348

	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00
Value										(Value £'000)
Desert Apples	71,688	83,897	56,158	56,643	65,636	51,828	57,431	37,305	53,970	54,125
Culinary Apples	38,505	41,545	34,408	33,916	33,642	32,172	31,166	27,596	29,293	25,053
Pears	15,814	19,362	10,102	14,256	11,919	15,001	17,885	10,542	11,372	7,139
Strawberries	69,324	63,014	72,439	80,305	64,546	65,607	77,566	68,815	74,874	87,402
Total Value	258,829	283,548	266,122	278,992	256,688	264,684	287,783	209,782	242,518	255,349

Source: DEFRA (2000), *Basic Horticultural Statistics for the United Kingdom*, Department for the Environment Food and Rural Affairs (DEFRA).

over 60% of total volumes of fruit grown in the UK. Strawberry production in 1999 was 42,000 tonnes. Total pear production was 18,000 tonnes. Apple production has varied over the period reflecting large variations in yield. Volumes in 1999 were almost double those in 1997 despite a reduction in planted area as a result of yields of 17 tonnes/hectare in 1999 compared to 9 tonnes/hectare in 1997. However, again the general trend has been a decline in production with volumes in the second half of the 1990's lower than those at the beginning of the decade. Pear production in 1999 was almost half that in 1990, but again, production levels have varied markedly year-on-year, reflecting large variations in yield (from 7 tonnes/hectare to 15 tonnes/hectare). Strawberry production has been fairly stable over the period.

The value of total UK fruit production varied year on year, dependent on volumes and prices but at £255 million in 1999, was at the same levels as its value in 1990 of £259 million (Table 4.6). The most significant fruit in terms of value are strawberries and apples. The value of total strawberry production in the UK in 1999 was £87 million compared to dessert apples at £54 million and culinary apples at £25 million. The value of strawberry production increased year-on-year over the period as a result of a steady increase in prices (Figure 4.7). In contrast, the value of apple production declined from £72 million in 1990 to £54 million in 1999 due to both a decrease in production and a fall in prices from £502/tonne to £405/tonne. The average farm-gate prices for culinary apples and pears were also lower in 1999 than 1990.

Fruit production is seasonal (Figure 4.8). Production periods are highly specific to individual fruit and varieties. The crop year for apple and pear production starts in August and September, peaking for most varieties throughout the autumn, with production tailing off from January to March. Soft fruit has a much shorter season with production concentrated from June to September.

Monthly producer prices for most fruit crops vary greatly, reflecting both short-term supply and short-term demand variations. Figure 4.3 shows large variations in

Figure 4.7

Average Farm-gate Prices: Principal Fruit Crops

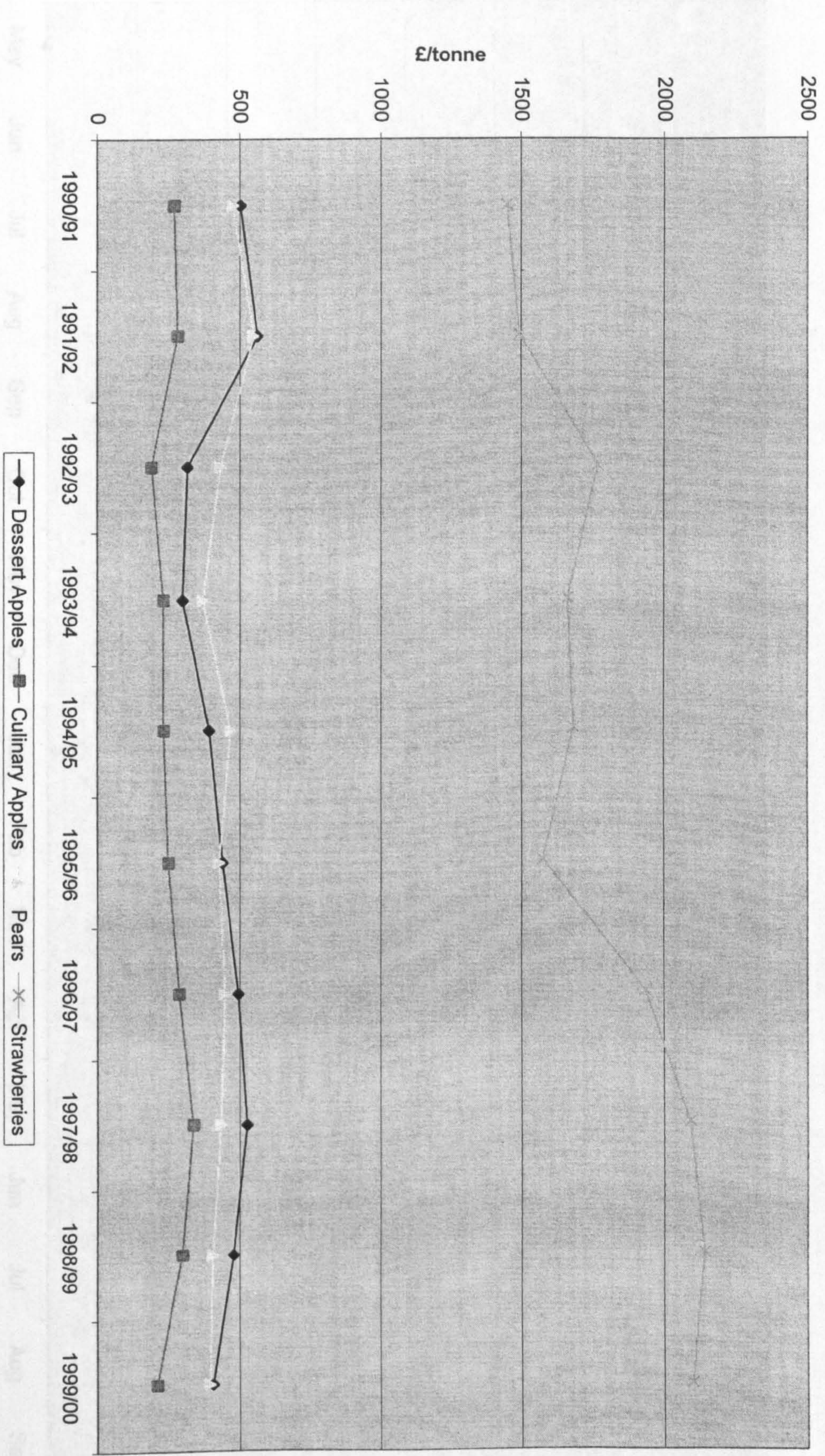
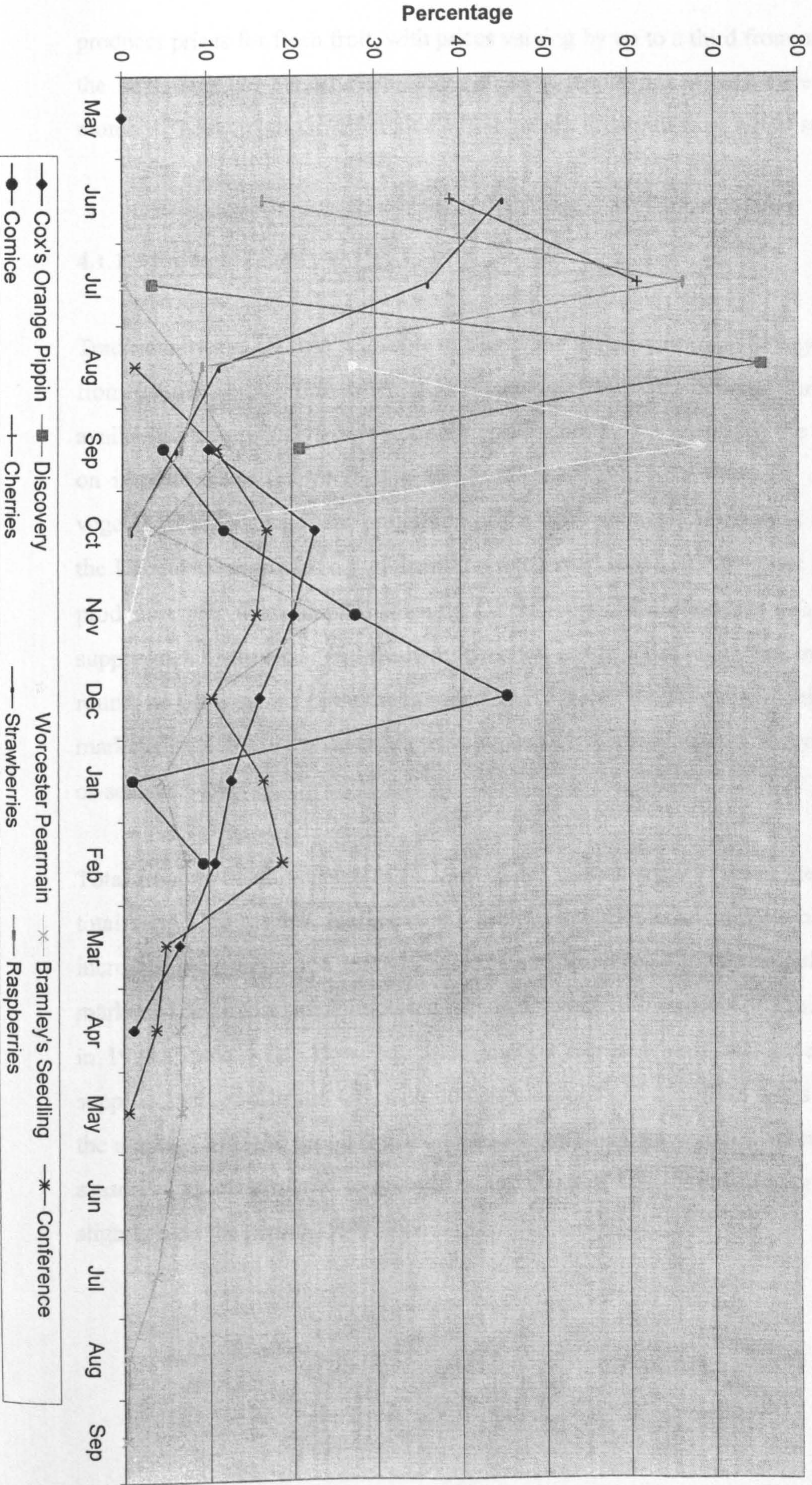


Figure 4.8

Monthly Marketing Patterns: Principal Fruit Crops



producer prices for fresh fruit, with prices varying by up to a third from one month to the next over the period 1998-1999. Dessert Apple prices also varied from one month to the next but the differentials from month to month were not as strong.

4.1.1.3 Foreign Trade

Traditionally, the UK has been able to supply the majority of its field vegetable needs from its own production when it is in-season. Increased demand for year-round availability of produce from multiple retail customers has increased the dependence on imports when UK product is out-of-season (Table 4.7). Imports of protected vegetables are a significant proportion of the total protected vegetables marketed in the UK (694,000 tonnes out of 1 million tonnes marketed in 1999). The UK imports product both to form supplies when the UK is not producing but also to increase total supply in UK season. The fresh fruit market is the most reliant on imports year-round, as UK supplies cannot satisfy demand (348,000 tonnes out of 3 million tonnes marketed in 1999). However, these volumes also increase when UK product is out-of-season.

Total imports of all vegetables in 1999 of 1.3 million tonnes represented 28% of a total supply on the UK market of 4.1 million tonnes. Total imports have steadily increased over the period 1990-1999 leading to an increase in total supplies onto the market. The largest single imported crop is potatoes with imports of 1 million tonnes in 1999 (Table 4.7). However, these imports represent only one seventh of total supplies marketed in the UK with domestic supplies of 6 million tonnes dominating the market. The UK supplies market demand with its own varieties when they are in season. Imports are used to provide volumes out-of-UK season. Imports increased slightly over the period 1990-1999.

Table 4.7 Fruit and Vegetable Imports Quantity and Value

Selected Crops	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Quantity										(⁰⁰⁰ Tonnes)
Carrots and Turnips	35	49	34	29	38	46	53	29	37	46
Onions	266	257	217	169	222	260	206	213	209	198
Cauliflowers and Broccoli	33	33	29	52	71	76	100	99	110	106
Tomatoes	253	252	251	167	247	273	291	312	306	305
Lettuce	82	82	90	83	106	128	131	145	146	149
Potatoes	948	978	1010	1038	1162	1239	1091	1075	1232	1149
Total Vegetables	2067	2093	1999	1847	2207	2417	2309	2357	2499	2427
Apples	467	465	458	417	438	453	452	449	465	468
Pears	99	90	110	100	106	104	103	103	135	122
Total Fruit	2,181	2,194	2,310	2,192	2,298	2,417	2,569	2,540	2,768	2,675
Total Fresh Produce	4,248	4,193	4,309	4,039	4,505	4,834	4,878	4,897	5,267	5,102

Selected Crops	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Value										(£'000s)
Carrots and Turnips	13,007	18,177	9,857	10,386	11,823	12,366	23,566	10,176	15,092	18,265
Onions	47,094	42,004	36,842	38,068	55,553	70,976	44,100	61,252	66,173	45,240
Cabbage										
Cauliflowers and Broccoli	15,696	17,394	14,784	37,887	42,946	50,383	67,709	63,527	67,038	61,116
Tomatoes	172,462	167,309	152,576	120,834	171,541	194,503	202,934	196,077	192,992	219,627
Lettuce	58,851	59,784	68,194	72,646	71,341	89,698	101,607	99,158	104,640	96,389
Potatoes	224,293	231,288	234,208	237,947	270,052	383,497	315,951	281,675	351,784	338,516
Total Vegetables	796,760	811,944	811,094	814,729	960,427	1,201,455	1,186,462	1,196,300	1,258,578	1,227,753
Apples	218,267	220,036	227,103	184,600	220,768	244,172	298,998	273,893	237,345	243,565
Pears	60,981	53,170	65,004	51,202	53,950	64,043	63,147	55,479	76,457	66,342
Total Fruit	1,076,143	1,098,079	1,157,391	1,080,247	1,202,604	1,331,660	1,525,835	1,456,244	1,506,400	1,433,152
Total Fresh Produce	1,873,903	1,910,023	1,968,485	1,894,976	2,163,031	2,533,115	2,712,297	2,652,544	2,764,978	2,660,905

Source: DEFRA (2000), *Overseas Trade Statistics*, Department for the Environment Food and Rural Affairs (DEFRA).

Tomatoes are the second largest imported vegetable crop with 305,000 tonnes imported in 1999. This is almost 3 times UK supplies. These imports have increased steadily from 253,000 tonnes in 1990 to satisfy increasing demand that is not being met by a stable UK production. Onion imports of 198,000 tonnes represent almost one-third of UK market supplies. Onion imports have been steadily decreasing as UK production has increased. Other crops imported in significant volumes are lettuce and cauliflowers and broccoli. Lettuce imports in 1999 were 149,000 tonnes in 1999 compared to field and protected production in the UK of 19,000 tonnes and 156,000 tonnes respectively in 1999. These imports have increased year-on-year replacing declining UK production. Imports of cauliflowers and broccoli increased threefold over the period 1990-1999, from 33,000 tonnes to 106,000 tonnes, again replacing declining volumes in UK production.

The value of total vegetable imports in 1999 was £1.2 billion out of a total value of marketed supplies in the UK of £2.6 billion. The value of potato imports in 1999 was £339 million out of a total potato market worth £434 billion. The value of tomato imports was £220 million, an increase from £172 million in 1990. The value of lettuce imports increased from £59 million in 1990 to £96 million in 1999. The value of cauliflower and broccoli imports increased significantly from £16 million in 1990 to £61 million in 1999. The increase in value of tomato, lettuce, broccoli and cauliflower imports reflected the increase in volumes traded rather than an increase in prices.

The UK fresh fruit market relies heavily on imports with over 90% of the home market served by overseas supplies. Total fruit imports into the UK in 1999 were 2.7 million tonnes compared to domestic production of just 348,000 tonnes. Imports of apples in 1999 of 468,000 tonnes represented over two-thirds of the volumes of apples marketed in the UK. Pear imports of 122,000 tonnes represent an even more significant proportion of total UK marketed volumes with domestic production of just 18,000 tonnes in 1999.

The value of total fruit imports in 1999 was £1.4 billion. This compares to the value of domestic production of £255 million. The value of apple imports of £244 million in 1999 was an increase on the value of apple imports in 1990 of £218 million, but the value year-on-year has fluctuated influenced by both volumes and prices. The value of pear imports in 1999 was £66 million.

Exports of vegetables are minimal. Total fresh vegetable exports in 1999 were 92,200 tonnes (source: Basic Horticultural Statistics for the United Kingdom, DEFRA). Total exports of potatoes were 339,000 tonnes. Exports of fruit are very small. Total exports of fruit in 1999 were 74,000 tonnes (source: Basic Horticultural Statistics for the United Kingdom, DEFRA).

The majority of fresh fruit and vegetable imports come from other countries within the European Union. Spain is the largest exporter in the EU and the largest exporter of salad produce to the UK. Imports have been increasing over the decade as production in that country has increased through better growing conditions. The increased use of protected structures by producers in Spain and other parts of Southern Europe has increased both total production and also the length of the season for which production is viable. France and the Netherlands are also important sources of salad and vegetable imports into the UK. France is the main supplier of potato imports from within the EU, whilst Egypt and Cyprus are the major suppliers outside the EU. The largest supplier of apple imports into the UK is France, although significant volumes are also imported from outside the EU, most notably from New Zealand and South Africa.

Improvements in the transport infrastructure throughout Europe, but again particularly in Southern Europe have reduced transportation times across Europe, with the time taken to transport produce from Southern Europe to the UK halved over the last decade.

4.1.1.4 Importing Channels

Produce is imported into the UK through a number of routes, dependent on both country of origin and product type. Some crops are marketed through export bodies. These bodies represent the growers of a particular product and all their exports are channeled through this marketing group. For example, at the time of our study apple and pear exports from New Zealand were sold through a single marketing desk called EnzaFruit under the brand name Enza. Before 2000 there was no independent pipfruit exporting permitted from New Zealand. The industry has subsequently been de-regulated and May 2002 was the first season of de-regulated pipfruit exporting. Other examples are the Cape marketing body for a variety of fruit exports in South Africa and the Egyptian and Israeli markets that are dominated by export agents. Export marketing groups sell direct to UK customers including large retail multiples, smaller retailers, wholesalers, catering outlets and processors.

Some countries also have regional auction houses through which all produce grown domestically has to be sold. This is the case in France and the Netherlands. Export trade is through these houses. These groups are used by the large retailers for spot-market purchasing, to counteract short-falls in short-term supply and for produce that is only marketed through these intermediaries.

Produce is also imported into the UK through importing agents who buy produce from overseas producers and then sell on to UK customers, including large retail multiples, smaller retailers, wholesalers, catering outlets and for processing. The role of UK-based importing agents is diminishing as their function is increasingly being carried out by UK producers or overseas agents (Industry interviews).

Increasingly, multiple retailers are by-passing these traditional channels and using current UK suppliers to procure product directly from overseas producers. UK producers taking on this intermediary role generally trade in the product that they grow themselves, importing at those times of the year that are out-with their own production window. These suppliers import produce into their own UK pack-houses

where it is packed and labeled for multiple retail customers. This has become the most important means of supplying non-UK season produce to the major UK multiple retailers.

All the firms in our study had formed strategic relationships with overseas producers to procure product for current UK customers. All firms were procuring the same type of product that they were already supplying to their supermarket customer.

4.1.1.5 Summary

The UK fresh produce industry is characterized by short-term supply inflexibility and uncertainty. All fresh produce production is seasonal with seasonality varying from crop to crop. Production systems used vary and with them the control over supplies, although all crop production is dependent to a certain extent on external factors such as incidences of pests and diseases and sunlight levels. Product prices are highly variable from month to month, reflecting both short-term supply and demand variations. UK demand for field vegetables is mostly met in season by UK production but out of season production and demand for protected vegetables and fruit is dependent on imports from overseas. Thus, on an international level, the industry is characterized by heterogeneous possession of supply resources, dependent on climate and location of production which leads to inter-dependencies between producers to meet their resource needs. The importance of resource configurations in an industry in predicting alliance activity is at the heart of the resource-based view (Barney 1991; Das and Teng 2000) which argues that firms will pool resources through collaborative arrangements when they cannot be acquired through market exchange or internalization. The influence of resource needs on alliance formation has been supported empirically in a number of studies (Beamish 1987; Gulati 1995; Nohria and Garcia-Pont 1991; Shan and Hamilton 1991; Yan and Gray 1994).

4.1.2 Firm Resources

4.1.2.1 Firm Size and Incomes

The majority of farm holdings in horticulture are small, specialist businesses, often operating on a regional basis for production and often specialising in particular areas of the market. Almost 90% of farm holdings in horticulture are less than 20 hectares and 42% are less than 1 hectare (Table 4.8). However these farms account for a minority of the total land area under horticultural production. Although only 11% of farm holdings in horticulture in the UK are larger than 20 hectares, these account for 69% of the total land area under horticultural production. Thus there is a skew towards large sized farms within the UK.

Table 4.8 UK Holdings by Total Horticultural Area Size Groups 1999

Size of Holding	Number	% of Total	Area (Ha)	% of Total
0.1 - < 1 hectare	8051	42.3	2711	1.6
1 - < 2 hectares	2477	13.0	3393	2.0
2 - < 5 hectares	2905	15.3	9069	5.3
5 - < 20 hectares	3482	18.3	37294	21.8
20 hectares and over	2131	11.2	118394	69.3
Total	19046	100.0	170862	100.0

Source: Farm Incomes in the UK (DEFRA 2000)

Although physical area is an important indicator of size and scale, economic indicators of farm sizes are more robust at showing intensity of production and scale

of output. Precise economic data for the horticultural sector is difficult to ascertain. Business Monitor identifies VAT-registered horticultural businesses. In the UK in 1999, there were 6,000 VAT-registered businesses involved in the growing of vegetables, horticultural and nursery products and another 195 in fruit growing (Table 4.9). The number of UK fresh produce growers has been declining steadily in recent years, falling from over 6,800 in 1996 to 6,195 in 1999. Overcapacity and poor returns in the sector has led to some rationalisation and a reduction in the number of firms over the last few years.

Table 4.9 Number of VAT-Registered Growers of Fresh Fruits and Vegetables by Turnover, 1999

	Vegetables*		Fruit**	
	No.	%	No.	%
Turnover (£000)				
1-49	2300	38.3	85	43.6
50-99	1245	20.8	25	12.8
100-249	1235	20.6	25	12.8
250-499	545	9.1	20	10.3
500-999	340	5.7	15	7.7
1,000-4,999	275	4.6	20	10.3
5,000+	60	1.0	5	2.6
Total	6,000	100.0***	195	100.0***

* including horticultural and nursery products

**including nuts, beverages and spice crops

***does not sum due to rounding

Source: Business Monitor PA1003

Over half of all fruit and vegetable growers had annual sales of less than £100,000 (56% and 59% respectively). Only 13% of fruit growers and 7% of vegetable growers had sales of £1 million or more in that year and only 5 fruit and 60 vegetable growers had sales of more than £5 million. These larger growers were responsible for a disproportionate amount of total output in the industry. The outcome of this is that each product area is dominated by a few large companies despite the numerically dominant small-scale holdings.

In the fieldwork conducted in this thesis, the firms surveyed tended to be large or medium-sized relative to the industry average. Ten of the firms were major producers in their product area, producing more than 25% of UK production of their product category. A further 5 produced between 15-25% of UK production of their product category. Only 5 firms had less than 15% market share of their product category. Ten firms in our survey had turnovers over £20 million, with a further 5 with turnovers between £10 million and £20 million. Only 5 firms had turnovers below £10 million. The dominance of our sample by the largest firms in the industry was related to the fact that these were firms choosing to form strategic alliances to maintain supplies for their major retail customers. These tended to be the largest firms in the industry and the key producers in their product area. The multiple retail customers have reduced their number of key suppliers and required larger volumes from these suppliers (discussed in detail in Section 4.3.2). The need for critical volumes has meant that producers wanting to supply these customers have often had to increase the size of their marketing unit. They have done this in a number of ways: through the formation of larger co-operatives and grower companies, through alliances and mergers between companies and through contractual links between smaller growers and larger growers/grower groups as satellite production operations (Industry interviews). This has resulted in each production area being dominated by a few large producers who supply the multiple retailers and then large numbers of

much smaller producers who supply wholesalers, small retailers, catering and processing or sell directly through the farm-gate.

Levels of profitability in the industry as a whole are difficult to ascertain. Table 4.10 shows the distribution of farm incomes in horticulture in England produced by the Farm Business Survey. This shows that 22% of horticultural farms had negative net farm incomes in 1999/2000. Half of all horticultural holdings in England had average incomes of £10,000 or less, yet 12% of farms had net farm incomes of £50,000 or more.

Table 4.10 Horticultural Holdings: distribution of farm incomes in England, 1999/00

Net Farm Income	Percentage of Farms
Less than zero	22
0 < £5,000	12
£5,000 - < £10,000	16
£10,000 - < £20,000	17
£20,000 - < £30,000	17
£30,000 - < £50,000	5
£50,000 and over	12
Average (£'000 per farm)	19.5

Source: Farm Incomes in the UK (DEFRA 2000)

When aggregated by farm size large variations are seen (Table 4.11). The larger firms in the industry have an average net farm income of £59,500, the medium sized firms of £18,400 and the smaller sized firms of £11,700. This again seems to point to a dichotomy in the industry between a limited number of large horticultural firms

dominating the sector in terms of production volumes, turnover and profitability and a large number of smaller firms with limited output and low levels of profitability. As discussed in Section 4.1.1.2 prices received by UK producers for their product have not increased in real terms over the last 10 years (see Figure 4.2). At the same time costs of production have increased (Table 4.13).

Table 4.11 Horticultural Holdings: income by size* of Farm in England, 1999/00

Average per farm	Small	Medium	Large
Net Farm Income (£'000)	11.7	18.4	59.5

* See Footnote¹

Source: Farm Incomes in the UK (DEFRA 2000)

4.1.2.2 Employment

There is no reliable information on the total labour force employed in the horticulture industry. Estimates of labour force in agriculture as a whole are made by the Farm Business Survey (DEFRA) and are useful in showing the breakdown of types of employment in the industry. Table 4.12 shows the importance of self-employment and also the importance of part-time and seasonal labour. Out of a total workforce of 586,000 people in 1999, 57% were self-employed farmers, partners and directors. A further 9% were part-time and 12% seasonal casual workers. Only 16% were regular

¹ Farm size is measured in European Size Units (ESU), where one ESU is defined as 1200 European Currency Units (average value 1987-89) of Standard Gross Margin (SGM). It is a measure of the economic size of holdings in terms of the value they add to variable inputs and thus differ from physical measures, such as area, which take no account of the intensity of production. Three size groups are defined for the Farm Incomes in the UK Reports: the small size group contains farms in the range 8 to under 40 ESUs; the medium size group contains farms in the range 40 to under 100 ESUs and the large size group relates to farms of 100 ESUs and above.

Table 4.12 UK Labour Force in Agriculture, 1999 and 2000, 000 persons

	1999	2000
Workers		
Regular whole-time	94	83
Regular part-time*	50	45
Seasonal or casual	73	65
Salaried managers	14	11
Total workers	229	205
Farmers, partners and directors:		
Whole-time	172	165
Part-time	163	167
Total Farmers, partners and directors:	335	332
Spouses of farmers, partners and directors	21	21
Total Labour Force	586	558

* Part-time is defined as less than 39 hours per week in England and Wales, less than 38 hours per week in Scotland and less than 30 hours per week in Northern Ireland.

Source: Farm Incomes in the UK (DEFRA 2000).

whole-time workers. These figures reflect a number of factors. First, there has been a shift away from mixed farming and towards specialized production which has reduced the need for whole-time workers (Carter 1997). Second, increased mechanization coupled with scientific and technological developments have replaced

labour with capital inputs (Keynote 2000). There has been an increase in the mechanization of production, both in the field and also for protected production, but particularly for the latter. Production of protected crops has used increasingly sophisticated growing techniques with mechanization of watering, feeding, aeration, heating, with computerized monitoring of carbon dioxide and oxygen levels. Picking of crops has become more automated, with less reliance on labour. This has been partly off-set by seasonal production peaks which tend to have high labour requirements. Farms have reduced whole-time employment and increasingly rely on part-time, seasonal and casual workers, often drawn from a family pool (Carter 1997).

4.1.2.3 Costs

Table 4.13 shows average costs of production in horticultural holdings from 1996-2000. These aggregated figures do not illustrate the differences between product groups but do allow a general discussion about the relative importance of input costs. Comparative disaggregated data is very difficult to obtain for a number of reasons. First, very little data is published on a national basis. Second, there are wide differences in factors that are included in cost data. For example some producers do not cost for depreciation of capital or include interest charges. Third differences in markets serviced and marketing structures mean that precise comparisons cannot be made on an international basis. Finally, different units of measurement are also used with some producers detailing costs according to area, whilst others cost per box or item.

The most important cost of production in horticulture is labour costs. Average labour costs per farm in 1999 was £56,000 or 31% of total costs. As noted above, a large proportion of this labour is part-time seasonal and casual workers. Differences between product sectors are difficult to ascertain. Some estimates of relative cost

components between product groups can be made using a study of the European Salad sector which used individual producers own cost data (Gibbs and Shaw 1997).

Table 4.13 Horticultural Holdings: input costs, 1996-2000

Average per farm £'000s	1996/97	1997/98	1998/99	1999/00
Seed	24.9	26.1	28.8	30.3
Fertilizer	5.7	6.0	5.7	5.8
Machinery	7.5	7.5	7.0	7.3
Labour	50.0	51.8	53.8	56.2
heating fuel	8.8	8.0	7.8	7.9
Water	1.7	1.7	1.4	1.6
depreciation	13.1	13.2	13.0	12.3
land and buildings	7.8	8.2	8.6	9.0
Total inputs	168.7	173.6	180.2	183.8

Source: Farm Incomes in the UK, taken from Table 1.43 (DEFRA)

This study examined the protected salads sector and estimated labour costs from producers' own data. Depreciation costs and land and buildings were not taken into account in this study. Accounting for this, labour costs represented from 23% to 30% of total costs of production with labour costs for tomato production highest, at 30% of total costs.

It is impossible to ascertain accurate labour costs between protected and unprotected crops or variations in types of unprotected crops from secondary sources. What can be assumed is the larger use of seasonal workers in those production areas with high seasonal variations. Table 4.14 shows the difference in average earnings by type of worker for all agricultural and horticultural workers. It shows that part-time and casual labour is cheaper on an hourly basis than full-time labour and that female labour is cheaper than male labour. However, high labour turnover brings its own costs such as administration costs and training costs. There may be increased efficiency in utilizing a larger proportion of labour on a full-time basis and thus reducing these costs.

Table 4.14 Average Earnings per Hour in Agriculture and Horticulture by Type of Worker, 2000

Type of worker	Full Time Male	Full Time Female	Part Time Male	Part Time Female	Casual Male	Casual Female
Average Earnings/Hour	£6.72	£5.71	£5.52	£5.11	£5.67	£4.76

Source: Earnings and Hours of Agricultural and Horticultural Workers England and Wales, June 2000, DEFRA

Traditionally, producers in Southern Europe were at a distinct competitive advantage over producers in Northern Europe with cheaper labour costs and lower energy costs in particular meaning that they could market product significantly cheaper. However, the differential in labour costs between Member States has been getting smaller, due

to increasing social costs in Southern Europe and this study found labour costs comparable across Europe (Gibbs and Shaw 1997).

Capital costs are defined here as machinery costs, depreciation and land and building costs. These have been constant over the period at an average of £29,000 per farm (Table 4.13). Individual components have changed slightly with machinery and depreciation costs slightly lower in 1999/00 than 1996/97 and land and building costs up slightly. The capital labour ratio over the period has increased slightly from 1:1.7 to 1:1.9. Thus labour costs are almost twice capital costs.

Again differences between sectors are impossible to ascertain from secondary data. It can be assumed that capital costs in the industry are highest for those producers using protected production methods such as salad producers and lowest for open-field production such as field vegetables. Within product sectors across Europe the increased homogeneity of production systems has meant that capital costs are also becoming more similar. This is particularly true in the salads sector where the increased use of protected structures by producers in Southern Europe has meant that their capital costs have increased significantly and their cost advantage has been eroded (Gibbs and Shaw 1997).

Fixed costs are almost twice variable costs². These fixed costs will be spread over the period of the year the farm is operating which will depend on the seasonality of the crop(s) grown. There is an incentive for producers to spread these costs over a 12 month period to increase efficiency by lowering overheads. This can be done by producing more than one crop that has seasonal complementarities in production or by dealing with production from other sources when a farm is not in production itself.

² Fixed costs are defined as machinery, labour, contract work, land and buildings, other general farming costs and depreciation of plant, machinery, vehicles, glasshouses and permanent crops. Variable costs are defined as costs of feed, veterinary fees and medicines, other livestock costs, seeds, fertilizers, crop protection and other crop costs.

4.1.2.4 Summary

The UK fresh produce industry is highly fragmented with most businesses small and specialist, often operating on a regional basis for production and often specializing in particular areas of the market. Within each product area there is a polarization of suppliers, with a few large suppliers supplying the multiple retailers and a large number of much smaller suppliers supplying other customers. Labour utilization in the industry has been decreasing as there has been an increase in the mechanization of production. Prices received by producers for most products have not increased over the last decade. Average levels of profitability in the industry are low, but highly variable according to producer size. Costs of production have increased. Two of the largest cost components are fixed costs, or overheads, and labour costs. There is an incentive for producers to spread fixed costs over a 12 month period to increase efficiency by lowering overheads. This can be done by producing more than one crop that has seasonal complementarities in production or by dealing with production from other sources when a farm is not in production itself. There may also be increased efficiency in utilizing a larger proportion of labour on a full-time basis rather than depending on seasonal labour and a high labour turnover. Thus there are efficiency motives for firms to utilize facilities year-round and one of the means of doing this is through a strategic alliance. Efficiency motives are at the heart of transaction cost theory (Heide 1994; Williamson 1975, 1985) and have been shown empirically to be an important drive for alliance formation (Dunning 1995; Freeman and Hagedoorn 1992; Gomes-Casseres 1993; Unctad 1993, 1994; Hagedoorn 1990, 1993).

4.2 The Social Network

The UK fresh produce industry is highly fragmented with limited horizontal collaboration (see below). Producers tend to specialize in particular product areas, with production limited to a number of geographical areas. However, within product groups the informal network is strong. The supply chain has been shortened, with multiple retail customers, in particular, working in direct relationship with their UK suppliers. This relationship has become closer, as has the relationship between the UK suppliers and their suppliers from overseas. It is very difficult to ascertain accurate levels of collaboration or types of collaboration within the fresh produce industry in particular. There is no reliable information on industry structures available from secondary sources that gives a complete picture of the industry. What is available is information on general trends which are discussed below.

4.2.1 Horizontal Relationships

There are various types of collaboration between producers within the fresh produce sector. This can be as simple as machinery rings, where equipment is shared between a number of geographically localized producers. Or it can be the formation of sophisticated organizations involved in joint purchasing of farm supplies and the collaborative marketing of commodities. Formal co-operative production and marketing in the industry is limited. Whilst some producers are part of grower companies or marketing groups, most operate independently. Most product groups have trade associations, but these tend not to perform marketing functions. It is estimated that in agriculture as a whole about 20% of farmers are co-operative members. This compares with levels of over 50% in fresh produce sectors in Europe (Gibbs and Shaw 1997).

There are various explanations proposed to explain low levels of sophisticated collaboration. The independence of the agriculture sector is one factor (Carter 1997), as is the structural factor that farm sizes in the UK are large in comparison with other

EU states and the benefits of collaboration are not as obvious (Gibbs and Shaw 1997). The frequency of personal contact in the industry also means that there is a highly effective informal network. Most producers are aware of the levels of supply and demand in their product areas at any point in time. Most producers are also aware of who their key competitors are. This network is also an important means of establishing trust in business relations (Industry interviews). This is especially significant in this industry where most business operations work on a non-contractual basis. The importance of the informal network and the lack of formal contracts in the industry means that personal relationships and personal chemistry play an important part in business operations.

4.2.2 The Supply Chain

4.2.2.1 The Retail Sector

Changes in the UK Food Industry over the last 20 years have had an important effect on the fresh produce sector in the UK. The wholesale markets, traditionally the most important outlet for agricultural produce have decreased numerically and in relative importance (Keynote 2000). On the manufacturing side, there has been increased fragmentation as a result of corporate re-structuring and growth in the numbers of small and medium-sized concerns. The catering sector has expanded and there has been an increase in central purchasing within the catering multiples. The main trend in the food-retailing sector in the last few years has been the growing influence of the major food retailing chains. Led by Tesco, Asda, Sainsburys and Safeway, and primarily through the development of large out-of-town food stores, the large grocery multiples have become the dominant force in food retailing. Between 1995 and 1999, sales through the major supermarkets increased by over 20% at current prices (Table 4.15). In 1999 sales through the major supermarkets were worth over £90 billion.

Over this period the major grocery multiples continued to increase their share of retail sales of fresh produce. By 1999 these chains accounted for 77% of all fresh fruit and vegetables sold (Table 4.16) at a value of £7.3 billion. Fruit and vegetable sales in 1999 represented 77% of retail sales by the major supermarkets (The UK Food Market, Keynote Report 2000). The remaining 23% was sold through intermediaries such as wholesale markets and secondary wholesalers or by producers directly through farm shops. The share taken by greengrocers and markets fell to 15% compared with a quarter of all sales in 1994 and the wholesaling sector is not a viable market option for major UK producers. However it is still important for smaller growers as a means of supplying the smaller retailing chains and independents.

One of the most important sources of competitive strength of the multiple retailers has been the growth of central purchasing and the use of large volume buying discounts. By dealing directly with suppliers for the majority of their products, the retail multiples have internalized the wholesale distributive function and wholesalers are now rarely used for business from domestic sources. The increased market shares of retailers coupled with centralized decision-taking have changed the position and use of power within the supply chain (Shaw and Dawson 1997). The power construct is defined here as:

“The ability of one channel member to influence the decision variables of another channel member or one firm’s potential for influence on another’s beliefs and behaviour” (Frazier 1990).

The large multiple retailers hold a number of types of power over their key suppliers. First, they have reward power by being able to offer the benefits of a large account on offer. Second is the coercive power held with the threat of the loss of an account.

Third is expert power held by the retailers in the knowledge and expertise they have in factors such as marketing, logistics and new product development. Fourth is informational power held by access to market information by Electronic point of sale

Table 4.15: Retail Sales by Major Supermarkets at Current Prices (£m and index 1995=100), 1994-1999

	Value (£m)	Index 1995=100
1994	70,719	94.4
1995	74,914	100.0
1996	78,884	105.3
1997	82,930	110.7
1998	87,125	116.3
1999	90,122	120.3

Source: Key Note Report: 'The UK Food Market' 2000

Table 4.16: Distribution of Fresh Fruit and Vegetables by Type of Outlet by Value (%) 1994-1999

	1994	1996	1998	1999
Multiples/co-operatives	63	72	76	77
Greengrocers/market stalls	26	18	16	15
Independent grocers	6	6	4	4
Farm shops/others	5	4	4	4
Total	100	100	100	100

Source: Key Note Report: 'The UK Food Market' 2000

(EPoS) systems and customer loyalty programmes. Fifth is the ability to curtail supplier power through other viable sources of supply to retailers (Shaw and Dawson 1997).

The growth of the multiple retail sector has also brought about an erosion in the seasonality of consumption of many food products. Retailers increasingly demand the permanent availability of specific food products, for which they are prepared to pay premium prices.

There have also been changes in consumer demands for fresh produce. Slow population growth has led to a highly static market for food at an aggregate level, but there have been changes in the nature of demand fuelled by changing demographic, economic and technological trends (Keynote 2000). These include a reduction in family size; a larger number of single-person households; an increasing proportion of older people; participation of women in the labour market; growth in real incomes; higher education levels; diffusion of technological innovations. These have all affected the market for food. Overall the food market has become highly fragmented with a concomitant increase in new products (Reuters 2000). By 1999, Retail superstores listed approximately 25,000 product lines. There has been a shift away from primary food products and towards processed and convenience food; there has been an increase in the trend towards snacking and grazing and growth in awareness of healthier eating. In the fresh produce sector there has been increased demand for new varieties to meet consumer demands for more exotic produce. There has been an increase in demand for premium products including ranges of pre-pack and prepared salads and vegetables and mini-versions of fruit and vegetables for lunch boxes and the snack market (Keynote 2000).

Producers have responded to these changes in different ways. Some growers have moved into specialized production, concentrating on providing year-round supply of one commodity. This brings benefits of economies of scale and volume sales. Other

growers have concentrated on developing premium brands and products for niche markets. The use of new varieties and growing techniques has enabled firms to explore the niche markets for new products. This has been most marked in the protected salads sector and most notably with the proliferation of leafy salad varieties and tomato varieties that are now supplied to the UK market. This has been driven by the large UK retail multiples in collaboration with the larger UK producer firms. It has been an extremely effective means of combating the general depressed level of prices for commodity products.

4.2.2.2 Supply Chain Efficiency

The changes in channel structures and power relationships have been accompanied by changes in the processes of channel management with the development of retailer-led vertically administered channels. Retailers are taking control at earlier stages in the supply chain and exercising higher levels of authority over operations such as in the specifications and control of quality and the operation of physical logistics (Shaw and Gibbs 1999; Mentzer 1993). There has been increased integration of processes, primarily through the implementation of Efficient Consumer Response (ECR) (Reuters 2000; Shaw and Dawson 1997). ECR involves reducing inventories and operating costs and increasing product assortment, promotion and introduction as well as service levels. This is done by eliminating unnecessary and repeated activities within the supply chain, especially at linkage points between producers/manufacturers, distributors and wholesalers, and retailers. It involves the reduction of channel inventory and the ordering and sharing of detailed point-of-sale data between producer/manufacturer and retailer. Category Management (CM) is the process by which the supplier and the retailer work together to improve the performance of a category for their mutual benefit. This is a move away from maximizing sales of individual brands to managing whole product categories as business units and customizing these on a store-to-store basis to satisfy customer needs.

A category is defined as:

“a distinct manageable group of products or services that consumers perceive to be interrelated and/or substitutable in meeting a customer need” (ECR Europe 2000).

A retailer will assess the importance of a category according to 4 criteria:

- i) importance to the consumer – based on annual expenditure
- ii) importance to the retailer – based on gross margin
- iii) importance to the retailer’s competition – based on market share
- iv) importance to the market – based on market growth (Reuters 2000).

The category is then assessed according to where it fits into the overall store. Fresh produce are critical categories for multiple retailers and are defined as ‘destination products’ (Reuters 2000). These are products that define the consumer positioning of a store and are crucial to a loyal customer base, that is they are a key reason for a consumers’ choice of that store.

Multiple retailers will assess the category by comparing the current role of a category with the expected role. They will measure the current performance of a category and identify gaps for certain products.

A key to the success of category management is strong relationships between suppliers and retailers and that both parties see benefit to their business. Within the fresh produce sector it has led to strategic partnerships between key suppliers and their retail customers with a focus on both revenue growth and cost reduction.

The use of category management by retailers has led to the implementation of a variety of technologies that can be grouped as information and logistics technologies. Information technologies such as electronic data interchange (EDI) and electronic

point of sale data (EPoS), comprise systems that aid the flow of information between partners, help them understand consumers and extract information from different sources. Logistics technologies, such as packhouse technologies, produce efficiencies in the supply chain.

EDI is a linking technology that transfers information from one location to another by means of an electronic link. It is widely used in retail distribution in particular to link retailers, suppliers and distributors. It is commonly used for invoicing and ordering but can also be used to transmit catalogue information, delivery notification and transport instructions.

Epos data has enabled retailers to implement automated store ordering where point of sale data is used to trigger new stock orders automatically. Benefits to the retailer include improved transaction accuracy, faster and more efficient throughput, sales-based automatic ordering and the ability for more extensive promotions such as through loyalty card schemes. Theoretically there are also benefits in sharing sales information with suppliers. A supplier can point out potential problems in supply rates and suppliers can improve service levels to retailers through better production planning and inventory management for just-in-time delivery. In practice, conflicts often arise because of business confidentiality and logistics.

Warehouses are becoming more automated as suppliers and retailers use IT systems that enable them to make the supply chain more efficient and responsive. Warehouse IT systems that are becoming more widespread include warehouse management systems and inventory control. A warehouse management system aims to overcome problems encountered in the warehouse such as high inventory levels or poor pick rates. It can handle functions such as order generation and labour management as well as assembly and dispatch.

Category Management has impacted on suppliers in a number of ways. There has been a growth in importance of relational factors over transactional ones and longer-

term relationships with fewer partners (GEA 1994). First multiple retailers have reduced the number of their key suppliers and these relationships have become longer-term (Industry interviews; Reuters 2000; Shaw and Dawson 1997). Second, these suppliers have had to be able to supply them with critical volumes of product (Reuters 2000). Third, there has been an increase in the technological and quality specifications of product made by the multiple retailers (Reuters 2000). Fourth, UK producers are increasingly used to procure products for their multiple retail customers (Industry interviews, Reuters 2000).

The large retail multiples now have only 2 or 3 key suppliers for any one produce line. These tend to be larger suppliers who can provide them with critical volumes of product. This has made access to volumes a much more critical factor in sales and has meant that the key suppliers to the retail multiples tend to be the larger suppliers in the industry. Smaller suppliers have had their marketing role marginalized. These suppliers have a number of options: selling through one of the key retail suppliers; continuing to supply a diminishing wholesale sector; selling directly at farm-gate or at farmer's markets; or selling to the catering or processing sectors.

As noted above, fresh produce is seen as a destination product category. It is viewed by retailers as encompassing products critical in maintaining customer loyalty. Within this the development of premium and speciality products by growers in partnership with their retail customers has become an increasingly important weapon.

Another key impact of the drive for efficiencies through the supply chain is the use of UK suppliers to procure product for their multiple retail customers at the times when they cannot supply product themselves. UK suppliers are expected to find appropriate sources of product and to ensure that product is produced to the specifications required by the multiple retail customers (Industry interviews; Shaw and Dawson 1997). The focus on tight quality specifications means that retail customers need product from highly identifiable sources where they can ascertain the precise production standards used and specify the product required. The

responsibility for searching for suppliers and developing and monitoring product standards is devolved to the UK producer from their multiple retail customer. With this comes the risk that if product is not of acceptable standard the UK producer firm's relationship with their multiple retail customer could be jeopardized. Although there are no formal contracts, the partners work to specific terms and conditions and standard operating procedures. These are monitored primarily through valuation of the end product.

4.2.2.3 Summary

There is limited sophisticated collaboration in the UK fresh produce industry but there is a highly effective informal network facilitated by the frequency of personal contact in the industry. The structure of the supply chain and the power relationships in the supply chain have changed, specifically there has been an increase in the market share and power of a decreasing number of large retail businesses over the rest of the marketing channel. There has been a reduction in the number of suppliers to any one retailer and increasing global competition to supply them. The role of key suppliers has also changed. They are increasingly expected to supply their retail customers with year-round, dedicated produce with specific product characteristics.

The influence of the network that firms operate within on alliance activity has been researched empirically by a number of scholars (Cook and Emerson 1978; Gulati 1995; Gulati and Singh 1998; Kogut, Shan and Walker 1992; Eisenhardt and Schoonoven 1996; Walker, Kogut and Shan 1997). Network theorists argue that a network provides firms with information about the existence of potential partners and also each other's needs, capabilities and alliance requirements at a given time (Giddens 1984; Gulati 1995, 1999; Khanna, Gulati and Nohria 1998). It also serves as an important basis for trust between potential partners (Bradach and Eccles 1989; Gulati 1995; Gulati; Nohria and Zaheer 2000). They argue that without such

awareness, an alliance between two firms is less likely (Kogut, Shan and Walker 1992; Van de Ven 1976).

4.3 Emerging Producer Strategies

As noted above, many producers see the retail multiples as the premium market for their output. However, with this market comes increasing demands on UK producers, particularly for the permanent availability of produce. Key suppliers to the multiple retailers have to find a reliable source of product for those times of the year when they cannot supply the product themselves. Efficiency motivations also encourage them to try and reduce overhead and labour costs by utilizing facilities 12 months of the year (see Section 4.1.2.3). These producers have a limited number of procurement options open to them. For a given product or service a firm may choose to produce it on its own; purchase it from spot markets or make it jointly with partner firms (Buckley and Casson 1996; Hennart 1998). The precise product needs of the multiple retailers means that spot-purchasing on international auction markets or buying from export houses or importing agents are not a viable option.

This leaves the UK producer with the option of expanding abroad himself, acquiring an overseas supplier through a merger, or by forming a strategic alliance with an overseas producer. The theoretical basis of these options was discussed in Chapter two where the analysis of the theories of alliance formation was presented. Specifically, transaction cost theory, the resource based view and network theory all present arguments for the formation of an alliance as an alternative to a multinational corporation or merger or acquisition (Beamish and Banks 1987; Contractor 1990; Dunning 1995; Hennart 1991; 1988; Kogut 1988; Madhok 1997). It is posited here that alliances are likely to be the preferred option for most UK producers in this situation. This is for a number of reasons.

First, expansion or acquisition is a costly option (Chi 1994; Hennart 1988). Most firms in the industry have limited resources to invest in expansion abroad or acquisition of overseas production sites (Section 4.1.2). The industry in general has been characterized by conditions of over-supply and consequent poor returns. Prices received for most products have decreased in real terms over the last 10 years.

Second, the fresh produce industry is still essentially a commodity market dealing with a perishable product in the context of volatile short-term supply and demand conditions. Thus returns are highly variable. The high uncertainty over performance makes even a long-term contract difficult and costly to stipulate ex-ante the conditions and contingencies for monitoring performance and guarding against opportunism (Kogut 1988).

Third, the time-frame for operations makes an alliance a far less risky option for a firm than to expand abroad themselves. Most key suppliers have a programme with their multiple retail customer detailing volume requirements over a year. Although many of the relationships are long-term, there is no guarantee of maintenance of that supplier contract from one year to the next. Alliances are a far less irreversible commitment than an acquisition or expansion if a supplier contract is terminated (Hennart 1998). Because there is no transfer of ownership rights, the relationship may be rescinded at relatively low cost (Hennart 1998).

Fourth, international strategic alliances can also be a much quicker means of establishing a competitive position than acquisition or expansion abroad (Dunning 1995). Collaborating with an established firm means that a firm avoids all the potential problems associated with international expansion. An established firm has an existing network of suppliers for items such as labour, seed, water, heating, packaging and so on. This network would have to be established by an incoming firm. Cultural differences might create problems in terms of business practices, labour relations or dealing with local bureaucracy and language difficulties can also

be a significant barrier to successful expansion abroad (Harrigan 1988; Bleeke and Ernst 1993; Pennings 1996).

As noted above, the extent, duration and precise forms of alliances between UK fresh produce suppliers and producers from overseas is impossible to ascertain from secondary data. The purpose of our study is to ascertain that these relationships exist and to examine the motivating factors behind their formation, the process of their formation and the factors that contribute to their success.

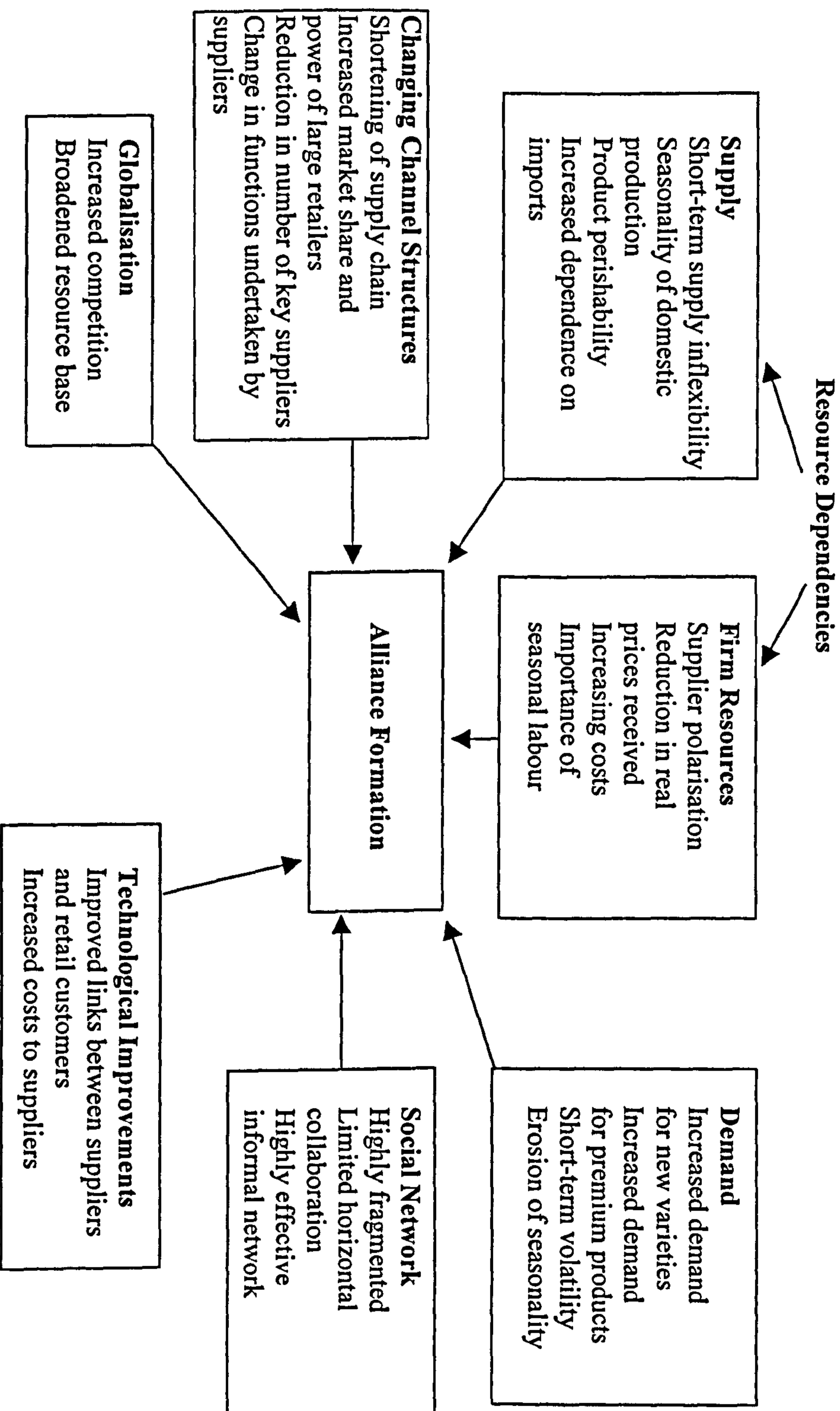
4.5 Conclusions

This chapter has described specific features of the UK fresh produce industry that are relevant to this study. These are illustrated in Figure 4.9. We have argued that resource dependencies are a critical feature of the industry. On the supply-side, the UK fresh produce industry is characterized by short-term supply inflexibility and uncertainty. All fresh produce production is seasonal with seasonality varying from crop to crop. Product prices are highly variable from month to month. UK demand for field vegetables is mostly met in season by UK production but out of season production and demand for protected vegetables and fruit is dependent on imports from overseas. The importance of resource configurations in an industry in predicting alliance activity has been supported empirically. Specifically, researchers have explained strategic alliance formation on the basis of strategic interdependence resulting from country-specific resource advantages (Shan and Hamilton 1991), the distribution of strategic capabilities (Nohria and Garcia-Pont 1991), human resources (Combs and Ketchen 1999; Rasheed and Geiger 2001), technical resources (Rasheed and Geiger 2001) and the relative size and performance of firms (Burgers, Hill and Kim 1993).

It is proposed that firm resources will also influence alliance formation. The UK industry is highly fragmented with most businesses small and specialist. Within each

Figure 4.9

Key Features of the UK Fresh Produce Industry



product area there is a polarization of suppliers, with a few large suppliers supplying the multiple retailers and a large number of much smaller suppliers supplying other customers. Prices received by producers for most products have not increased over the last decade. Average levels of profitability in the industry are low, but highly variable according to producer size. Efficiency motives, which are at the heart of transaction cost theory (Heide 1994; Williamson 1975, 1985) have been shown to be an important drive for alliance formation (Dunning 1995; Freeman and Hagedoorn 1992; Gomes-Casseres 1993; Unctad 1993, 1994; Hagedoorn 1990, 1993).

The social network that UK firms operate within is highly fragmented with limited horizontal collaboration. Yet there is a highly effective informal network facilitated by the frequency of personal contact in the industry. The network has been influenced by the changing channel structures in the industry, notably the shortening of the supply chain, the increased market share and power of a decreasing number of large retail businesses over the rest of the marketing channel, the reduction in the number of key suppliers and a change in the functions undertaken by the key suppliers.

The influence of the network that firms operate within on alliance activity has been researched empirically by a number of scholars (Cook and Emerson 1978; Gulati 1995; Gulati and Singh 1998; Kogut, Shan and Walker 1992; Eisenhardt and Schoonoven 1996; Walker, Kogut and Shan 1997). Network theorists argue that a network provides firms with information about the existence of potential partners and also each other's needs, capabilities and alliance requirements at a given time (Giddens 1984; Gulati 1995, 1999; Khanna, Gulati and Nohria 1998). It also serves as an important basis for trust between potential partners (Bradach and Eccles 1989; Gulati 1995; Gulati; Nohria and Zaheer 2000). They argue that without such awareness, an alliance between two firms is less likely (Kogut, Shan and Walker 1992; Van de Ven 1976).

The fresh produce industry is becoming increasingly globalised. This has increased competition by broadening the resource base open to both retailers and growers. Technological developments have forged closer links between suppliers and their retail customers but have also increased costs to supplier business. The ability of individual firms to respond to these increasing technological needs individually are curtailed by the levels of profitability in the industry. The influence of technology and globalization as drivers in alliance formation have also been examined empirically by a number of researchers (Achrol 1991; Davis 1987; Dunning 1995; Johansson 1995; Jorde and Teece 1989; Schlender 1993; Varadarajan and Cunningham 1995). Many authors argue that the increasing rate of technological development has increased the propensity of firms to enter into strategic alliances (Dunning 1995; Jorde and Teece 1989; Schlender 1993; Varadarajan and Cunningham 1995). Globalisation of markets has also been cited as a key influence on the formation of international strategic alliances (Achrol 1991; Davis 1987; Dunning 1995; Johansson 1995; Varadarajan and Cunningham 1995). As competition becomes more global in scope and the cost of competing in key global markets escalates, more and more firms are likely to find themselves lacking in resources to compete effectively on their own and instead seek strategic alliance partners.

CHAPTER FIVE

RESEARCH PROPOSITIONS

5.0 Introduction

This chapter details the research propositions that form the basis of the empirical research conducted in this study. These propositions are derived from the conceptual frameworks developed at the end of Chapters 2 and 3 and reproduced here. The frameworks developed in these chapters were developed following an extensive review of the theoretical literature that is presented in Chapters 2 and 3. These propositions have been developed using a multi-paradigm approach, based on the resource-based view, the transaction cost perspective and the network perspective. They propose explanations for alliance formation and the success and development of alliances.

This chapter details the propositions that are tested in our research followed by a discussion of the theoretical basis for the propositions. The research methodology used to test these propositions in our empirical research is discussed in Chapters 6 and 7.

5.1 Research Propositions

5.1.1 Motivations for Alliance Formation

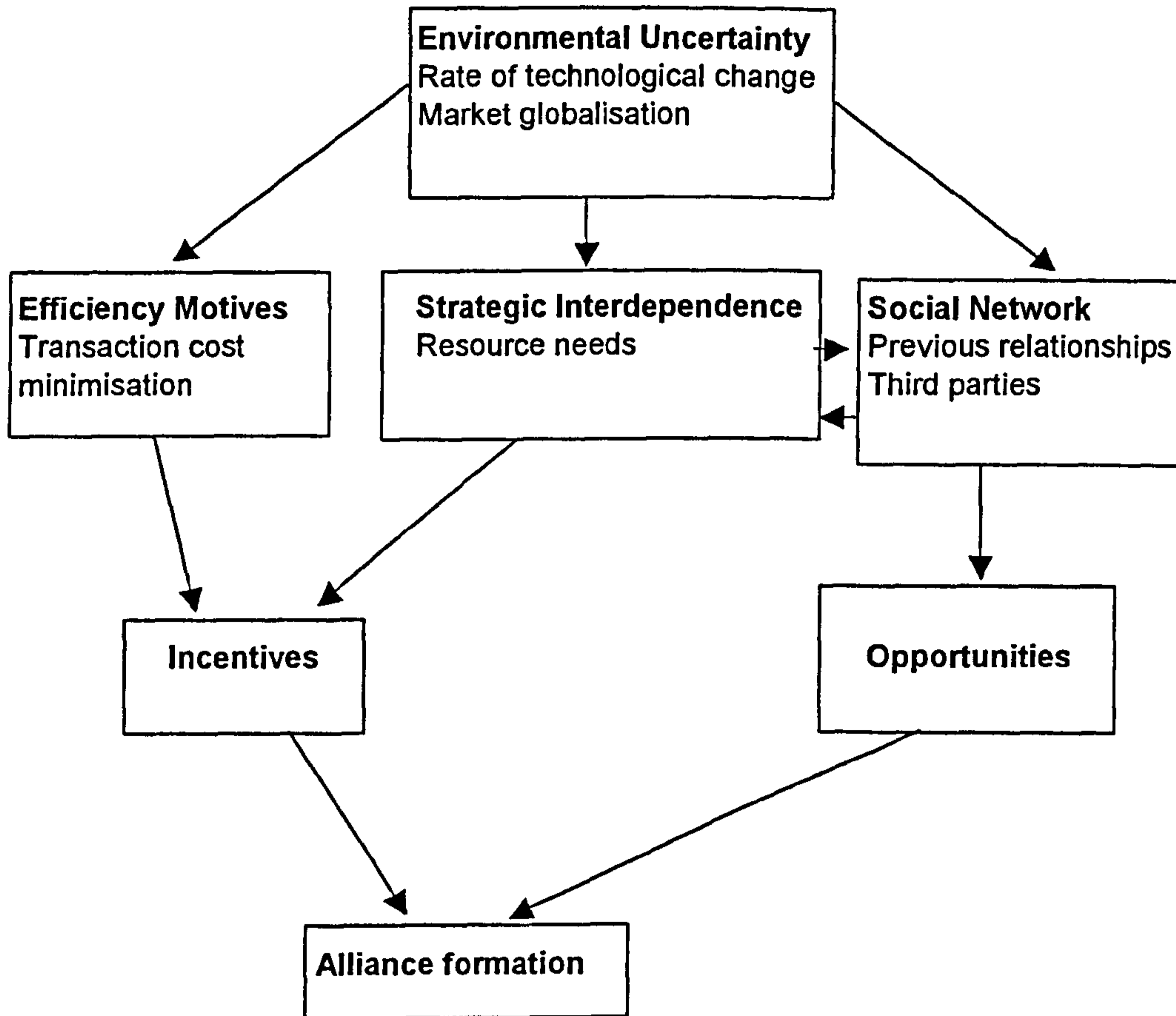
A large number of factors have been cited in the literature as having an impact on alliance formation (see Chapter 2 for a full discussion). In our analysis we have developed a meta-theoretical framework which takes as its basis the resource-based view (Barney 1991; Berg, Duncan and Friedman 1982; Hagedoorn 1993; Mariti and

Smiley 1983; Pfeffer and Salancik 1978) with contributions from both the transaction cost perspective (Combs and Ketchen 1999; Gray and Wood 1991; Kay 1992; Rasheed and Geiger 2001; Tsang 2000) and the network perspective (Ahuja 2000; Eisenhardt and Schoonhoven 1996; Gulati 1999). This framework was produced in Chapter 2 (Figure 2.6) and reproduced here as Figure 5.1. Our analysis uses this framework to examine the factors leading to alliance formation in the UK fresh produce industry. These have been developed into the three propositions below.

Proposition 1: **Firms are motivated to form alliances when their transaction costs are of an intermediate level, but not high enough to justify vertical integration. These transaction costs are determined by asset specificity, uncertainty and frequency of transactions.**

This proposition is derived from the transaction cost perspective and highlights the efficiency motives of alliance formation that form the basis of this perspective (Figure 5.1). Transaction cost theory proposes that the properties of a transaction determine the governance structure and institutional arrangement of a firm (Williamson 1975; 1985). The three specific functions of a transaction are the specificity of the asset (in terms of labour and capital), the expected frequency of exchange and the expected uncertainty of the transaction (Anderson and Coughlan 1987; Bucklin and Sengupta 1993; McNaughton 1996; Williamson 1975, 1985). Transactions that involve uncertainty about their outcome, recur frequently and require substantial transaction-specific investments are more likely to occur in hierarchically organised firms or alliances than in the market (Heide 1994; Williamson 1975, 1985).

International Alliance Formation in the Fresh Produce Industry



Proposition 2: Firms are motivated to form strategic alliances to access resources and achieve strategic competitive advantage when these resources cannot be acquired through market exchange or internalisation.

This proposition is derived from the resource-based view and highlights the possession of and need for various resources as motivating factors in alliance formation (Barney 1991; Berg, Duncan and Friedman 1982; Hagedoorn 1993; Mariti and Smiley 1983; Pfeffer and Salancik 1978). It proposes that the heterogeneous possession of resources leads to strategic interdependence between firms and that this strategic interdependence leads firms to form alliances. Various factors have been proposed as leading to strategic interdependence between firms. These include country-specific resource advantages (Shan and Hamilton 1991), the distribution of strategic capabilities (Nohria and Garcia-Pont 1991), human resources (Combs and Ketchen 1999; Rasheed and Geiger 2001), technical resources (Rasheed and Geiger 2001) and competitive and demand uncertainty (Burgers, Hill and Kim 1993). For ease of discussion they can be grouped as measures of uncertainty and dependence.

I Environmental Uncertainty

Two sources of environmental uncertainty are identified in the literature: demand uncertainty and competitive uncertainty (Burgers, Hill and Kim 1993; Harrigan 1988; Pfeffer and Salancik 1978; Provan 1982; Whetten and Leung 1979).

I.1 Competitive Uncertainty

Competitive uncertainty motivates firms to enter into alliances with each other in order to reduce uncertainty by reducing competition (Contractor and Lorange 1988; Kogut 1988; Pennings 1981; Pfeffer and Nowak 1979; Pfeffer and Salancik 1978). This arises from competitive interdependence, which is when the competitive actions of a firm have a direct effect on the market position of its rivals, thereby risking a response in kind (Hay and Morris 1979). The extent of competitive interdependence that a firm faces is a function of industry structure (Hay and Morris 1979). Burgers,

Hill and Kim (1993) argue that competitive interdependence is low in fragmented industries and in monopolies and highest in oligopolies where a limited number of evenly balanced competitors confront each other.

They argue that competitive interdependence produces competitive uncertainty because a firm never knows in advance whether its actions will invite retaliation, or whether its rivals will initiate competitive moves that directly impact upon its market share and require a response in kind. It is argued that the desire to co-opt ones competitors, thereby reducing competitive uncertainty, represents an important motive for entering into horizontal strategic alliances (Contractor and Lorange 1988; Kogut 1988; Pennings 1981; Pfeffer and Nowak 1976; Pfeffer and Salancik 1978).

Burgers Hill and Kim (1993) thus argue that within a single industry the competitive uncertainty facing a firm varies with its position within the industry's size distribution. Accordingly, so does the firms incentive for entering into an alliance to reduce competitive uncertainty. Specifically they argue that the incentive to enter into an alliance to reduce competitive uncertainty is greatest for intermediate sized firms and least for smallest and largest firms in an industry. Actions by the smallest firms in an industry have limited impact on other firms. Thus the competitive moves of small players will be less likely to invoke a response in kind. Added to this, their small market share implies that they are limited in their ability to use horizontal alliances to reduce competitive uncertainty. Whilst actions by the largest firms in an industry will impact on other firms they are very able to survive sustained competition from rivals. This moderates the incentive to enter into alliances for the purposes of reducing competitive uncertainty. Competitive actions by intermediate firms are likely to elicit a response in kind from their rivals. Their lesser size and more limited resources than larger firms mean that they are less likely to be able to fight sustained competition from rivals. Thus, on average, the intermediate-sized firm faces a higher degree of competitive uncertainty. Therefore they have a greater incentive to enter strategic alliances to reduce competitive uncertainty.

I.2 Demand Uncertainty

The notion of demand uncertainty is discussed in Chapter 3 (Burgers, Hill and Kim 1993; Kogut 1988; Nohria and Garcia-Pont 1991; Porter and Fuller 1986). Specifically it is argued that demand uncertainty motivates companies to enter into alliances and gain access to capabilities to cope with uncertainty. To survive in an uncertain environment firms must be able to adapt quickly to changing demand conditions. However, organisational inertia and administrative constraints may make it difficult for firms to internally develop or purchase the strategic capabilities required to deal with rapidly changing demand conditions (Bartlett and Ghoshal 1989; Hannah and Freeman 1989). Burgers, Hill and Kim (1993) argue that firms can gain access to the requisite strategic capabilities by entering into alliances with firms that already possess those capabilities (Kogut 1988; Nohria and Garcia-Pont 1991; Porter and Fuller 1986).

However, alliances are prone to failure (Harrigan 1988), difficult to manage (Killing 1983), demand attention from top management (Berg and Friedman 1980; Koot 1988) and decrease organizational autonomy (Aldrich 1979; Provan 1982). Thus firms only enter into alliances if there is a clear incentive. Burgers, Hill and Kim (1993) argue that within a single industry, poorer performing firms have more incentive to enter an alliance than more efficient ones. They argue that this is due to the fact that poorer performing firms are probably less able to deal with the adverse consequences of demand uncertainty than their more efficient competitors.

II Dependence

Scholars measuring dependence have developed measures of the resources and capabilities of the firm.

II.1 Relative Financial Attributes

The significance of partner firms' relative financial attributes in indicating strategic interdependence was discussed in Chapter 3 (Burgers, Hill and Kim 1993; Gulati

1995; Paulson 1976; Rasheed and Geiger 2001). Specifically it was asserted that firms seek partners with different attributes who are unlikely competitors and will have complementary resources (Burgers, Hill and Kim 1993, Paulson 1976). The relative financial attributes of the focal firm and their alliance partners that were examined were firm size and performance. These were proxied by turnover and market share as before, but here the focus is on the relative size and performance of the focal firm and their alliance partners.

II.2 Organisational Niche

Organisational niche refers to a set that includes firms possessing similar sets of resources and capabilities (Gulati 1995; Hannan and Freeman 1977). In Chapter 2 it was argued that firms with differing capabilities (belonging to different niches) are likely to share greater interdependence than firms with similar capabilities (belonging to the same niche) and are thus more likely to form strategic alliances (Astley 1985; Baum and Singh 1994; Fombrun 1986).

II.3 Organisational Compatibility

Organisational compatibility refers to the complementarity of goals and objectives; operating philosophies and corporate cultures of alliance partners (Achrol, Scheer and Stern 1990; Bucklin and Sengupta 1993; Ruekert and Walker 1987).

All these influences on resource needs will be tested in this proposition.

Proposition 3: The social network that a firm operates within influences both the motivations for firms to form alliances and the alliance opportunities made available to that firm.

This proposition is derived from the network perspective and highlights the influence of the social network that the alliance partners operate within on both their motivations to form alliances and also the opportunities to form alliances (Giddens 1984; Gulati 1995; Gulati 1999; Khanna, Gulati and Nohria 1998). The social network is defined in Chapter 2 and refers to the prior direct and indirect relationships between firms that are used as an important source of information for firms about the reliability and capabilities of potential partners. The influence of the social network on various facets of alliance formation have been studied empirically by researchers. Some have examined the role of networks in the cumulative frequency of future alliances by firms (Cook and Emerson 1978; Gulati 1995; Kogut, Shan and Walker 1992; Eisenhardt and Shoonhoven 1996); others to alliances with new partners (Walker, Kogut and Shan 1997); others to the precise nature of inter-firm relationships (Gulati 1995; Gulati and Singh 1998); and others to their effects on the structure and performance of alliance relationships (Zaheer and Venkatraman 1995; Dyer 1996).

Gulati (1995) argues that the network of previous alliances between potential partners is used as an information source by them and can dispel the riskiness of alliances and be instrumental in the formation of new alliances and in firms' choices of partners (Gulati 1995; Eisenhardt and Schoonhoven 1996; Zajac and Olsen 1993). He argues that the information provided by networks serves as an important basis for trust between potential partners by providing information to partners about each other's reliability and by reinforcing a concern for reputation (Gulati 1995). Bucklin and Sengupta (1993) argue that co-operation is subject to the threat of opportunistic behaviour by one or more partners (Spekman and Sawhney 1990; Williamson 1981). However trust and commitment counterbalance the potential for adverse forms of behaviour with commitment an implicit pledge of relational continuity (Dwyer, Schurr and Oh 1987). Building on work from Heide and John (1990) who found a

positive association between the historical length of the alliance relationship and expected continuity of future interactions they argue that a long and stable history of prior business can build trust and commitment (Ruekert and Walker 1987; Van de Ven and Ferry 1980).

A number of scholars argue that indirect connections through common partners can play an important role in leading to new alliances between firms (Burt and Knez 1995; Gulati 1995; Kreps 1990; Portes and Sensenbrenner 1993; Raub and Weesie 1990; Van de Ven 1976). The simplest form of indirect connection is two firms sharing a third partner. As Gulati (1995) argues, two such firms are likely to have access to more information about each other than two firms with no such connection. He argues that information gained through third-party ties serves two purposes. First, by serving as effective referral networks, indirect ties make firms aware (or more aware) of each other (Van de Ven 1976). Second, common ties can also serve as an important basis for enforceable trust (Burt and Knez 1995; Kreps 1990; Portes and Sensenbrenner 1993; Raub and Weesie 1990). The anticipated utility from both a tie with a given partner and those with shared partners motivates good behaviour. Each partner's awareness that the other has much to lose from behaving opportunistically enhances its confidence in the other.

Indirect ties can also influence alliance formation for technological reasons. Firms may prefer an alliance with another firm with whom they share common partners to ensure compatibility across their product lines (Gulati 1995). He argued that this could be compared to the "network externalities" argument made by economists, in which considerations of compatibility lead firms to participate in the same or competing networks (Katz and Shapiro 1985).

5.1.2 Measurement of Alliance Success

Proposition 4: Alliance success can be measured through a perceptual measure based on the firm's evaluation of alliance performance.

This proposition puts forward the view that alliance performance can be measured using a perceptual measure of satisfaction with alliance performance (Beamish 1985; Bleeke and Ernst 1991; Bucklin and Sengupta 1993; Dussauge and Garrette 1995; Glaister and Buckley 1999; Harrigan 1985, 1988; Killing 1983; Parkhe 1993; Schaan 1983).

The measurement of alliance success has been a matter of contention in past theoretical and empirical work (Cameron 1986; Chakravarthy 1986; Eccles 1991; Glaister and Buckley 1998; Glaister and Buckley 1999; Goodman and Pennings 1980; Jacobson 1987; Lewin and Minton 1986; Varadarajan and Ramanujam 1990; Venkatraman and Ramanujam 1986). This is discussed at length in Chapter 3, but is summarised briefly here. Some authors have advocated the use of traditional financial measures of success such as return on investment, growth or profits and the extent to which other indicators are relevant, such as maximising shareholders' wealth; or customer satisfaction (Lecraw 1983; Tomlinson 1970). Other authors have argued that an alliance's success cannot be viewed in isolation from the nature of the organisation's environment; the resource capabilities of the partnering firms and the motivations for the alliance formation in the first place. They argue that given the multifaceted objectives of many alliances, performance is inadequately measured by the use of purely financial measures or objective measures such as alliance termination (Anderson 1990; Bleeke and Ernst 1991; Bucklin and Sengupta 1993; Glaister and Buckley 1999). They argue that a focus on individual measures does not adequately reflect the extent to which the alliance has achieved its aims and objectives (Geringer and Herbert 1991).

Empirical studies examining international alliance performance have mainly dealt with equity joint ventures. In these studies a large number of criteria have been used to assess performance (Chowdhury 1992). In summarising prior empirical research Geringer and Herbert (1991) note that early studies relied on a variety of financial indicators such as profitability, growth and cost position (Tomlinson 1970; Lecraw 1983). Others have examined the stock market reaction to the announcement of alliance formation (McConnell and Nantell 1985; Woolridge and Snow 1990). Other studies have used objective measures of performance such as survival of the alliance (Franko 1971; Geringer 1990; Harrigan 1986; Killing 1983; Park and Russo 1996); its duration (Day 1995; Harrigan 1986; Kogut 1988; Parkhe 1991); instability of its ownership (Franko 1971; Gomes-Casseres 1987); shifts in competitive strength (Hamel, Doz and Prahalad (1989) and renegotiation of the alliance contract (Blodgett 1992).

Concerns about the ability of financial and objective measures to gauge effectiveness of alliance performance have led other scholars to use perceptual measures of satisfaction with alliance performance (Beamish 1985; Bleeke and Ernst 1991; Bucklin and Sengupta 1993; Dussauge and Garrette 1995; Glaister and Buckley 1999; Harrigan 1985, 1988; Killing 1983; Parkhe 1993; Schaan 1983).

5.1.3 Factors Contributing to Alliance Success

A large number of factors have been cited in the literature as having an impact on alliance success (see Chapter 3 for a full discussion). Most empirical studies of alliance performance have linked levels of performance, however defined and measured to particular explanatory factors describing given attributes of the observed alliances. Most studies have examined these explanatory factors in isolation from each other. In contrast, Bucklin and Sengupta (1993) develop a framework incorporating strategic, organisational and environmental factors. They categorise influencing factors into three groups. First, factors grouped under the term 'Project Management' reflecting the distribution of ownership, control and conflict

resolution. Second, 'Project Payoff' reflecting alliance partners ex-ante views about the benefits and costs of the alliance. Third, 'Partner Match', reflecting the capability of the alliance partners to cooperate and work with each other.

Our framework (Figure 5.2) depends heavily on this framework. Our analysis uses this framework to examine the factors leading to successful strategic alliances in the UK fresh produce industry. These have been developed into the three propositions below. The specific constructs and measures used are discussed in Chapter 7.

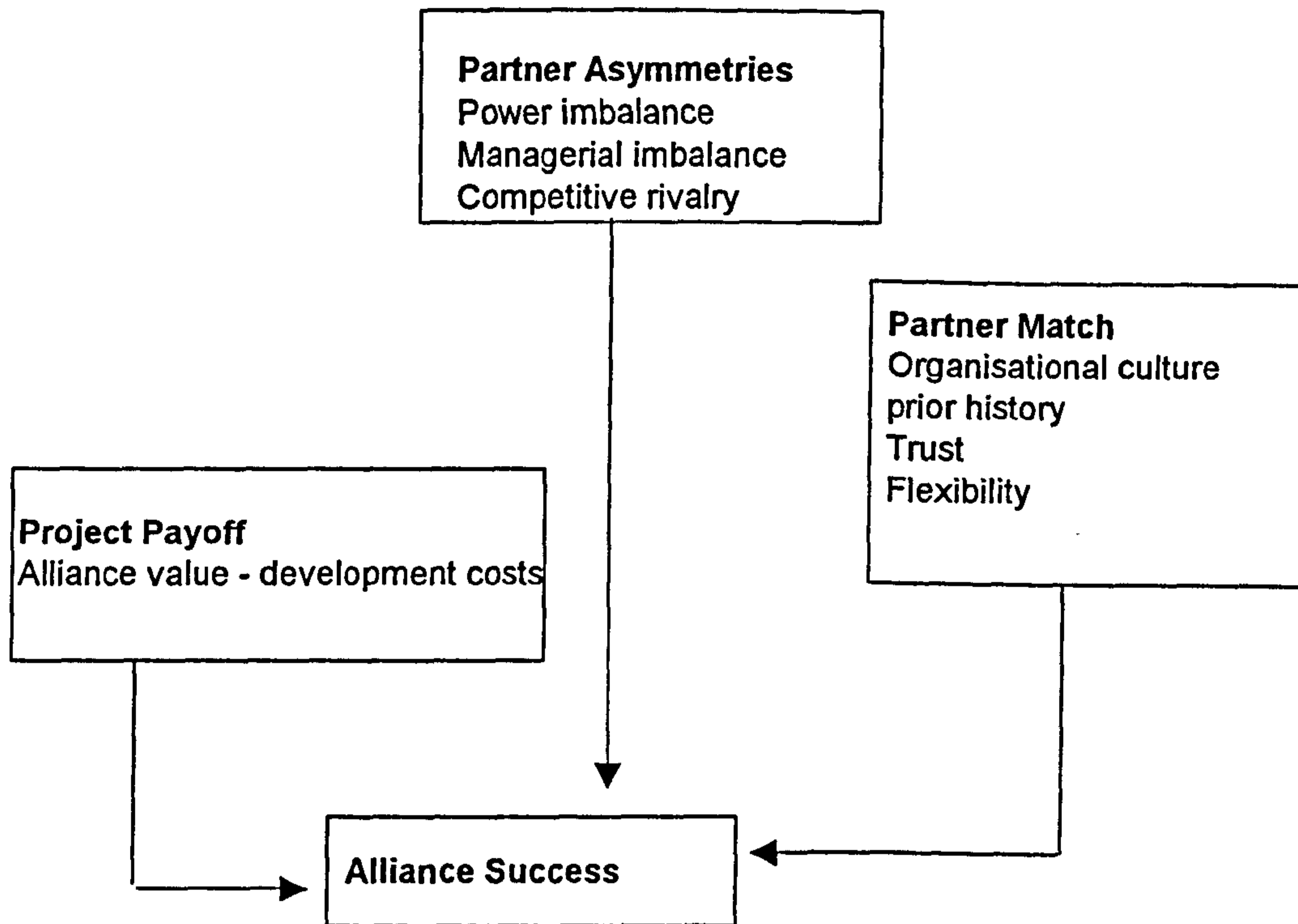
Proposition 5: Imbalances in power and in the managerial resources that each partner provides to the alliance are drawbacks to alliance operations and have an important role in limiting alliance success.

The analysis of power in alliance relationships has been examined in two distinct ways. First, some researchers have looked at it in terms of control of the relationship (Beamish 1984; Killing 1982; 1983). This perspective has emerged from analysis of joint ventures by multinational corporations in less developed countries where the focus is on the location of control in the relationship. The second perspective is of power in terms of market power defined according to financial resources and market presence (Bleeke and Ernst 1991; Bucklin and Sengupta 1993; Cook 1977; Harrigan 1988; Prahalad 1989). Here the focus is on the balance of power between alliance partners and the consequences of alliances between partners with similar or different levels of market power. Previous research has argued that if an alliance is out of balance the weaker party may try and limit its vulnerability to the detriment of the alliance and the stronger party may be loath to put forward effort (Bucklin and Sengupta 1993). The definitions of power used by researchers and the implications of power imbalances on the success of an alliance are discussed in detail in Chapter 3. In this study we focus on the second perspective of power, that is the relative

Figure 5.2

Alliance Success Factors in the Fresh Produce Industry

Adapted from Bucklin and Sengupta (1993); Glaister and Buckley (1999)



Alliance success is defined qualitatively as where the alliance partners are satisfied with the performance of the alliance and the extent to which it has achieved its overall objectives.

market power of the alliance partners. The measurement of power used in previous empirical work and our study is discussed in Chapter 7.

Proposition 6: The higher the project payoff from a strategic alliance the more likely it is to be successful

Project payoff is defined as the strategic value of the alliance net of development cost (Bucklin and Sengupta 1993). It is argued that the higher the project payoff from an alliance the more likely it is to be successful (Benson 1975; Bucklin and Sengupta 1993; Glaister and Buckley 1999; Schermerhorn 1975). Project payoff defines alliance partners' ex ante views about market opportunity and cost. Bucklin and Sengupta (1993) argue that alliances with well-defined market opportunities and well-defined costs are more likely to perform well. The notion of project payoff is discussed in Chapter 3 and the measurement of the concept in Chapter 7.

Proposition 7: Alliance success is dependent on partner match. This is facilitated through similar organizational cultures, prior history, trust and flexibility.

Partner match refers to alliances in which the partners are similar in management style and company culture (Bucklin and Sengupta 1993). This is facilitated through similar organizational cultures (Barkema and Vermeulen 1997; Fedor and Werther 1995; Rule and Keown 1998; Shenkar and Zeira 1992); a long and stable history of prior business relations (Bucklin and Sengupta 1993; Glaister and Buckley 1999; Heide and John 1990; Parkhe 1993; Saxton 1997); mutual trust (Beamish and Banks 1987; Buckley and Casson 1988; HanYan and Gray 1994; Harrigan 1986; Inkpen and Beamish 1997; Madhok 1995; Monczka, Petersen, Handfield and Ragatz 1998; Hoffman and Schlosser 2001; Rule and Keown 1998; Zaheer, McEvily and Perrone 1997) and flexibility by alliance partners (Bleeke and Ernst 1991; Doz 1996; Dyer and Singh 1997).

Cultural compatibility between organizations reflects complementarity in goals and objectives, operating philosophies and corporate cultures (Bucklin and Sengupta 1993). It is argued that similar cultural values can reduce misunderstanding between partners and enhance the success of an alliance (Barkema and Vermeulen 1997; Fedor and Werther 1995; Rule and Keown 1998; Shenkar and Zeira 1992).

Prior history allows partner firms to know each other better and thus they are likely to have a greater understanding of the respective capabilities and resources they are seeking to access and the likely behaviour of the expected partner (Bucklin and Sengupta 1993; Glaister and Buckley 1999; Heide and John 1990; Parkhe 1993; Saxton 1997). It is also argued that prior knowledge of potential partners can lead to alliances that begin their existence with an existing stock of 'relationship assets' (Fichman and Levinthal 1991) and a high degree of inter-party trust (Gulati 1995).

Numerous researchers have argued that mutual trust is essential for successful alliances (Beamish and Banks 1987; Buckley and Casson 1988; HanYan and Gray 1994; Harrigan 1986; Inkpen and Beamish 1997; Madhok 1995; Monczka, Petersen, Handfield and Ragatz 1998; Hoffman and Schlosser 2001; Rule and Keown 1998; Zaheer, McEvily and Perrone 1997). The various facets of trust are discussed in Chapter 3 and the measurement of trust in Chapter 7.

Flexibility of the alliance to change with the changing objectives, resources and relative power of the partners has also been cited as a determinant of alliance success (Bleeke and Ernst 1991; Doz 1996; Dyer and Singh 1997).

5.2 Summary

This chapter presented the research propositions that form the basis of the empirical Framework for research conducted in this study. The methodology used to test these

propositions is described in Chapters 6 and 7 and the results of the empirical study in Chapters 8 and 9.

CHAPTER SIX

RESEARCH METHODOLOGY I

6.0 Introduction

This chapter describes the research methodology used as the basis for the empirical work undertaken in this thesis. This chapter is the first of two on research methodology. This chapter follows the research process through to sampling. The next chapter begins with the development of constructs and measures and continues to data analysis.

This chapter begins with an overview of the key methodological decisions. The methodology used is determined by the key objectives of the research and these are presented. The research methodology is placed in its theoretical context. The research used in this thesis is qualitative. The empirical work in this study is through a number of in-depth open-ended interviews. In this chapter we discuss the strategic themes of different types of qualitative research and the differing philosophical positions underlying differing research methodologies and research strategies. We present a justification of the research methodology used here and compare it to the research methods in previous empirical studies of strategic alliances.

The second part of the chapter describes the research procedures used in our empirical study. We present and justify the data collection and sampling methods chosen. The personal interview was used for the qualitative research. The sampling procedure for the personal interviews was non-probability judgement. The point of entry to all firms was the managing directors, but other managers were also interviewed.

6.1 Problem Definition and Research Objectives

The purpose of this research is to ascertain the key factors motivating fresh produce suppliers in the UK to form strategic alliances with producers from overseas; the process of alliance formation; and the success and development of these alliances. The specific focus is on international producer alliances between firms in the UK and alliance partners from overseas.

Research Objectives

1. *To examine the viability of a resource based view with social structural explanations as a means of investigating the motivations for alliance formation and the success and development of alliances.*
2. *To examine the interconnectedness and interaction between the factors influencing a firm's motivations to become involved in strategic alliances and the success and development of alliances.*
3. *To assess the significance of the proposed measures of motivations for alliance formation and the success and development of alliances.*
4. *To establish the gaps emerging from previous empirical work, based in part on the limitations of existing research.*
5. *To add knowledge to the literature by the development of theoretical perspectives and a focus on an area that is under-researched.*

6. *To identify research questions which still need to be addressed, both in the light of existing empirical research and the findings of this study.*

6.2 Discussion of Methodological issues

Qualitative research encompasses a range of analytical perspectives. Its interpretation is also dependent on the philosophical position of the person undertaking the research. In this section we aim to clarify the aims and meanings of qualitative research; to examine the classical qualitative/quantitative divide; to discuss the key epistemological perspectives of social science researchers; to briefly present an overview of the types of qualitative analysis and then to discuss the reasons for the type of analysis used in this research compared to methods used in previous empirical studies of strategic alliances.

6.2.1 Strategic Themes

Qualitative research encompasses a myriad of methodologies and its use and interpretation is dependent upon the epistemological position of the researcher(s). As such it is quite difficult to define. Denzin and Lincoln (2000) define qualitative research as:

“Qualitative research is multi-method in focus, involving an interpretive, naturalistic approach to its subject matter. This means that qualitative researchers study things in their natural settings, attempting to make sense of or interpret phenomena in terms of the meanings people bring to them. Qualitative research involves the studied use and collection of a variety of empirical materials – case study, personal experience, introspective, life story, interview, observational, historical,

interactional and visual texts – that describe routine and problematic moments and meaning in individuals' lives.”

Creswell (1998) emphasises a ‘complex, holistic picture’ in his definition which conveys similar ideas:

“Qualitative research is an inquiry process of understanding based on distinct methodological traditions of inquiry that explore a social or human problem. The researcher builds a complex, holistic picture, analyzes words, reports detailed views of informants and conducts the study in a natural setting.”

Authors often define qualitative research by comparing it to quantitative research (Creswell 1994; Denzin and Lincoln 2000; Patton 2002; Ragin 1987). A key difference characterised by Ragin (1987) is that quantitative researchers work with a few variables and many cases, whereas qualitative researchers rely on a few cases and many variables. The use of quantitative methods makes it possible to measure the reactions of a great many people to a limited set of questions, facilitating comparison and statistical aggregation of data. Quantitative research gives a broad, generalisable set of findings presented succinctly and parsimoniously. Qualitative methods produce a wealth of detailed information about a much smaller number of people and cases. Qualitative research increases the depth of understanding of the cases and situations studied, but reduces the generalisability (Patton 2002).

Qualitative inquiry focuses on relatively small samples, even single cases, selected purposefully to permit research into and understanding of a phenomenon in depth. Quantitative methods depend on larger samples selected randomly in order to generalise with confidence from the sample of the population that it represents. As Patton (2002) notes:

“Not only are the techniques for each sample selection different but the very logic of each approach is distinct because the purpose of each strategy is different.”

While the quantitative approach is largely hypothetical-deductive and the qualitative approach is largely inductive, a study can include elements of both strategies. Over a period of inquiry an investigation may flow from inductive approaches to find out what the important questions and variables are (exploratory work) to deductive hypothesis-testing aimed at confirming and/or generalising exploratory findings then returning to inductive analysis to look for rival hypotheses and unanticipated or unmeasured factors.

Quantitative analysis looks at variables in a linear fashion to test hypotheses and draw inferences about the relationships among separate indicators. Qualitative analysis is a holistic approach where the whole is understood as a complex system that is bigger than the sum of its parts.

Qualitative methods facilitate the study of issues in depth and detail. They allow researchers to approach fieldwork without being constrained by predetermined categories of analysis. This contributes to the depth, openness and detail of qualitative inquiry. Quantitative methods need the use of standardised measures so that the varying perspectives and experiences of people can be fit into a limited number of predetermined response categories to which numbers are assigned.

Some have argued that the quantitative versus qualitative debate is based on fundamentally different epistemological assumptions. They argue that positivists favour the use of quantitative methods in researching large-scale phenomena. Interpretivists employ qualitative methods in order to address the meaningful character of human group life. However, researchers pursue qualitative research whilst holding a variety of epistemological assumptions and there are also epistemological debates within particular

theoretical traditions (Travers 2001). The main epistemological positions and their relationship to qualitative methods are discussed in the next section.

In a comprehensive overview of qualitative research, Patton (2002) identifies 12 strategic themes of qualitative inquiry which are reproduced here in Table 6.1. He argues that ideally a pure qualitative study includes all twelve themes and dimensions. In practice, however he argues that it is important to recognise that actually “conducting holistic-inductive analysis and implementing naturalistic inquiry are always a matter of degree.” He also argues that it is not necessary to be a qualitative methods purist and that qualitative data can be collected and used in conjunction with quantitative data. Many researchers have argued that the debate between the merits of qualitative versus quantitative inquiry is highly simplistic (Cook 1995; Greene 1998; Patton 1997). They argue that work should be methodologically appropriate and pragmatic and that neither approach is necessarily better than the other. Researchers need to use research designs that are relevant, meaningful, understandable and able to produce results that are valid, reliable and believable. On many occasions a variety of data collection techniques and design approaches may be used together. The ideal in evaluation designs is methodological appropriateness, design flexibility and situational responsiveness in the service of utility (Patton 1997), not absolute allegiance to some ideal standard of paradigm purity and methodological orthodoxy.

The debate about the relative value of the two paradigms has made a distinction between using quantitative and experimental methods to generate and test hypothetical-deductive generalisations versus using qualitative and naturalistic methods to inductively and holistically understand human experience and constructed meanings in context-specific settings (Taylor and Bogdan 1984). But the variety of inquiry approaches has expanded well beyond the simplistic dichotomy between quantitative and qualitative paradigms. Instead it is argued that a researcher should match concrete methods to specific questions including the option of tactically mixing methods as needed and appropriate (Patton 2002).

Table 6.1 Themes of Qualitative Inquiry

Design Strategies	
1. Naturalistic inquiry	Studying real-world situations as they unfold naturally; nonmanipulative and noncontrolling; openness to whatever emerges (lack of predetermined constraints on findings).
2. Emergent design flexibility	Openness to adapting inquiry as understanding deepens and/or situations change; the researcher avoids getting locked into rigid designs that eliminate responsiveness and pursues new paths of discovery as they emerge.
3. Purposeful sampling	Cases for study (e.g. people, organisations, communities, cultures, events, critical incidences) are selected because they are “information rich” and illuminative, that is, they offer useful manifestations of the phenomenon of interest; sampling then, is aimed at insight about the phenomenon, not empirical generalisation from a sample to a population.
Data Collection and Fieldwork Strategies	
4. Qualitative data	Observations that yield detailed, thick description; inquiry in depth; interviews that capture direct quotations about people’s personal perspectives and experiences; case studies; careful document review.
5. Personal experience and engagement	The researcher has direct contact with and gets close to the people, situations and phenomenon under study; the researcher’s personal experiences and insights are an important part of the inquiry and critical to the understanding of the phenomenon.
6. Empathic neutrality and mindfulness	An empathic stance in interviewing seeks vicarious understanding without judgement (neutrality) by showing openness, sensitivity, respect, awareness and responsiveness; in observation it means being fully present (mindfulness).

7. Dynamic systems	Attention to process; assumes change as ongoing whether focus is on an individual, an organisation, a community or an entire culture; therefore, mindful of and attentive to system and situation dynamics.
Analysis Strategies	
8. Unique case orientation	Assumes each case is special and unique; the first level of analysis is being true to, representing, and capturing the details of the individual cases being studied; cross-case analysis follows from and depends on the quality of individual case studies.
9. Inductive analysis and creative synthesis	Immersion in the details and specifics of the data to discover important patterns, themes and interrelationships; begins by exploring, then confirming; guided by analytical principles rather than rules; ends with a creative synthesis.
10. Holistic perspective	The whole phenomenon under study is understood as a complex system that is more than the sum of its parts; focus on complex interdependencies and system dynamics that cannot meaningfully be reduced to a few discrete variables and linear, cause-effect relationships.
11. Context sensitivity	Places findings in a social, historical and temporal context; careful about, even dubious of, the possibility or meaningfulness of generalisations across time and space; emphasises instead careful comparative case analyses and extrapolating patterns for possible transferability and adaptation in new settings.
12. Voice, perspective and reflexivity	The qualitative analyst owns and is reflective about her or his own voice and perspective; a credible voice conveys authenticity and trustworthiness; complete objectivity being impossible and pure subjectivity undermining credibility, the researcher's focus becomes balance – understanding and depicting the world authentically in all its complexity while being self-analytical, politically aware and reflexive in consciousness.

Patton (2002)

6.1.2 The Epistemological Divide

Critical to a discussion of methodology is a discussion of the different philosophical positions underlying different research methods. The qualitative/quantitative divide has been characterised by an interpretivist versus a positivist philosophical viewpoint. Both of these viewpoints have been elevated into stereotypes and both encompass a wide range of philosophical positions. Below we briefly describe the differing aspects of these positions and then link them to particular methodological positions which are then discussed.

6.1.2.1 Positivism

There are numerous varieties of positivism. A central assumption is that it is possible to describe the world objectively, from a scientific vantage point. Positivists argue that properties should be measured through objective measures rather than being inferred subjectively. Smith, Thorpe and Lowe (1991) list 8 implications of a positivist standpoint. These are:

- i) independence:* the observer is independent of what is being observed;
- ii) value-freedom:* the choice of what to study, and how to study it, can be determined by objective criteria rather than by human beliefs and interests;
- iii) causality:* the aim of social sciences should be to identify causal explanations and fundamental laws that explain regularities in human social behaviour;
- iv) hypothetico-deductive:* science proceeds through a process of hypothesising fundamental laws and then deducing what kinds of observations will demonstrate the truth or falsity of these hypotheses;
- v) operationalisation:* concepts need to be operationalised in a way which enables facts to be measured quantitatively;
- vi) reductionism:* problems as a whole are better understood if they are reduced into the simplest possible elements;

- vii) *generalisation*: in order to be able to generalise about regularities in human and social behaviour it is necessary to select samples of sufficient size;
- viii) *cross-sectional analysis*: such regularities can most easily be identified by making comparisons of variations across samples.

These propositions are drawn from a number of positivist philosophers and represent a collection of points that have come to be associated with a positivist viewpoint. Smith, Thorpe and Lowe (1991) note that some 'positivists' would disagree with some of the statements. Qualitative researchers who share this epistemological assumption often favour building techniques into studies modelled on the procedures used by quantitative researchers. They also usually deal with large data sets and are looking for representativeness in their study. Proponents of positivist styles of ethnography include Hammersley (1991) who argues that all studies should be judged by a set of scientific criteria, which include reliability and representativeness.

6.1.2.2 Interpretivism

The interpretive tradition encompasses a number of different variants including interpretive sociology (Habermas 1970), hermeneutics (Outhwaite 1975), constructivism (Fay 1996), naturalistic inquiry (Lincoln and Guba 1986), social constructionism (Berger and Luckman 1966), and 'new paradigm' inquiry (Reason and Rown 1981). Interpretivists are interested in how members of a society understand their own actions. This compares to positivists who offer causal explanations of social, behavioural and physical phenomena. Interpretivists hold the view that the world and reality are not objective and exterior, but that they are socially constructed and given meaning by people (Husserl 1964). They place an emphasis on the qualities of entities and on processes and meanings (Denzin and Lincoln 2000). They employ qualitative methods and favour smaller in-depth samples than positivists where they are interested in exploring interviewees understanding in-depth rather than aspiring to represent a population.

The concept of understanding or *Verstehen* is central to the interpretivist tradition. Denzin and Lincoln (2000) argue that interpretivism generally embraces two dimensions of *Verstehen*. First *Verstehen* is “the name of a complex process by which all of us in our everyday life interpret the meaning of our own actions and those of others with whom we interact” (Bernstein 1976). Second, *Verstehen* is also “a method peculiar to the social sciences” (Schutz 1962), a “process by which the social scientist seeks to understand the primary process” (Denzin and Lincoln 2000). Thus interpretivists aim to reconstruct the self-understandings of actors engaged in particular actions. They argue that actors’ ways of making sense of their actions are constitutive of that action (Giddens 1993; Outhwaite 1975).

Finally, interpretivism considers understanding to be an intellectual process whereby the inquirer gains knowledge about an object. Accordingly, the notion of a hermeneutic circle of understanding is, as Berstein (1983) explains:

“object” oriented, in the sense that it directs us to the texts, institutions, practices, or forms of life that we are seeking to understand....No essential reference is made to the interpreter, to the individual who is engaged in the process of understanding and questioning, except insofar as he or she must have the insight, imagination, openness and patience to acquire this art – an art achieved through practice.”

Denzin and Lincoln (2000) argue that in interpretive traditions the interpreter “objectifies that which is to be interpreted...and in that sense...remains unaffected by and external to the interpretive process.”

There are two additional philosophical positions (Travers 2001), realism and post structuralism. Realism involves looking behind appearances in order to discover laws or

mechanisms which explain human behaviour. This becomes important when one interprets what people say about their own activities. Interpretivists usually take members' accounts at face value or contrast these to the perspectives of different groups in society. Realists are likely to view them as incomplete or deficient. For example Marxist and feminist ethnographies about social class in Britain found that members of the working class do not view their activities in class terms (Skeggs 1997). Much of critical theory is informed by these epistemological assumptions. Critical theory analyses competing power interests between groups and individuals within a society. Privileged groups, criticalists argue, often have an interest in supporting the status quo to protect their advantages. Studies of privilege often revolve around issues of race, class, gender and sexuality (Carter 1998; Howell 1998; Kincheloe and Steinberg 1997; Kincheloe, Steinberg, Rodriguez and Chennault 1998; McLaren 1997; Sleeter and McLaren 1995).

Positivism, interpretivism and realism all share the assumption that it is possible to obtain valid knowledge about the world and the studies written can represent social reality. Poststructuralism is a radical philosophical movement that challenges these assumptions. It questions the idea that it is possible to represent the world unproblematically through texts.

6.2.3 Overview of Research Strategies

The structure of research design is dependent on a number of factors. First, the paradigm being used. Second, the design process. Third, the focus of study. Fourth, the strategies of inquiry that are used. Fifth, the methods and research tools used for collecting and analysing empirical materials. These five factors are discussed briefly here and then at more length individually.

The positivist, postpositivist, constructionist and critical paradigms dictate, with varying degrees of freedom, the design of a qualitative research investigation. Positivist research designs place a premium on the early identification and development of a research question, a set of hypotheses, a research site, and a statement concerning sampling strategies as well as a specification of the research strategies and methods of analysis that will be employed. In interpretive research, a priori design commitments may block the introduction of new understandings. Therefore, although qualitative researchers may design procedures beforehand, designs should always have built-in flexibilities to allow for discoveries of new and unexpected empirical materials (Denzin and Lincoln 2000).

There are numerous approaches to the process of design. Interpretivists criticise positivists for the rigidity of their design structure, arguing that the essence of good qualitative research design requires the use of a set of procedures that are at once open-ended and rigorous (Janesick 2000).

Three generic approaches may be taken to the question of who or what will be studied. First, a single case or single process may be studied, the intrinsic case study (Stake 2000). Second, the researcher may focus on a number of cases. Third, the researcher can study multiple instances of a process in a variety of cases.

Research designs vary, depending on the needs of multi-focus or single case and process inquiries. Different sampling issues arise in each situation. These needs and issues also vary according to the paradigm that is being employed. For these reasons, many postpositivist, constructionist and critical theory qualitative researchers employ theoretical or purposive and not random sampling models. They seek out groups or settings and individuals where and for whom the process being studied are most likely to occur.

There are a myriad of research strategies using a qualitative basis and many typologies used by authors. Jacob (1987) categorised all qualitative research into "traditions" and

lists ecological psychology; holistic ethnography; cognitive anthropology; ethnography of communication and symbolic interactionism. Creswell (1998) identifies 5 traditions of qualitative inquiry: biography, phenomenology grounded theory, ethnography and case study. Holliday (2001) distinguishes 4 types of theory-based analysis approaches: phenomenology; grounded theory; qualitative comparative analysis; and analytic induction. Denzin and Lincoln (1994) distinguish between case studies; ethnography; phenomenology, ethnomethodology, and interpretive practices; grounded theory; biographical, historical and clinical research. Research strategies implement and anchor paradigms in specific empirical sites or in specific methodological practices. Each of these strategies is connected to a complex literature and each has a separate history.

In this section we give a brief description of the main research strategies used in qualitative research before describing the choice of research strategy used in our study and justifying the reasons behind that choice.

An ethnography is a description and interpretation of a cultural or social group or system. It is the earliest distinct tradition of qualitative inquiry and the primary method of anthropology. The researcher examines the group's observable and learned patterns of behaviour, customs and ways of life (Harris 1968). It takes as its central and guiding assumption that any human group of people interacting together for a long enough period of time will evolve a culture. The primary method of ethnographers is participant observation.

Reality-oriented inquiry presumes there is a real world with verifiable patterns that can be observed and predicted. It uses deductive processes looking for causal descriptions. Analytic induction (Taylor and Bogdan 1984) is a specific form of inductive analysis that begins deductively by formulating propositions or hypotheses and then examines a particular case in depth to determine if the facts of the case support the hypotheses. These hypotheses can be based on hunches, assumptions, careful examination of

research and theory or a combination (Gilgun 1995). If it fits another case is studied and so on in the search for generalisations.

A phenomenological study is defined by Creswell (1998) as “a type of study that describes the meaning of experiences of a phenomenon (or topic or concept) for several individuals.” The focus of this type of study is on discovering what people experience and how they interpret the world. The best means of doing this is for the researcher to experience the phenomenon as directly as possible themselves through in-depth interviewing or participant observation.

A biographical study is the study of an individual and his or her experiences as told to the researcher or found in documents or archival material.

A case study is an exploration of a bounded system or a case (or multiple cases) over time through detailed, in-depth data collection involving multiple sources of information rich in context.

The intent of grounded theory is to generate or discover a theory through being immersed in the data so that embedded meanings and relationships can emerge (Glaser and Strauss 1967). In contrast to all other qualitative approaches, the focus is on the process of generating theory rather than a particular theoretical content. It emphasises steps and procedures for connecting induction and deduction through the constant comparative method, comparing research sites, doing theoretical sampling and testing emergent concepts with additional fieldwork.

Holliday (2001) argues that no one methodology is inherently better than another and that the different qualitative methodologies cannot be compared in isolation from the research to be carried out. Rather there must be appropriate matching of methods to purposes, questions and issues. This view echoes that of LeCompte and Preissle (1993) who argue that the research strategy should focus on “what information most

appropriately will answer specific research questions, and which strategies are most effective for obtaining it". Denzin and Lincoln (2000) argue that a research design "describes a flexible set of guidelines that connect theoretical paradigms first to strategies of inquiry and second to methods for collecting empirical material."

6.2.4 Presentation and Justification of Research Methodology

The methodology in this research is qualitative and stems from an interpretive philosophical viewpoint. Our interest is in the factors that motivate firms in the UK fresh produce industry to form international strategic alliances, the process of alliance formation and the factors influencing the success of these alliances. The research is driven by general propositions that are explored and developed through the use of in-depth semi-structured interviews. These propositions are based on conceptual frameworks that are meta-theoretical in nature and were derived following a review of the relevant literature. This process is described in the following section (6.3).

The research began with the author's developing interest in the strategic behaviour of firms in the fresh produce industry in response to changing pressures in the industry and in particular the increasing importance of collaboration between UK producer firms and producers from overseas in strategic alliances. The author's interest was in what factors motivated firms to make the strategic choices they were making, how alliances were formed and what made these relationships successful. Our interest is in the factors underlying firms' decision processes and strategic viewpoints and in taking a holistic view of the firm as a whole entity. Our interest is in areas of both commonality and differences between firms and finding reasons for these rather than in attempt to make generalisations about the whole industry.

The methodology used in this research is in contrast to the methodology used in most previous empirical research in strategic alliances. This has been discussed briefly in Chapters 2 and 3 and is discussed at length below.

Table 6.2 summarises the methodologies used in a sample of previous empirical research into strategic alliances. Nearly all previous empirical research has used quantitative research methodology of various levels of sophistication. This research has been primarily cross-sectional, although there have also been longitudinal studies (Buckley and Chapman 1997; Combs and Ketchen 1999; Dussauge and Garrette 1995; Gulati 1995; Hamel, Doz and Prahalad 1989). Some research has focused on a particular industry (Ahuja 2000; Anderson and Coughlan 1987; Burgers, Hill and Kim 1993; Combs and Ketchen 1999; Driscoll and Paliwoda 1997; Dussauge and Garrette 1995; Millington and Bayliss 1995; Mohr and Spekmen 1994; Reijnders and Verhallen 1996) or sector (Buckley and Chapman 1997; Bucklin and Sengupta 1993; Hamel, Doz and Prahalad 1989) whilst others have been multi-industry studies (Aulakh, Kotabe and Sahay 1996; Bleeke and Ernst 1991; Glaister and Buckley 1998; Gulati 1995). As noted in Chapters 2 and 3 none of the major empirical studies on strategic alliances have focused on the UK fresh produce industry or even agriculture.

The methodologies used in previous empirical work on strategic alliances have been overwhelmingly quantitative in nature. Only one study known to this author has used a qualitative methodology (Buckley and Chapman 1997). This study was a 5 year ethnographic study of co-operative strategies in international business which made use of repeated open-ended interviews with key informants throughout the time period of study. Other empirical work has been principally conducted through the use of secondary data (Ahuja 2000; Burgers, Hill and Kim 1993; Combs and Ketchen 1999; Dussauge and Garrette 1995; Gulati 1995; Hamel, Doz and Prahalad 1989) and postal questionnaires (Aulakh, Kotabe and Sahay 1996; Bucklin and Sengupta 1993; Driscoll and Paliwoda 1997; Glaister and Buckley; Mohr and Spekman 1994;). One researcher used qualitative interviews in their initial research to inform and refine questionnaires

Table 6.2: Methodologies Used in Strategic Alliance Literature

Author(s)	Focus	Sample and Sector	Methodology	Constructs included	Measurement	Analysis	Conclusions	Comment
Ahuja (2000)	Inducements and opportunities for alliance formation	97 leading firms in global chemicals industry (out of original sample of 120).	12-year Longitudinal study. Secondary data	Technical links; technical capital; commercial capital; social capital; capital-poor firms; important inventions; control variables.	Technical links: new technical strategic alliances. Technical capital: total chemical patents in prior 4 years. Commercial capital: assets in the chemical business. Social capital: number of linkages in the prior industry network. Capital-poor firms: below median on all 3 forms of capital. Important inventions: patent citation counts. Control variables: debt/equity; assets/liabilities; return on assets; diversification; marketing linkages.	Quantitative. Regression.	Co-operative behaviour related to both inducements and opportunities. Possession of technical, commercial and social capital influence inducements and opportunities.	Reliance on secondary data unlikely to account for all technical capital i.e. human skills. Could examine the interaction between the three forms of capital.
Aulakh, Kotabe and Sahay (1996)	Trust and performance in international alliances	257 U.S. industrial firms and their major affiliates.	Postal questionnaire (response rate 39.4%).	Relational norms, monitoring mechanisms, relationship consequences, moderator variables, control variables.	Relational norms: continuity expectation; flexibility; information exchange. Monitoring mechanisms: output control; process control; social control. Relationship consequences: trust. Moderator variables: asset specificity; host market unpredictability. Control variables: ownership level; type of partnership; industry; geographical base of partner.	Quantitative. Factor analysis, regression.	Finds support for relational norms and monitoring mechanisms as important determinants of trust and performance in international alliances. Trust moderates opportunistic behaviour.	Performance defined narrowly in terms of sales growth and market share. Only behavioural aspects of trust examined.

							Geographic basis for trust. Finds no link between ownership and control.	
Anderson and Coughlan (1987)	Channel choice in international market entry.	36 U.S. firms in semiconductor industry	Personal interview	Transaction specific assets; product age; service requirements; product differentiation; legal restrictions; existing distribution arrangements; relation to principal business; strength of patent; competitive behaviour; country of entry.	Transaction specific assets: factor; questions about training. Product age: entry into foreign market. Service requirements: factor. Product differentiation: components and materials v equipment. Legal restrictions: scale. Existing distribution arrangements: entry v expansion. Relation to principal business: 2 scale. Strength of patent: factor. Competitive behaviour: no. of competitors with integrated channels. Country of entry: dummies.	Quantitative. Interviews coded and quantitatively analysed.	Firms reinforce channel choices by adding new products through existing channels; are protective in distributing sophisticated products that require an investment in learning; integrate the distribution of differentiated products; use middlemen when accessing non-Western markets.	Measures could be better developed. Authors note need for inclusion of other measures.
Bleeker and Ernst (1991)	Successful cross-border alliances	49 cross-border S.A.'s in the U.S., Europe and Japan.	Personal interviews and secondary data	Achieving strategic objective; recovering cost of capital	Achieving strategic objective: market share; sales volume; new product development. Recovering cost of capital: financial results.	Quantitative. Analysis tools not identified.	Cross border alliances are the best vehicle for expanding into new geographic	Huge variety of structures, size, location and industry studied. Financial criteria for

		Various industries, mainly high-tech manufacturing. Sample derived from partnerships of the top 150 companies, ranked by market value.					regions or into new businesses. They work best when balanced and flexible with the ability to evolve.	success skews results in favour of U.S. and EU firms where more relevant. Japanese firms may use more longer term measures for success.
Buckley and Chapman (1997)	Co-operative strategies, process of internationalisation.	10 pharmaceutical and scientific instrument companies, UK, France and EU.	Longitudinal ethnographic study. Repeated interviews as events unfolded. Open-ended interviews.	Management of co-operative strategies; internationalisation process of firms	N/a	Qualitative.	Internationalisation strategies are multi-level within a firm and not independent of overall strategies. Co-operation widespread, especially informal relations. Pointless trying to quantify transactions costs – should see them in terms of complexity. Role of culture needs to be incorporated into theory	Questions simplified analysis and measurement in literature. Qualitative measures more likely to capture complexity of transaction. Unstructured terminology allows respondents to define issues. Potential for more insight if had more diversity in sample.

Bucklin and Sengupta (1993)	Successful co-marketing alliances	98 U.S. Computer and semi-conductor firms	Postal survey. Focal Firm only. (Response rate of 20%, but many firms contacted did not have a co-marketing alliance).	Perceived effectiveness of relationship; power balance.	23 measures of constructs included from previous literature. Perceived effectiveness: project management; project payoff; partner match; rate of technological change; and age of alliance. Power balance: contract governance and transactions cost variables.	Quantitative. Factor analysis and OLS regression.	Relationships work best when balanced, projects are well selected and partners chosen carefully. Work best in turbulent environments. Contracts can mitigate some problems. Age of relationship only insignificant variable.	Perceptual performance measures. Some problems with measurement of constructs. R square only 0.5.
Burgers, Hill and Kim (1993)	Motivations for alliance formation	23 largest global competitors, automotive industry.	Secondary data. All significant global competitors.	Firm size, firm performance, intensity of co-operation.	Firm size: production. Firm performance: market share performance. Intensity of co-operation: number of alliance agreements.	Quantitative	Support for view that alliances are a device both for reducing demand uncertainty and competitive uncertainty	Use of profit and market share data as proxies for size and performance.
Combs and Ketchen (1999)	Motives and performance of s.a. formation	94 publically-held restaurant chains.	Longitudinal study, 1992-1995. Secondary data, expert panel. Total population covered.	Resource variables; exchange conditions; inter-firm co-operation; performance; control variables.	Resource variables: brand name reputation; top management team experience; slack capital. Exchange conditions: outlet-level asset specificity; specific knowledge; geographic dispersion. Inter-firm co-operation: % growth accomplished through co-operation 1992-1993. Performance: return on assets; market-to-book value. Control	Quantitative. Factor analysis and regression.	Firms respond to contingencies identified by both the resource based view and organisational economics.	Limited generalisability. Limited set of variables.

						variables: age; total sales 1992.			
Driscoll and Paliwoda (1997)	The different dimensions of the mode of entry decision and the situational determinants which bear on mode choice.	117 Canadian Manufacturing firms	Postal survey (response rate of 18%).	Mode choice, control, risk, resource commitment, flexibility.	Mode choice: export/contract/investment. Control: authority over decision making. Risk: perception of appropriation risk. Resource commitment: level of financial, physical and human resources committed. Flexibility: ability to change entry modes.	Quantitative. Correlations.	Socio-cultural distance, tacit know-how and product differentiation influence choice of modes of entry.	Authors argue for need for case studies to allow for more in-depth analysis of influences.	
Dussauge and Garrette (1995)	Successful international s.a.'s. Rival firms.	63 International alliances in aerospace industry.	Historical study 1950-1990. Secondary data.	Environment and strategic organizational features. Number of partner firms, type of partnership, power balance, alliance scope and functions.	Environment: country origin; time period; business segment. Strategic and organizational features: number of partner firms. Type of partnership: equity joint venture v other partnerships. Power balance: sales of focal firm less than twice sales of partner firm and vice versa. Alliance scope: r&d; final assembly; marketing.	Quantitative. Hierarchical clustering.	Technical quality combined with choice of an adequate organisation enhances performance	Subjective performance measures. Results only generalisable to 'scale' alliances. No testing of sector-specific	
Glaister and Buckley (1998)	Measures of performance in UK international alliances	75 UK partners of international alliances. Multi-industry.	Postal questionnaire (response rate of 46.3%).	Satisfaction; survival; stability; duration; cultural difference;	Satisfaction: subjective measure; cost/benefit measure; actual performance v initial projections. Survival: dichotomous var (survival v non-survival). Stability: dichotomous (changes in equity). Duration: years. Cultural difference: dichotomous (believe important or not).	Quantitative	Finds relationship between objective and subjective measure of performance and also finds the impact of culture on performance depends on	Argues for need for longitudinal study for deeper understanding and also for need for multiple perspectives within each alliance.	

							measure of performance using.	
Gulati (1995)	How social structure affects inter-firm alliance formation patterns.	166 firms from 3 sectors: new materials, industrial automation and automotive products. U.S., Japan and E.U.	Longitudinal study 1970-1989. Secondary data – use of transcripts of personal interviews. Dyadic. Sampled most prominent firms in the industries.	Strategic interdependence, past alliances, time, sector, industry trends, firm-level attributes.	Strategic interdependence: creation of firm niches within industry (similar capabilities). Firm specific attributes: size; performance; solvency; liquidity. Past alliances: alliance weighting on strength of relationship; all past alliance activity. Time: scale variable. Sector: 2 dummy variables. Industry: total alliances in industry. Firm-level: prior alliance experience; firm size; performance; liquidity and solvency.	Quantitative. Dynamic panel model.	Provides support for both social network and strategic interdependence factors as influences on alliance formation. Also shows the dynamics between these two schools of thought.	Important empirical support for combining perspectives.
Hamel, Doz and Prahalad (1989)	Gaining out of collaborative ventures.	15 high technology alliances in EU, U.S. and Japan	5 year study. Secondary data. Dyadic.	Success	Success: shifts in competitive strength	Quantitative. Analysis tools not identified.	Measured success by shifts in competitive strength. See collaboration as a different form of competition. Works when the partner's strategic goals converge and their competitive goals diverge; when the size and market power of both	Difficulty of interpretation of impact of alliance on business over and above other impacts not discussed. Small numbers of firms in subsets limits generalisability of results.

							<p>partners is modest compared with industry leaders and when each partner believes it can learn from the other and at the same time limit access to proprietary skills.</p>	
<p>Millington and Bayliss (1995)</p>	<p>Motives for transnational JV's and the impact on competition.</p>	<p>Questionnaire to 626 manufacturing plc's; follow up case study of 46 of the 100 joint ventures between UK and EU companies.</p>	<p>Postal survey and personal interview</p>	<p>Competitive impact, motives.</p>	<p>Competition: demand growth and import penetration. Efficiency gains potential: technological content and economies of scale. Motives: open responses grouped into competitive contingencies; product exploitation; economies of scale; technological complementarities; product rationalization.</p>	<p>Quantitative. Analysis tools not identified.</p>	<p>Vertical JV's are undertaken by SME's and intermediate companies to penetrate national markets. Horizontal JV's are undertaken by large firms to pool resources and achieve economies of scale.</p>	<p>Aggregation of industry types in measurement.</p>
<p>Mohr and Spekman (1994)</p>	<p>Characteristics of alliance success</p>	<p>124 computer firms</p>	<p>Postal questionnaire (response rate of 22%).</p>	<p>Success, partnership attributes, communication behaviour, conflict resolution, control variable.</p>	<p>Success: sales volume; satisfaction. Partnership attributes: commitment; coordination; trust. Communication: quality; participation; information sharing. Conflict resolution: 6 modes tested. Control</p>	<p>Quantitative. Regression.</p>	<p>Trust, willingness to co-ordinate activities and commitment are key to relationship success.</p>	<p>Success measured narrowly in terms of sales volume.</p>

					variable: degree of closeness of the relationship.		Communication between partners is also critical.	
Reijnders and Verhallen (1996)	Alliances among small retailing firms and their influence on firm behaviour.	451 small men's wear retailers in Netherlands	Limited interviews followed by postal survey (response rate of 34.1%).	Outsourcing; marketing strategy; professionalism.	Outsourcing: various organizational and marketing tasks. Marketing strategy: competitive pricing; product assortment; advertising levels. Professionalism: degree of automation; market, competitors and firm information; service to clients.	Quantitative. Frequencies and correlations.	Retailers belonging to alliances outperform those not in alliances. In addition, they have higher profits, higher levels of professionalism, are more aggressive and more open to outsourcing certain functions.	Performance results slightly mixed. Also likelihood of effect of pre-existing attributes affecting performance as well as membership of the alliance which are not accounted for. Causality not explored i.e. do s.a.'s lead to better performance or are better performing firms attracted to s.a.'s.

Source: Author's own from literature review

that were then used in follow-up research (Reijnders and Verhallen 1996). Three additional studies used interviews for a major part of the research (Anderson and Coughlan 1987; Bleeke and Ernst 1991; Millington and Bayliss). However, these were structured interviews that were then coded and analysed quantitatively.

A key critique of previous empirical research is in the constructs and measures used in the research. There are several inter-linked areas of criticism. First, some of the constructs used in prior empirical work have been criticised in this thesis (Chapters 2 and 3) for being overly simplistic or not particularly good proxies for the variables they are intended for (Anderson and Coughlan 1987; Aulakh, Kotabe and Sahay 1996; Burgers, Hill and Kim 1993; Combs and Ketchen 1999; Mohr and Spekmen 1994; Reijnders and Verhallen 1996). Thus we have criticised the use of market share as a crude proxy for firm performance by Burgers, Hill and Kim (1993) (Chapter 2). Empirical research using the transaction cost perspective has been particularly hampered by the inability to agree on adequate measures of asset specificity (see Chapter 2). A number of authors have written about the need for better development of measures in empirical work in this area (Ahuja 2000; Anderson and Coughlan 1987; Bleeke and Ernst 1991; Buckley and Chapman 1997; Combs and Ketchen 1999; Dussauge and Garrette 1995; Glaister and Buckley 1998).

Second, a wide array of measures have been used to estimate the same variables with the consequence that the support for a variable as an influence on motivations or success is totally dependent on the proxy used in empirical research. Thus strategic interdependence has been measured by the relative size and performance of focal firms (Burgers, Hill and Kim 1993); the relative financial attributes of alliance partners (Barley, Freeman and Hybels 1992; Gulati 1995; Kogut, Shan and Walker 1992); organisational niche (Astley 1985; Baum and Singh 1994; Fombrun 1986; Gulati 1995; Hannan and Freeman 1977) and organisational compatibility (Achrol, Scheer and Stern 1990; Bucklin and Sengupta 1993; Ruekert and Walker 1987). The difficulties in establishing agreed measures of variables for quantitative research is most apparent in

the empirical research on alliance success factors. There has been considerable debate in the literature about the definition and measurement of a successful alliance (Cameron 1986; Chakravarthy 1986; Eccles 1991; Glaister and Buckley 1998; Glaister and Buckley 1999; Goodman and Pennings 1980; Jacobson 1987; Lewin and Minton 1986; Varadarajan and Ramanujam 1990; Venkatraman and Ramanujam 1986). Because alliances are formed for a variety of purposes (Contractor and Lorange 1988; Hennart 1988) and often in highly uncertain settings, performance evaluation becomes a very difficult task (Anderson 1990). Many authors have advocated the use of traditional financial measures of success such as return on investment, growth or profits (Lecraw 1983; Tomlinson 1970). However, other authors have argued that an alliance's success cannot be viewed in isolation from the nature of the organisation's environment; the resource capabilities of the partnering firms and the motivations for the alliance formation in the first place (Anderson 1990; Bleeke and Ernst 1991; Bucklin and Sengupta 1993; Glaister and Buckley 1999). They argue that a focus on individual measures does not adequately reflect the extent to which the alliance has achieved its aims and objectives (Geringer and Herbert 1991). Using a purely financial measure may classify an alliance as unsuccessful whereas the same alliance might be deemed successful using a more subjective measure. The factors that contribute to this success or otherwise are thus dependent on the initial definition of success.

Third, the same measures have been used in different empirical work to measure different variables. Thus relative firm size is used as a proxy for strategic interdependence (Burgers, Hill and Kim 1993) but is also used as a proxy for market power (Dussauge and Garrette 1995).

These criticisms have led a number of researchers to call for more qualitative approaches to this area to reach a deeper understanding of the subject (Buckley and Chapman 1997; Driscoll and Paliwoda 1997; Glaister and Buckley 1998; Parkhe 1993; Tsang 2000). Parkhe (1993) argues that researchers in international joint ventures put too much emphasis on deductive quantitative approaches which fail to grasp the 'complexity and

fuzziness' of their subject. Tsang (2000) agrees arguing that given the current state of our knowledge about joint ventures in particular there is a need for qualitative case studies to understand the core concepts and their inter-relationships. He argues for "interviews with managers to help to evaluate the costs and benefits of joint venturing and also to gain insights into the operationalisation and measurement of the concepts. Buckley and Chapman (1997) used a qualitative approach in a three-year longitudinal study of co-operative strategies in British and French companies. They used a series of open-ended interviews with managers over a three-year period. They found that internationalisation strategies were multi-level within a firm and not independent of overall strategies. They also found that co-operation was widespread, especially informal relations. They argue that their analysis enabled them to look at the inter-play of firm strategies, to take account of the external environment in which the firm was operating in. They argue that the level of analysis is crucial and is often not that of "the firm". They argue that a qualitative approach is more likely to capture the complexity of the situation and question the simplified analysis and measurement used in previous quantitative research.

Thus, in summary, previous empirical research has been shown to have a number of related weaknesses. It has been overwhelmingly quantitative in nature, yet limited by the inadequacy of measures used to assess the significance of the frameworks presented. A particular criticism is the wide array of measures used as proxies for the same variables and the use of the same measures as proxies for completely different variables.

Most research has also been highly partial in nature, assessing the influence of a particular group of variables, taken from a single theoretical perspective. Using a quantitative approach, previous empirical work has used a number of constructs and measures to test the validity of the proposed perspective. Some of the hypotheses are supported and some not. The result is a partial group of factors that are 'found' to influence the motivations for alliance formation and the success of alliances with no idea of the relationship between the factors or of what has not been 'found'. There has been

little attempt to synthesise perspectives. Yet, as noted above these perspectives often have overlapping constructs and perceived differences between theoretical perspectives are not always as clear as argued.

The research presented here takes a qualitative approach based on the concepts and measures developed in previous empirical research. A number of propositions are developed based on a conceptual framework. This framework is meta-theoretical in content informed by the resource-based view. In addition it includes social structural explanations of alliance formation, success and development. Its focus is on one particular industry, the UK fresh produce industry. As discussed in Chapters 2 and 4, this industry has a number of factors that distinguish it from other sectors, notably the structure of the supply chain and the short-term supply inflexibility faced by producers within it. Despite this there has been only a limited amount of empirical research into strategic alliances in this sector. Part of the objectives of this study was to see the influence of these distinctive characteristics on the motivations for strategic alliance formation and the success of the strategic alliances. Although single-industry studies limit the generalisability of results, they do enable greater control over sources of extraneous variation due to industry characteristics and external environmental factors (McDougall and Robinson 1990; Spekman and Gonhaug 1986). As noted on page 196, a number of other studies of strategic alliances have focused on a single industry (Ahuja 2000; Anderson and Coughlan 1987; Burgers, Hill and Kim 1993; Combs and Ketchen 1999; Driscoll and Paliwoda 1997; Dussauge and Garrette 1995; Millington and Bayliss 1995; Mohr and Spekmen 1994; Reijnders and Verhallen 1996).

The research examines the motives for alliance formation, the process of formation and the success and development of the alliances. As noted above, most previous empirical research has been from one theoretical perspective. The use of qualitative research with a multi-paradigm approach will allow us to explore the ideas, concepts and measures in-depth and crucially to gauge the overlap between the theoretical constructs. It allows the exploration of the aspects of motivations, processes and success that have not been

adequately addressed through prior methodology which has been almost totally quantitative in nature.

Using propositions based on previous empirical research enables us to use that research as a framework on which to flesh out ideas and examine the inter-connectedness of theoretical perspectives. Verma and Beard (1993) define a hypothesis as:

“A tentative proposition which is subject to verification through subsequent investigation....In many cases hypotheses are hunches that the researcher has about the existence of relationship between variables.”

The essence of all types of hypotheses is a precise relationship between two or more variables (Holliday 2000). Hence hypotheses are used in qualitative research which investigates a relationship between several entities. As Holliday (2000) notes: “This essential nature of hypotheses does not have to be restricted to the controlled world of quantitative research”. In qualitative research there can be relationships that the researcher sets out to investigate in a systematic, though not quantifiable way. In this way researchers seek ‘to consider their original research propositions and hypotheses in the light of experience, modifying, reformulating and rejecting them, adopting new hypotheses and so on’ (Reason 1994).

The use of quantitative techniques in most previous research in strategic alliances has resulted in broad generalisable findings and comparisons between different empirical studies, although, as noted, these comparisons have been hampered by disagreements over measures and constructs used. But it has been argued here (Chapters 2 and 3) that what is lacking from previous research in this area is not generalisability but rather detail to give weight to proposed frameworks. It is proposed that the use of qualitative techniques will add depth and colour to strategic alliance research, exploring issues in-depth and helping to connect disparate ideas.

Furthermore, our research is interested in the processes associated with alliance formation and the development of the alliance. This is an area where very little empirical research has been conducted. The use of in-depth interviews allows the researcher to gain an insight into these factors in a way that could not be achieved through a quantitative survey. The researcher is able to probe the decision process of alliance formation; to gauge the key factors behind partner choice and the inter-connection between these factors, to build up a picture of the process itself. The use of in-depth interviews allows the researcher to explore the development of the alliances and the importance of a whole range of factors, building up a picture of inter-connection rather than a list of single key factors. The flexibility of semi-structured interviews allows for the possibility of unspecified factors to emerge in the interviews and their importance to be discussed in depth. This is highly important given the 'partial' explanatory nature of previous studies.

The sensitivity of the area of the research also informed the methodology. UK growers were being asked in-depth questions about the purpose and scope of their strategic relationships with growers from overseas; their selection criteria, operating procedures, goals and objectives; the costs and benefits of the alliances they were in; alliance successes and failures; their marketing relationships, particularly with their supermarket customers, and how all this fitted into their current and future strategic operations. These are sensitive areas and have become increasingly so with the increased levels of competition in the UK fresh produce industry. The information obtained from growers was only obtained after guarantees about the confidentiality of any disclosures. By using one-to-one in-depth interviews the researcher was able to develop a close rapport and build trust so that the interviewee was assured of confidentiality and was able to speak freely. It is highly unlikely that the levels of disclosure and the depth of information obtained would be obtained in a mail survey where this level of trust had not been engendered.

Finally, there was the issue of the definition of an alliance itself. Some growers who had been initially approached did not think of themselves as being involved in strategic supplier alliances and would have completed a mail-survey to that effect. However after being contacted personally by the researcher and informally discussing the nature of their relationships with overseas suppliers it emerged that these relationships actually fell within the remit of what the research has defined as a strategic alliance.

6.3 The Research Process

The research reported in this thesis developed through three major stages: stage one was the exploratory stage; stage two, the development of the conceptual framework; and stage three, the qualitative research.

6.3.1 Exploratory Research

The research began with the author's developing interest in the strategic behaviour of firms in the fresh produce industry in response to changing pressures from both within and outwith the supply chain. In particular, the increasing importance of collaboration between UK producer firms and producers from overseas in the form of strategic alliances. The author's interest was in what factors motivated firms to make the strategic choices they were making, how they made those choices, how these relationships evolved and what made these relationships successful.

The primary piece of exploratory research was a review of relevant literature. A bibliography is provided at the end of this thesis. It provides a picture of the extent of the literature review conducted. The research examined explanations for alliance formation and development from management and other social science literature. In terms of the theoretical construction of the research, the main contributions came from the resource based view, network, and institutional economics schools of thought.

Electronic media were an important source of material for the research. In particular, the accountancy and business information (ABI-INFORM) and the social science citation index (SSCI) cd-rom databases. They provided access to journals unavailable in libraries used by the researcher and allowed key author searches to be undertaken.

The exploratory research also involved discussions with key practitioners within the industry to test the research ideas. These key people acted as sounding boards. This interactive element was vital in terms of methodology and to the fine-tuning of the research questions.

6.3.2 The Development of the Conceptual Frameworks

It became necessary to develop a framework to test the research ideas. The proliferation of strategic alliances has led to a growing stream of research by scholars who have examined some of the causes and consequences of such partnerships, mostly at the firm level. The diverse organisational characteristics and different research interests of scholars in the field has resulted in the development of a number of theoretical perspectives which provide distinctive yet often overlapping reasons for the formation of strategic alliances and the development and success of alliances. As the theories have developed there has been increased integration of these perspectives, most notably with the resource dependency perspective being subsumed within the resource based view.

However, this author felt that none of the perspectives in themselves provided sufficient explanation of strategic alliance formation and the development and success of alliances. I also felt that perceived differences between theoretical perspectives were not always as clear as argued.

The author assessed the main theoretical schools that addressed the motivations for strategic alliance formation. The author compared the theoretical frameworks to assess degrees of complementarity of constructs used. The author focused on the resource-based view, the transactions cost framework and the network perspective. The resource-based view (Barney 1991) examines the influence of resource heterogeneity on alliance formation and the acquisition of valuable resources as a means of achieving strategic competitive advantage. It argues that firms will pool resources through collaborative arrangements when they cannot be acquired through market exchange or internalisation. The transaction cost perspective (Williamson 1985) provides a detailed means of examining the cost minimisation motives of alliance formation. The assertion is that firms are motivated to form alliances when their transaction costs are of an intermediate level but not high enough to justify vertical integration. The network perspective (Gulati 1995) takes account of the social network that a firm operates within and the important influence of that network on the motivations to form alliances and the opportunities to form alliances.

The author developed maps of the variables used as proxies for constructs in the different models to determine the overlap between these models. In this way the author argued that social structure could be incorporated within a resource dependency framework.

Thus at this stage a meta-theoretical perspective was established. It was a resource-based view but included transactions cost and social structural explanations of alliance formation. The conceptual framework was developed. It is a development of the previous frameworks with a synthesis of overlapping constructs.

Its basis is a synthesis of the resource based view and transactions cost framework. It is argued here that the strategic motivations of a firm cannot be assessed outwith the social structure in which they are embedded. This determines the dependence of a firm on others and thus the motivations for collaborative involvement. The construct of social

structure has been extended to include the structure of the supply chain and the influence of where power resides in the supply chain.

6.3.3 The Qualitative Research

6.3.3.1 Data Collection

Van Maanen (1983) describes qualitative methods as ‘an array of interpretive techniques which seek to describe, decode, translate and otherwise come to terms with the meaning, not the frequency of certain more or less naturally occurring phenomena in the social world.’ There are four main methods of collecting qualitative data (Cresswell 1994): observations (ranging from nonparticipant to participant), interviews (ranging from structured to open-ended), documents (ranging from private to public) and audio-visual materials. The personal interview was used as a method for collecting the qualitative data for this research. This section examines the appropriateness of the personal interview as a data collection technique in this instance, the design of the interview Schedule the interview itself and the response inducing strategies used.

6.3.3.2 The Interview as a Data Collection Technique

The in-depth interview is the most fundamental of all qualitative methods (Easterby, Thorpe and Lowe 1991). The interview provides the researcher with “the opportunityto probe deeply to uncover new clues, open up new dimensions of a problem and to secure vivid, accurate inclusive accounts that are based on a personal experience.” (Burgess 1982). The main reason for conducting interviews is to understand “how individuals construct the meaning and significance of their situations from the complex personal frameworks of beliefs and values which they’ve developed over their lives in order to help explain and predict events in their world.” (Burgess 1982).

To achieve this requires the researcher to be sensitive enough and skilled enough to ensure that they not only understand the respondents views, but also to assist the respondent to explore their own beliefs (Easterby, Thorpe and Lowe 1991). Taking arguments from them and Webb (1995), in-depth interviews are advisable where:

- i) It is necessary to understand the constructs that the interviewee uses as a basis for her opinions and beliefs about a particular matter or situation;
- ii) a detailed analysis needs to be conducted of complex situations, attitudes, beliefs and feelings
- iii) the interviewer needs to gain a progressive set of images of a decision process
- iv) the step-by-step logic of a situation is not clear;
- v) the subject matter is highly confidential or commercially sensitive;
- vi) the respondent may be reluctant to be truthful about this issue other than confidentially in a one-on-one situation.

Webb (1995) argues that in-depth interviews allow for the collection of a great depth and richness of data; give the researcher the ability to ascribe a response directly to a single individual (Kinneer and Taylor 1991); provide the ability to develop a close rapport and high degree of trust between the interviewer and the respondent, encouraging a freer flow of conversation and more valid results and let the interviewee respond without overt peer pressure.

There are a wide variety of interview forms used in qualitative research but the most common form involves individual, face-to-face verbal interchange (Denzin and Lincoln 2000). There is a broad range of types of interview, from totally 'open' or non-directive' interviews, to ones where there are closed, fixed response categories. 'Open' conversational interviews have no predetermined questions, rather questions emerge from the immediate context. They increase the salience and relevance of questions but mean that different information is collected from different people. This type of

interview is less systematic and comprehensive than more structured interviews and data analysis can be difficult. Closed, fixed response interviews have questions and response categories fixed in advance. Data analysis is simple and responses can be directly compared and easily aggregated. Many questions can be asked in a short time. However, respondents must fit their experiences into the researcher's categories and this can distort respondents real meanings. The interviews can also seem to be impersonal and mechanistic. Between these two extremes there are varying degrees of structure used which can be grouped into two categories. First the interview guide approach where topics to be covered are specified in advance, in outline form and where the interviewer decides the sequence and wording of questions in the course of the interview. The outline increases the comprehensiveness of the data gathered and makes the data collection relatively systematic whilst still enabling the interviews to remain fairly conversational and situational (Patton 2002). Interview guides can be developed in more or less detail, depending on the extent to which the interviewer is able to specify important issues in advance and the extent to which it is important to ask questions in the same order to all respondents. The extent to which the structure varies between interviews will affect the comparability of responses from different respondents. A more structured approach is using a standardised open-ended interview where the exact wording and sequencing of questions are determined in advance. All interviewees are asked the same basic questions in the same order but questions are worded in a completely open-ended format. This approach means that there is a high level of comparability of responses and reduces interviewer effects but means that there is little flexibility in relating the interview to particular individuals and circumstances. The standardised wording of questions can also limit the depth of response to questions.

6.3.3.3 The Interview

This study used a detailed interview guide which is reproduced in Appendix 4. It covers the main areas of inquiry, namely the motivations for alliance formation; the process of alliance formation; the costs and benefits of the alliance; the success and development of the alliances; external influences on the firm and some firm classification questions. It is semi-structured in design. All interviews were conducted following the structure of the proforma exactly, but there were a mix of question types. The interviewer was free to 'explore, probe and ask questions that will elucidate and illuminate that particular subject' (Patton 2002). The interviewer was also free to make decisions about which information to pursue in greater depth (Patton 2002). The interviewer did not go into totally new subject areas that were not covered within the framework of the guide.

The questions used covered 4 of the six types of question categories defined by Patton (2002). These were experience and behaviour questions (about what a person does or has done); opinion and value questions (has the alliance been successful?); knowledge questions (How many times do you and your partner make contact in a day?) and background and demographic questions (How old is this alliance?). The questions varied from ones eliciting a specific objective response (such as firm turnover; alliance duration; alliance scope); ones asking for a subjective response to a specific question (has the alliance been successful?) and ones eliciting a range of responses from a more open-ended question (are there other external factors that influence your business that I have not mentioned?). Questions were singular, with no more than one idea contained in one question. Respondents were encouraged to discuss the questions at length and the researcher was able to clarify any points that the respondents did not understand.

The interview guide started with general questions about the firm to establish rapport building to more confidential areas. The first questions were about the firms' current activities and encouraged the respondent to talk descriptively, following Patton (2002), who argues that in "qualitative interviewing the interviewee needs to become actively involved in providing descriptive information as soon as possible instead of becoming

conditioned to providing short-answer, routine responses to uninteresting categorical questions". Once experiences or activities were described, opinions and feelings were solicited, building on and probing for interpretations of the experience, following Patton (2002). Knowledge and skills questions were asked in context once rapport and trust had been established (Patton 2002). Respondents were asked about present and past activities. Questions about future actions were minimal (What potential problems with the alliance do you see in the future?) as these are typically less reliable (Patton 2002). Most background and demographic questions were kept until the end of the interview. The interview guide moved from general to specific areas and from one area to the next in a logical manner as proposed by Webb (1995).

Probes were used to deepen the response to questions. Following Patton (2002) and Smith, Thorpe and Lowe (1991) various types of probes were employed. First the basic probe of repeating the initial question was used when the respondent was wandering off the point. Second, 'explanatory' probes were used to obtain a complete and detailed picture. Thus incomplete and vague statements were followed up by the researcher with "who", "where", "what", "when" and "how". Third, focused probes were used to obtain specific information by asking questions such as "What sort of.....?". Fourth, elaboration probes were used to keep the respondent talking about a subject, through both verbal and non-verbal cues such as affirmatory body language such as head nodding. Fifth, silent probes were used by the researcher maintaining silence after a response to get the respondent to continue talking. Sixth, clarification probes were used for responses that were ambiguous. Finally, the researcher also mirrored the respondent by repeating what the respondent had said in order to get them to think about their response and also to amplify it if necessary. As noted by Patton (2002):

"Probing is a skill that comes from knowing what to look for in an interview, listening carefully to what is said and what is not said, and being sensitive to the feedback needs of the person being interviewed."

Respondents were asked about their supplier alliances consecutively. That is they were asked all questions about their first alliance and then were questioned about their second, third alliances and so on. In practice firms were interviewed in detail on up to four alliances. The first alliance they were asked to discuss was their most important supplier alliance. They were asked to choose which alliance they defined as such and on what criteria. Thus they were defining importance themselves. Criteria chosen were factors such as age of the alliance; size of the alliance business; criticalness of the specific alliance to the firm.

The interviewer provided the respondent with feedback during the interview in a number of ways. First, the researcher provided the interviewee with reinforcement and feedback during the interview letting them know that the purpose of the interview is being fulfilled and detailing why more detailed answers were needed to certain questions. Second, feedback was used to control an interview and to explain the purpose of certain questions when the interviewee was digressing from the subject or not answering the specific questions posed. Finally, the interviews closed by asking the respondents if there were any questions they had not been asked that they thought they should have been asked, following Patton who argues that "it is important in formal interviews to let the interviewee to have the final say (by asking something like) What should I have asked you that I didn't think to ask?"

In line with scholars in the field (Cresswell 1998; Hart 1991; Patton 2002; Webb 1995) there were certain procedures undertaken to ensure that the interview process was managed to the best of the researcher's ability. Initially the researcher described the boundaries that circumscribed the interview situation giving the respondent a context for the research and their answers (Webb 1995). The respondent was told the exact purpose of the research and the value of the respondent's answers to the researcher. The respondent was ensured of the confidentiality of the interview. All interviews were taped, so that accuracy was assured. In addition the researcher made notes throughout the interview. The researcher had prior experience in this type of interviewing and had

background knowledge of the sector under study. In addition the researcher knew some of the interviewees through previous work in this area. All this helped to engender a rapport between the interviewee and the researcher and also helped to validate the importance of the interview.

The skills of the interviewer are critical in in-depth interviews (Cresswell 1998; Denzin and Lincoln 2000; Patton 2002; Webb 1995). In particular the interviewer must try to ensure concentration on the research issues and that the information received is valid. Concentration on the research topic is a matter of preparation and questioning and is helped by experience in this area. Continual probing, cross-referencing and careful post-evaluation of content are all important elements in ensuring the validity of information received.

The interviews were scheduled to last one hour. Given the semi-structure of the interviews the timing of duration was flexible and depended upon the number of alliances discussed and the depth of discussion of particular points. All interviews lasted at least one hour with the longest interview lasting 3 hours. The interviews were conducted at the respondent's place of work. Given the sensitive nature of the contents of the interview, most interviews were conducted in a private office with only the researcher and the interviewee present.

Immediately after the interview, the taped transcripts were checked and the interview notes were read to ensure there were no areas of ambiguity or uncertainty. The researcher also used the period after each interview to reflect on the data obtained and the interview experience.

6.3.3.4 Response Strategies

There are a number of strategies proposed by researchers to ensure a positive response to a request for interviews. Schneider and Johnson (1995) found that university sponsors achieved higher response rates in market surveys of business professionals. The covering letter in this research used a university sponsor. In addition it named the researcher's supervisor, someone who had been involved in much research in the fresh produce industry and whose name would be known to many of those contacted.

The covering letter briefly described the research being undertaken and the purpose of the research. One of Scott's (1961) conclusions on response strategies was the need to convince respondents of the importance of the study. All the key people contacted at the exploratory stage of research thought the subject matter to be important and likely to be of interest to the respondent group. All those contacted were firms who had been pre-identified as being involved in strategic supplier alliances. The respondents were offered the opportunity to receive feedback summary of the research results. Given the sensitivity of the area, an assurance was given as to the confidentiality of the interview. Respondents were asked about the possibility of agreeing to an interview and told that the researcher would contact their secretary within the next few days.

Letters were dispatched and then the firms were contacted 3-4 days later. Fridays and Monday mornings were avoided for initial contact as it was felt by the key contacts and prior experience that these times were sub-optimal. Most firms were at their busiest on Fridays, with peaks in customer demand on Saturdays. Many firms had to be contacted several times before the managing director was contacted. The researcher then had a fairly lengthy discussion about the nature of the research, the appropriateness of the firm contacted to the research, the length of the interview and the assured confidentiality of the information divulged, before interviews were agreed to. The best time of day for contacting interviewees was found to be late afternoon when they had time to discuss the research. All this reinforces the validity of using qualitative research in this instance. The response rate to a mailed questionnaire under these circumstances is likely to be poor, with a number of categories incomplete.

Of the firms contacted who were found to be appropriate for the research, only one declined to be interviewed, citing the sensitivity of the area in question.

6.4 Sampling

6.4.1 The Qualitative Sample

Five firms were initially chosen on a non-probability judgement basis. Non-probability judgement sampling uses experience and the service of experts in appropriate fields to make an assessment and choice of the sampling units on the basis of their relevance to the research project.

The criteria for the initial judgement was the researcher's knowledge of the industry. Five of the largest companies in different product areas were chosen as key firms for the initial qualitative research. The firms chosen had the following characteristics:

- i) They were all involved in strategic supplier alliances with firms from overseas.
- ii) They were one of the largest companies in their product area.
- iii) They were major suppliers to one or more multiple retailer.
- iv) Access was gained to all the managing directors, but other managers were also interviewed.
- v) The managing directors were all well-known within the industry and had wide industry knowledge.

Once these five interviews had been conducted, the researcher discussed the interview experience with her supervisor. This included the ease of the interview process; the workability of the interview structure; the interview findings; and any problems that had

arisen. The interview proforma was then fine-tuned before the second-stage of interviews.

A number of options were considered to ascertain the total population size. Business Monitor list 6,195 businesses growing vegetables, horticulture and nursery products in 1999. However, the vast majority of these are small, specialist growers. Only 5 fruit growers and 60 vegetable growers in 1999 had sales of over £5 million (see Chapter 2). Europa and UK Companies online marketing service list 475 businesses as 'Horticultural Producers', but many of these are not exclusively horticultural producers. In addition, most strategic supplier alliances between UK producers and producers from overseas are non-equity and therefore this alliance activity is not detailed in company listings. Following the initial interviews a key informant technique was used to try and ascertain the total population of UK firms in strategic alliances. The initial five managing directors interviewed provided names of key informants. These informants were representatives of geographic areas and product groups. These informants were contacted by letter and asked to provide lists of all growers in their geographic area and product group that they thought were involved in strategic alliances. This letter was followed up by telephone calls. A proportion of these were contacted by telephone to ascertain that they were involved in strategic alliances. Electronic media were also used to verify findings and to ensure that no major omissions were made. Various forms of horticulture tend to predominate in one geographical area. Therefore it is relatively easy to obtain a representative sample of firms. Using this technique, the estimation of the total population of UK growers involved in strategic supplier alliances is up to 100 at most.

The sample for the second set of qualitative interviews was again chosen on a non-probability judgement basis. It was stratified in terms of geographical area and produce type to obtain a spread of producers across the country and covering the main produce types. The produce and geographical groupings were according to DEFRA sub-groups, namely produce groups: vegetables, potatoes, salads/protected vegetables, fruit and

flowers and produce areas: Scotland, North-East, South-East, South-West. All producers were involved in strategic supplier alliances with producer firms from overseas. A range of firm size and ownership profiles was chosen.

In total 33 UK producers were contacted and 20 interviewed. Only one firm contacted who was currently involved in a strategic supplier alliance declined to be interviewed due to the sensitivity of the area. This firm was re-contacted and further assurances were given as to the confidentiality of the research, but the firm did not want to be interviewed. 10 other firms initially contacted were not interviewed. Two of these had ceased to have alliances; two were not in and had not been involved in alliances and two were considering alliances but had not yet formed them.

As noted by Patton (2002): "There are no rules for sample size in qualitative inquiry." The appropriate sample size depends upon the purpose of the research. Sample sizes needed for qualitative inquiry only seem small in comparison with quantitative research where there is a need for representativeness when the purpose is generalising from a sample to the population of which it is a part. The logic of purposeful sampling is quite different and should be judged according to the purpose and rationale of the study. Random probability sampling seeks to understand a specific set of experiences for a larger number of people whereas purposeful samples seek to understand a more open range of experiences for a smaller number of people in-depth.

Thus qualitative research samples can be very small even a single case (Sands 2000). In the only piece of previous qualitative research in strategic alliances known to this author, the sample size was 10 (Buckley and Chapman 1997). Patton (2002) argues that "the validity, meaningfulness, and insights generated from qualitative inquiry have more to do with the information richness of the cases selected and the observational/analytical capabilities of the researcher than with sample size."

As noted above, our sample covered all the main product sub-groups and included a range of firm sizes and ownership types. This stratified purposeful sample aimed to capture any variations between product sectors or firm size or ownership types whilst assessing levels of homogeneity in the sub-groups and the sample as a whole.

6.4.2 Justifying a UK Producer's Perspective

All the research in this thesis is from a UK producer's perspective. The focus is on the formation of international strategic alliances by UK fresh produce growers. This section reviews why this perspective is suitable for the current research.

The research began with the author's developing interest in the strategic behaviour of firms in the fresh produce industry in response to changing pressures in the industry and in particular the increasing importance of collaboration between UK producer firms and producers from overseas in strategic alliances. The author's interest was in what factors motivated firms to make the strategic choices they were making, how alliances were formed and what made these relationships successful. Our interest is in the factors underlying firms' decision processes and strategic viewpoints and in taking a holistic view of the firm as a whole entity. Our interest is in areas of both commonality and differences between firms and finding reasons for these rather than in attempt to make generalisations about the whole industry.

The research is proposing that there are a number of overlapping factors that influence this decision process; namely the internal resources and capabilities of the firm, external environmental uncertainty and the structure of the supply chain. Although the research is from the UK producer's perspective, the characteristics of the alliance partners are probed. However it is the UK producer's perception of the alliance and the role of the alliance within the overall firm strategy that is of interest. The focus on the firm rather than the dyad is similar to the approaches of many researchers in the field (Anderson and

Coughlan 1987; Buckley and Chapman 1997; Bucklin and Sengupta 1993; Driscoll and Paliwoda 1997; Glaister and Buckley 1998; Millington and Bayliss 1995; Mohr and Spekman 1994; Reijnders and Verhallen 1996).

The choice of a UK producer's perspective is reinforced by the fact that alliance partners view any particular dyadic relationship differently. This was illustrated in Anderson and Narus's (1990) study of manufacturing firms' and distributor firms' working partnerships. The authors developed a different process model for each group, on the basis of their findings. Ellram (1995), in a study of buyer-supplier relationships, found that there were differences in the perceived importance of partnership success factors among both groups. The mismatch between supplier and buyer's relational expectation is interesting but not the focus of this research.

The focus on the UK producer's perspective will allow for adequate testing of the conceptual frameworks of the research as described in Chapters 2 and 3.

6.4.3 Respondent Choice

The cover letter was sent to the managing director of each company. This was followed up by a phone call to arrange an interview. The researcher summarised the purpose and the content of the interview and then asked for it to be with the managing director or the most appropriate senior manager.

The study used John and Reeve's (1982) criteria for informant choice. The criteria for choice are whether or not the informant occupies a role that make him/her knowledgeable about the issues being researched and his/her ability and willingness to communicate with the researcher. The managing director was chosen as the point of entry into an organisation for a number of reasons. First seeking his/her approval would ensure cooperation. Second, some of the information required is about strategic issues

and thus she/he was often the most appropriate person to ask. Third, the small to medium scale of a number of the firms interviewed relative to other industries meant that the managing director was often the most knowledgeable about supplier and marketing relationships and thus the most appropriate informant. Where the managing director was not the most appropriate informant they chose an appropriate senior manager

6.4.4 Non-Response Strategies

The strategies reported on in the previous section aimed to maximize the positive response to interview requests. Other strategies will also be used to minimise non-response:

1. Follow-up

As noted in Section 6.6.4 every effort was made to contact the managing director of the firms in the sample. This sometimes entailed a number of phone calls over a period of weeks. Contact was made with all managing directors in the sample.

2. Analysis of unusable responses

A number of firms contacted were not interviewed because their alliance activity did not meet the criteria under study.

3. Item non-response

Every effort was made to reduce item non-response. This could be a potential problem given the sensitivity of the area and was a reason for a qualitative research methodology. As is reported in Chapter 7, item non-response was not an issue in this research. The use of in-depth interviews meant that respondents felt at ease to discuss sensitive topics in-depth and were assured of confidentiality.

6.5 Summary

This chapter presented some of the key methodological decisions of the research. It placed the research methods within their theoretical context, discussing the strategic themes in qualitative research and the differing philosophical decisions underlying the research methodologies and research strategies used. It described the research process undertaken for this research, describing the data collection methods and sampling. In overall terms, the research has gone through four stages and uses qualitative data collection methods.

The conceptual framework of the research emerged from an informal experiential process using secondary research and key informants within the industry. Based on this framework, propositions were developed and tested through semi-structured in-depth interviews.

Chapter 7 describes the development of constructs and measures used in the research and the data analysis undertaken.

CHAPTER SEVEN

RESEARCH METHODOLOGY II

7.0 Introduction

This chapter describes the second part of the research methodology used as the basis for the empirical work undertaken in this thesis. The chapter discusses the development of the measurement instruments and the method of data analysis undertaken.

The chapter begins with the measurement process. The research used in this thesis is qualitative, based on a set of propositions that have been derived from an extensive literature review. The three specific theoretical perspectives reviewed in the literature are the resource-based view, the transactions cost perspective and network theory. Since this research pursues a multi-paradigm approach, it has had to develop a series of measures that integrate these perspectives.

The components of the interview guide are outlined and the data analysis procedure used in this research is also given.

7.1 Construct Measure Development Process

7.1.1 Domain Specification

The literature was reviewed in order to analyse the elements previous empirical studies had used to assess the motivations for and success of strategic alliances. As noted in Chapters 3 and 4, strategic alliances have been studied by scholars from a number of theoretical perspectives. The frameworks developed in these chapters are based on a synthesis of the resource based and transactions costs frameworks with social structural explanations also included. The constructs developed in this thesis

have been developed on a multifaceted basis to reflect the key measures used in these different theoretical approaches.

7.1.2 Construct Measurement

A literature review was used to generate a sample of items to measure the constructs. These measures were then tested qualitatively through interviews with a sample of key people within the industry. In this way proposed definitions and measures were tightened up and areas of ambiguity made plain.

7.1.3 Operationalisation

The operationalisation of the research constructs was outlined in the literature chapters. The purpose of this part of the research is to translate this broad operationalisation into specific measures. This is achieved by grouping the measures used in previous research around the constructs of this researcher's, the presentation of the actual measures chosen and a selection of construct operationalisation and measures from a number of research articles in the area. In contrast to the quantitative surveys that these measures are based on, all the questions in the interviews conducted in this research were followed with probes for more information, such as why?, what exactly? And so on. The questions were used as a framework for the interviews, but were discussed in far greater depth than would have been possible through a self-administered postal questionnaire. In this way we hoped to be able to explore the determinants of strategic alliance formation and success in far greater depth than has been achieved in previous studies.

7.1.4 Motivational Constructs

7.1.4.1 Transactions Costs

As noted in Chapter 2, very few scholars have tried to quantify transactions costs because of the difficulties empirical researchers have had in establishing definitive measures of the costs of the functions of a transaction. Trying to quantify concepts such as high transaction-specific investment or high frequency of interaction has often resulted in rather ‘woolly’ measures (Anderson 1985; Anderson and Coughlan 1987; Bucklin and Sengupta 1993; McNaughton 1996). Approaching this area, through qualitative interviews rather than quantitative surveys, we hope to be able to explore the specific determinants of the costs of the functions of a transaction in far greater detail.

I. Asset Specificity

Anderson and Coughlan (1987) examined the role of transactions costs in market entry decisions by 36 U.S. based firms in the international semiconductor industry over the period 1955 to 1975. They measured the extent to which transaction-specific assets are involved in distributing the product in question. Respondents were interviewed and their responses were then coded. There were 5 questions about asset specificity, the first coded on a 5 point Likert scale, from 1 = “no training” to 5 = “very high level of training”; the next two coded on a 5 point Likert scale, from 1 = “very little training” to 5 = “very high level of training”; and the last two coded in terms of years and months respectively:

- a. *How much training at the sales office do you provide to salespeople who handle your product?*
- b. *How much training do you give employees of your purchasers at their installation?*
- c. *How much training do you give employees of your purchasers in your U.S. facilities?*

- d. *How many years education do you require for sales employees to be qualified to handle this product?*
- e. *How much sales experience do you require for salespeople to handle this product?*

Bucklin and Sengupta (1993) measured the expected transaction specific investment of both focal firm and partner firm in a study of co-marketing alliances in the U.S. electronics industry. Building on previous studies (Anderson 1984; Anderson and Coughlan 1987) they invited responses to the following statements on 5-point Likert scale from 1 = "to no extent" to 5 = "to a great extent":

At the start of this agreement our management believed:

- a. *Our firm would have to hire people with special skills relevant only to the partnership project*
- b. *Our firm would not have to make major investments in equipment or other property suitable only for this partnership*

At the start of this agreement the partner's firm management believed:

- c. *Their firm would have to hire people with special skills relevant only to the partnership project*
- d. *Their firm would not have to make major investments in equipment or other property suitable only for this partnership*

McNaughton (1996) examined transactions costs in a study of foreign market entry modes by Canadian computer software exporters. In a mail survey he used a 7-point Likert scale of responses to 6 statements related to employee skills and investment on equipment adapted from Anderson (1985) and Klein et al (1990). The scale was 1 = "strongly disagree" to 7 = "strongly agree":

- a. *Specialised facilities/equipment are needed to market this software*
- b. *A large investment in facilities/equipment is needed to market this software*
- c. *It is difficult for an outsider to learn our way of doing things*

- d. *It takes a long time for a salesperson to gain a thorough knowledge of our software*
- e. *To be effective a salesperson for our software has to take a lot of time to get to know the customer*
- f. *A salesperson's inside knowledge of our procedures would be very helpful to our competitors*

In this thesis asset specificity was measured by examining investments in capital and labour specific to the alliance. This follows from similar measures developed by the authors discussed above (Anderson 1985; Anderson and Coughlan 1987; Bucklin and Sengupta 1993; McNaughton 1996;):

- a. *Did you have to hire people with special skills specific to the alliance project?*
- b. *How much extra training did you have to give your staff?*
- c. *Did you have to make any investments in equipment or other capital relevant only to this project?*

II. Expected Frequency

Anderson and Coughlan (1987) measured the frequency of interaction through the product's service requirements by summing responses to the following questions:

- a. *Describe the service and maintenance usually required by users of your product in this geographic area (0 to 6 scale, 0 = "no service and maintenance", 6 = "extremely high level of service and maintenance")*
- b. *How much of the required service and maintenance do you contract to supply in your typical sales agreements? (0 to 5 scale, 0 = "no service and maintenance provided" and 5 = "virtually 100% provided")*

Bucklin and Sengupta (1993) measured the frequency of interaction by response to the following question, measured on a 5-point scale from 1 = "not once" to 5 = "many times daily":

- a. *At the beginning of this partnership, how frequently did management believe it would be easy to interact with the partner firm in a typical month?*

McNaughton (1996), building on the work of others (John and Weitz, 1988; Klein, Frasier and Roth, 1990) focuses on channel volume instead of frequency of interaction. He argues that firms choose channels to minimise the sum of production and transactions costs. He measures channel volume through the value of annual sales.

In our thesis the frequency of interaction was measured by examining the frequency of contact between the partners, both formally and informally:

- a. *How often do you have telephone contact with your alliance partner?*
- b. *How often do you have formal meetings?*
- c. *Who are these meetings between?*
- d. *Are these part of the specific terms of the alliance agreement?*
- e. *Do you have any other type of contact with your alliance partner? What is this?*

III Expected Uncertainty

Bucklin and Sengupta (1993) measured the expected uncertainty of the outcome of the transaction by response to the following question, with a yes or no answer:

- a. *At the start of this agreement our management believed it would be easy to determine if the partner firm was performing all its contractual obligations under this partnership*

McNaughton (1996) divides uncertainty into external and internal uncertainty. External uncertainty relates to the predictability of the external environment. Internal uncertainty relates to the problems of ascertaining contractual compliance and monitoring performance. In his model he only examines external uncertainty. he used a 7-point Likert scale of responses to 3 statements related to external uncertainty adapted from Anderson (1985) and Klein et al (1990). The scale was 1 = "strongly disagree" to 7 = "strongly agree":

- a. *We are often surprised by the actions of retailers of our software*
- b. *We are often surprised by customer reaction to our software*
- c. *We are often surprised by the actions of our competitors*

In our thesis both internal and external sources of uncertainty are examined. However, external sources of uncertainty are examined within the context of external influences and are discussed later on in this chapter (see Section 7.1.7). Internal sources of uncertainty were measured by examining how easy the focal firm felt it would be to determine if the partner firm was performing all its contractual obligations under the alliance. This follows from Bucklin and Sengupta (1993), but was discussed in more depth with responses to the following five questions:

- a. *Are there written documents that spell out detailed tasks, activities and schedules for both parties?*
- b. *Are standard operating procedures required for both parties?*
- c. *Is the partnership based more on a shared informal understanding or specific terms and conditions of the agreement?*
- d. *Is it easy to determine if the firm is performing its contractual obligations?*
- e. *How easy is it to monitor the partner firm?*

7.1.4.2 Strategic Interdependence

There are numerous facets of interdependence that have been tested empirically by a number of scholars (Burgers, Hill and Kim 1993; Eisenhardt and Schoonhoven 1996; Gulati 1995; Nohria and Garcia-Pont 1991; Shan and Hamilton 1991). For ease of discussion they can be grouped as measures of uncertainty and dependence.

I Environmental Uncertainty

Two sources of environmental uncertainty are identified in the literature: demand uncertainty and competitive uncertainty (Burgers, Hill and Kim 1993; Harrigan 1988; Pfeffer and Salancik 1978; Provan 1982; Whetten and Leung 1979).

I.1 Competitive Uncertainty

In an empirical study of 23 of the largest competitors in the free world car market, Burgers, Hill and Kim (1993) argue that the competitive uncertainty facing a firm varies with its position within the industries size distribution and that thus so does its incentive to enter an alliance to reduce competitive uncertainty. Burgers, Hill and Kim (1993) measure firm size by the average annual unit of production by the firm. However, this measure is not appropriate in our industry as the units of production are not homogeneous. The UK Fresh Produce Industry is sub-divided into a number of produce areas, with a number of individual crops in these areas (see Chapter 4). A firm typically specialises on one particular crop, or a number of related crops within a produce area. Thus a tomato producer may also produce a number of other protected salad crops; a potato producer may also produce carrots. The income and profitability generated from these different crops will be dependent on individual supply and demand conditions at a point in time. Aggregating and comparing these production figures cannot be done in any meaningful way. Thus a different measure of firm size is needed. This thesis measures firm size using turnover, following Gulati (1995). Turnover is an indicator of financial and managerial resources and possibly of economies of scale and scope. Firms were asked their current turnover figures. They were asked if they could break this down into business activities (if appropriate). They were also asked their turnover levels 5 and 10 years ago to give

an indication of growth/decline in turnover. They were also asked if they could give any other financial information such as profitability levels, liquidity or solvency.

1.2 Demand Uncertainty

Burgers, Hill and Kim (1993) argue that demand uncertainty motivates companies to enter into alliances and gain access to capabilities to cope with uncertainty. However, firms will only enter into an alliance if there is a clear incentive as they are prone to failure (Harrigan 1988), difficult to manage (Killing 1983), demand attention from top management (Berg and Friedman 1980; Koot 1988) and decrease organizational autonomy (Aldrich 1979; Provan 1982). It is argued that within a single industry, poorer performing firms have more incentive to enter an alliance than more efficient ones. This is due to the fact that poorer performing firms are probably less able to deal with the adverse consequences of demand uncertainty than their more efficient competitors (Burgers, Hill and Kim 1993).

Burgers, Hill and Kim (1993) measure performance by examining market share performance, specifically the change in market share. This is closely linked to turnover but it is also a crude (and admittedly imprecise) measure of performance. Burgers, Hill and Kim (1993) do not use profitability levels as a measure of performance because they are comparing firms across countries and argue that profitability figures are subject to national differences in accounting methods; of uncertain comparability due to differences in firm's costs of capital and that they will vary with currency fluctuations. They argue that market share should be strongly related to profitability in the capital intensive automobile industry.

In this thesis performance is measured by market share. Firms were asked what their market share was, explicitly what was their share of UK production of their product(s). Firms were also asked their current production figures. As production figures for total volumes of all types of fresh produce were available we could cross-check a firm's assessment of market share with actual market share to assure validity of the data. The relationship between market share and profitability is not as straightforward in the fresh produce industry as the automotive sector given the

nature of the industry and the sub-division into individual produce areas. It will be dependent on the importance of the crop in total fresh produce production and also the profitability of that crop.

II. Dependence

Scholars measuring dependence have developed measures of the resources and capabilities of the firm.

II.1 Relative Financial Attributes

Interdependence has also been measured by examining the relative financial attributes of firms within alliances. Gulati (1995) tests the importance of financial attributes using 4 variables: firms size; performance; liquidity and solvency. Firm size is an indicator of financial and managerial resources. Performance indicates the degree of success in the marketplace. Liquidity is important for short-term resources and solvency indicates long-term resources. Firm size was measured by total sales in the industry. Performance is measured by return on assets normalized to the industry mean. Liquidity is measured by current assets-inventory/current liabilities. Solvency is measured by the total amount of long-term debt/firms current assets. He measured the value of each variable for each dyad dividing the smaller value by the larger. The larger the ratio, the closer the partners were.

The relative financial attributes of the focal firm and their alliance partner that were examined in this thesis were firm size and performance. These were measured by examining turnover and market share as before, but here the focus is on the relative size and performance of the focal firm and their alliance partners. As well as the financial questions they were asked about their own operations described above firms were also asked the following questions about their alliance partner(s):

- a. *Is this a firm of similar size to yours or different?*
- b. *Do you know this firm's current turnover?*

- c. *Do you have any other financial information on this firm?*
- d. *Do you know what this firm's market share is?*
- e. *How does this compare to 5 years ago?*

II.2 Organisational Niche

Gulati (1995) developed the concept of organisational niche from population ecology theorists. Gulati (1995) examined alliances within the industrial automation, new materials and automotive sectors among American, European and Japanese firms between 1970 and 1989. Using secondary data he studied over 2,400 alliances formed by these firms in these industries over the time period. He divided each sector into distinct organisational niches. The members of each niche possessed similar resources and capabilities that were distinct from those of other niches. These industry subsegments and national origin of the firm were combined using hierarchical clustering to find organisational niches. The basis for the partitioning of industries is similar to that for determining strategic groups (for a review, see Dranove, Peteraf and Shanley 1993). On this basis Gulati defined 3 countries of origin and 2 or 3 industry subsegments for each of the industries analysed. Gulati then coded an alliance as 1 if the firms belonged to different niches and 0 if they belonged to the same niche.

In this thesis organisational niche is measured by examining two variables, country of origin and scope of operations. The fresh produce industry was segmented into groups according to scope of operations from propagation, growing, processing, pre-packing through to marketing. Firms were asked to give a description of their activities. They were specifically asked what they produced; what produce they marketed; who they marketed it to; and what business activities they were involved in apart from growing produce. They were asked a number of comparable questions about their partner namely:

- a. *Who is this alliance with?*
- b. *Where is this partner firm based?*

- c. *Is this a firm in your industry? If no, what industry?*
- d. *What does the firm do?*
- e. *What business activities is this firm involved in?*

II.3 Organisational Compatibility

Bucklin and Sengupta (1993) developed measures of organisational compatibility building on constructs developed by Ruekert and Walker (1987) and Van de Ven and Ferry (1980). They measured organisational compatibility with responses to the following 3 statements on 5-point Likert scale from 1 = "to no extent" to 5 = "to a great extent":

- a. *Our firm's goals and objectives are consistent with those of the partner firm*
- b. *Our ceo and the ceo of the partner firm have similar operating philosophies*
- c. *Our executives have a management style different from executives in the partner firm.*

In our thesis organisational compatibility was examined with discussion of the following questions, drawing from Bucklin and Sengupta (1993):

- a. *Do you have similar goals and objectives to the partner firm?*
- b. *Do you have similar operating philosophies?*
- c. *Do you have similar management styles?*

7.1.4.3 The Social Network

The network perspective proposes that the social network that the alliance partners operate within influences both their motivations to form alliances and also the opportunities to form alliances (Giddens 1984; Gulati 1995; Gulati 1999; Khanna, Gulati and Nohria 1998). The social network is defined in Chapter 2 and refers to the prior direct and indirect relationships between firms that are used as an important source of information for firms about the reliability and capabilities of potential partners. The influence of the social network on various facets of alliance formation have been studied empirically by researchers. Some have examined the role of networks in the cumulative frequency of future alliances by firms (Cook and Emerson 1978; Gulati 1995; Kogut, Shan and Walker 1992; Eisenhardt and Shoonhoven 1996); others to alliances with new partners (Walker, Kogut and Shan 1997); others to the precise nature of inter-firm relationships (Gulati 1995; Gulati and Singh 1998); and others to their effects on the structure and performance of alliance relationships (Zaheer and Venkatraman 1995; Dyer 1996).

We examined both the motivations to form alliances and the process of alliance formation and any links between the two.

Motivations

I Prior History

Bucklin and Sengupta (1993) measured the impact of prior history with responses to 3 statements measured on a 5-point Likert scale from 1 = "to no extent" to 5 = "to a great extent":

- a. *Our firm had business relationships with the partner firm continuously for several years*
- b. *Our firm did very little business with the partner firm*
- c. *The history of relations between our firm and the partner firm may be characterised as stable and enduring*

Gulati constructed networks of all alliance activity within each of the 3 industries he was studying by constructing adjacency matrixes representing the relationships between actors in a network. He computed matrixes for each industry for each year under study. He weighted all past alliances on the basis of the strength of the resulting relationship ranging from 1 (weak) to 7 (strong) based on prior weighting schemes used in alliance research (Contractor and Lorange 1988; Nohria and Garcia-Pont 1991). Where there were multiple ties between two firms over the observed time period he used a Guttman scale to capture the score of the strongest alliance the firms had formed and included all past alliance activity. Finally he included all past alliance activity over the 20 year period.

In our thesis the importance of prior history was examined with a discussion of the following questions:

- a. *Is this your first alliance with this partner?*
- b. *If no, how many past alliances have you had with this partner?*
- c. *When was the last alliance you had with this partner? How long did it last? Did it achieve the goals it was set up to achieve?*
- d. *Have you had previous trading relationships with this partner?*
- e. *Have you had any other previous dealings with this partner?*

II Indirect Ties

Gulati (1995) measured the importance of indirect ties by measuring the number of prior third parties partners shared and the interaction of the number of third parties and a dummy variable indicating whether the dyad had had a previous direct tie or not (1 = no prior tie, 0 = prior tie). The variable "common ties" was thus only positive when there were third-party ties but no direct ties between two firms (after Mizruchi 1992).

In our thesis the importance of third-party ties was measured with discussion of the following questions:

- a. *If you had no direct prior ties with this partner, did you have common third-party ties prior to alliance formation? Who?*
- b. *Did a third party help guide partner selection?*

Process

Empirical research on the affect of social networks on the process of alliance formation is very limited (Cyert and March 1963; Gulati 1995; Nelson and Winter 1982). We argue below that understanding how an alliance is formed is linked to the motivations to form alliances and will add to the richness of the data obtained. The specific parts of partner selection assessed were the selection process and the selection criteria.

I Selection Process

In our thesis the process of selection of alliance partners was examined with discussion of the following questions:

- a. *Who initiated this alliance? Yourself, your partner or a third party?*
- b. *How was this alliance initiated?*
- c. *How did you select your partner? i.e. systematic search; informal search; ideal partner prompted idea of alliance*

II Selection Criteria

In our thesis the selection criteria was examined with discussion of the following questions:

- a. *Did you have selection criteria? If so, what were they? i.e. historical records; previous alliance history*

b. Do you know why your partner became involved?

7.1.5 Success and Development of Alliance Constructs

7.1.5.1 Measurement of Alliance Success

There has been much debate in the literature about the measurement of a successful alliance with a large number of criteria used to measure performance. Many studies have used a number of financial indicators such as profitability, growth and cost position (Lecraw 1983; Tomlinson 1970). However, other authors have used objective measures of performance such as survival of the alliance (Franko 1971;; Geringer 1990; Killing 1983; Stopford and Wells 1972); its duration (Harrigan 1986; Kogut 1988); instability of its ownership (Franko 1971; Gomes-Casseres 1987) and renegotiation of the alliance contract (Blodgett 1992).

Others argue that organisations become involved in strategic alliances after careful consideration of costs and returns (Benson 1975, Schermerhorn 1975). Frazier (1983) put forward a framework of exchange in which expected rewards and required investment in a relationship determined implementation and future outcomes. Bucklin and Sengupta (1993) developed the notion of project payoff, defined as the strategic value of the alliance net of development cost. They argue that alliances with well-identified markets and well-defined costs are more likely to perform well.

Concerns about the ability of financial and objective measures to gauge effectiveness of alliance performance have led other scholars to use perceptual measures of satisfaction with alliance performance (Beamish 1985; Killing 1983; Schaan 1983). Perceptual measures are able to provide information regarding the extent to which the alliance has achieved its overall objectives.

Glaister and Buckley (1999) examined performance indicators in a study of UK partner firms in 51 equity joint ventures and 22 non-equity joint ventures with partners from Western Europe, the U.S.A. and Japan. They developed a perceptual measure of performance which was the UK parent's subjective level of satisfaction with the alliance's overall performance. As a check on this rating, they also used a cost-benefit measure, which evaluated the cost of the strategy of forming an alliance against the benefits of having followed such a strategy. They also measured actual performance versus initial projections. Glaister and Buckley (1999) found only a moderate correlation between the perceptive and objective measures of alliance success, arguing that they were capturing different concepts of alliance performance. They argue that the satisfaction measure represents a proxy for the extent to which the alliance has achieved its overall objectives and as such is a direct subjective measure of the extent to which the alliance has achieved its major objectives. It thus encourages a broad perspective of the performance of the alliance. In contrast, the cost-benefit measure focuses in on the net benefit of the alliance. Thus they argue that the two are conceptually not the same thing. They note that whilst alliance performance may be highly satisfactory, the overall strategy of pursuing the alliance may be doubtful, or vice versa. In our thesis, following Glaister and Buckley (1999), we differentiate between the concept of satisfaction with the alliance and the notion of the net benefit of the alliance or project payoff. We use a perceptual measure of the success of the alliance asking firms about the extent to which the alliance had achieved its overall objectives and the extent to which the firms perceived the alliance to be 'successful'. We also then develop a separate measure 'project payoff' which focuses on the specific benefits and costs of the alliance (Bucklin and Sengupta, 1993; Glaister and Buckley, 1999)

In our thesis, following Glaister and Buckley (1999), we use a perceptual measure of the success of the alliance with discussion of the following questions:

- a. *Have the objectives of the alliance been achieved?*
- b. *In what ways?*
- c. *What was the time period for achievement of these objectives?*

- d. *Are there things you hoped the alliance would achieve that it hasn't? What? Why do you think this is so?*
- e. *Do you think on balance that the alliance is/has been successful?*
- f. *In what ways could the alliance be/have been better?*

7.1.5.2 Factors Contributing to Alliance Success

A large number of factors have been cited in the literature as having an impact on alliance success (see Chapter 3 for a full discussion). Most empirical studies of alliance performance have linked levels of performance, however defined and measured to particular explanatory factors describing given attributes of the observed alliances. Most studies have examined these explanatory factors in isolation from each other. In contrast, Bucklin and Sengupta (1993) develop a framework incorporating strategic, organisational and environmental factors. They categorise influencing factors into three groups. First, factors grouped under the term 'Project Management' reflecting the distribution of ownership, control and conflict resolution. Second, 'Project Payoff' reflecting alliance partners ex-ante views about the benefits and costs of the alliance. Third, 'Partner Match', reflecting the capability of the alliance partners to cooperate and work with each other.

Our analysis uses this framework to examine the factors leading to successful strategic alliances in the UK fresh produce industry. These have been developed into the three propositions below. The specific constructs and measures used are discussed in Chapter 7.

I Imbalances in Power

The analysis of power in alliance relationships has been examined in two distinct ways. First, some researchers have looked at it in terms of control of the relationship (Beamish 1984; Killing 1982; 1983). This perspective has emerged from analysis of joint ventures by multinational corporations in less developed countries where the focus is on the location of control in the relationship. The second perspective is of

power in terms of market power defined according to financial resources and market presence (Bleeke and Ernst 1991; Bucklin and Sengupta 1993; Cook 1977; Harrigan 1988; Prahalad 1989). Here the focus is on the balance of power between alliance partners and the consequences of alliances between partners with similar or different levels of market power. Previous research has argued that if an alliance is out of balance the weaker party may try and limit its vulnerability to the detriment of the alliance and the stronger party may be loath to put forward effort (Bucklin and Sengupta 1993). The definitions of power used by researchers and the implications of power imbalances on the success of an alliance are discussed in detail in Chapter 3. In this study we focus on the second perspective of power, that is the relative market power of the alliance partners.

Bleeke and Ernst (1991) measure power according to both market power and also the skills and resources that each partner brings to the relationship. In a longitudinal study of international joint ventures in the global aerospace industry, Dussauge and Garrette (1995) measure power through the relative competitive positions of the partner firms. Specifically, they considered a partnership to be unbalanced when, at the time the alliance is created, the sales of one of the partner firms are at least twice as large as the sales of any other partner firm in that same business, based on indicators used by Franko (1971) and Ravenscraft and Scherer (1987).

In our thesis, imbalances in power and in the managerial resources that each partner provides to the alliance were measured with a discussion of the following questions:

- a. Is this a firm of similar size to yours or different?*
- b. Do you know this firm's current turnover?*
- c. Do you have any other financial information on this firm?*
- d. Do you know what this firm's market share is?*
- e. How does this compare to 5 years ago?*

The influence of the relative dependencies of both partners on each other was assessed in our thesis by examining the levels of competition between partners. This

was assessed with discussion of the following questions. The scope of the focal firm and the partner firm's own operations was discussed using the measures outlined in Section 6.2.1.1 (II). The firm was also asked a number of questions about the purpose and scope of the alliance:

- a. *What is the purpose of this alliance?*
- b. *What is the scope of this alliance?*
- c. *Is the alliance at firm-level or an individual sector of the firm?*
- d. *What is the primary function of this alliance? i.e. marketing of certain products*
- e. *Are there other functions undertaken by the alliance? i.e. product development*
- f. *Are there functional areas where you think this alliance would not be appropriate? If yes, what areas? Why?*

II Project Payoff

Project payoff is defined as the strategic value of the alliance net of development cost (Bucklin and Sengupta 1993). It is argued that the higher the project payoff from an alliance the more likely it is to be successful (Benson 1975; Bucklin and Sengupta 1993; Glaister and Buckley 1999; Schermerhorn 1975). Bucklin and Sengupta (1993) measured the strategic value of the alliance to both partners with responses to the following statements measured on a 5-point Likert scale from 1 = "to no extent" to 5 = "to a great extent":

To focal firm:

- a. *The complementary product has enhanced, or will enhance, the value of our product to end users*
- b. *The complementary product has stimulated, or will stimulate, sales of our firm's products*
- c. *This partnership has not given, and will not give, our firm access to important new markets*

- d. *This partnership has enhanced, or will enhance, the credibility of our firm in the marketplace*

To partner firm:

- e. *Our focal product has enhanced, or will enhance, the value of their product to end users*
- f. *Our focal product has stimulated, or will stimulate, sales of their firm's products*
- g. *This partnership has not given, and will not give, their firm access to important new markets*
- h. *This partnership has enhanced, or will enhance, the credibility of their firm in the marketplace*

Bucklin and Sengupta (1993) measured the development costs the alliance to both partners with responses to the following statements measured on a 5-point Likert scale from 1 = "to no extent" to 5 = "to a great extent":

To focal firm:

- a. *Relative to other projects within the firm our firm has incurred, or will incur, substantial costs in product development under this partnership agreement*
- b. *Relative to other projects within the firm our firm has not incurred, and will not incur, substantial costs in the promotion and marketing of the complementary product*
- c. *Relative to other projects within the firm the development cost to our firm in helping to commercialise the complementary product has been, or will be, high*

To partner firm:

- a. *The partner firm's management believe that relative to other projects, the development cost to their firm in commercializing the complementary product has been, or will be, high*

Project payoff was then computed as the difference between strategic value and development cost.

In our thesis project payoff is measured by focusing on the specific benefits and costs of the alliance with discussion of the following questions:

Strategic value:

- a. *What has been the impact of the alliance on firm profitability and sales?*
- b. *How is this quantified?*
- c. *Do you think the alliance has enhanced, or will enhance the value of your product to end users? How? How does this relate to the objectives of the alliance?*
- d. *Do you think the alliance has stimulated, or will stimulate, sales of your firm's products? How?*
- e. *Do you think the alliance has aided, or will aid, new product development? How?*
- f. *Do you think the alliance has given, or will give, your firm access to new markets? How?*
- g. *Do you think the alliance has expanded, or will expand, your firm's range of expertise? How?*
- h. *Do you think the alliance has given, or will give, your firm access to resources? What?*
- i. *Do you think the alliance has given, or will give, your firm access to specialist skills?*
- j. *Has the alliance enhanced, or will it enhance, the credibility of your firm in the marketplace?*
- k. *Has the alliance helped to keep current customers?*
- l. *Do you think the alliance has lowered, or will lower, your firm's production costs? How?*
- m. *Do you think the alliance has lowered, or will lower, your firm's marketing costs? How?*

- n. *What were your partner's prime motives for involvement in this alliance?*
- o. *Do you know your partner's views on the specific questions above? (If so repeat)*

Development costs:

- a. *What costs has your firm incurred in the development of the alliance product?*
- b. *What costs has your firm incurred in the production of the alliance product?*
- c. *What costs has your firm incurred in the marketing of the alliance product?*
- d. *Has the cost to your firm differed from expectations?*
- e. *What costs have been incurred by the partner firm?*

III Partner Match

Partner match refers to alliances in which the partners are similar in management style and company culture (Bucklin and Sengupta 1993). This is facilitated through similar organizational cultures (Barkema and Vermeulen 1997; Fedor and Werther 1995; Rule and Keown 1998; Shenkar and Zeira 1992); a long and stable history of prior business relations (Bucklin and Sengupta 1993; Glaister and Buckley 1999; Heide and John 1990; Parkhe 1993; Saxton 1997); mutual trust (Beamish and Banks 1987; Buckley and Casson 1988; HanYan and Gray 1994; Harrigan 1986; Inkpen and Beamish 1997; Madhok 1995; Monczka, Petersen, Handfield and Ragatz 1998; Hoffman and Schlosser 2001; Rule and Keown 1998; Zaheer, McEvily and Perrone 1997) and flexibility by alliance partners (Bleeke and Ernst 1991; Doz 1996; Dyer and Singh 1997).

III.1 Similar Organisational Cultures

Cultural compatibility between organizations reflects complementarity in goals and objectives, operating philosophies and corporate cultures (Bucklin and Sengupta 1993). It is argued that similar cultural values can reduce misunderstanding between

partners and enhance the success of an alliance (Barkema and Vermeulen 1997; Fedor and Werther 1995; Rule and Keown 1998; Shenkar and Zeira 1992).

The importance of cultural compatibility on the success of alliances is tested in our thesis using the measures described in Section 7.1.4.2 above.

III.2 Prior History

Glaister and Buckley (1999) include a variety of factors when measuring prior relationships, namely: r&d agreements; technology transfer agreements; supply contracts; licensing/patent agreements; marketing agreements; other joint ventures; and personal relationships between the top management.

The importance of prior history on the success of alliances is tested in our thesis using the measures described in Section 7.1.4.3 above.

III.3 Trust

Numerous researchers have argued that that mutual trust is essential for successful alliances (Aulakh, Kotabe and Sahay 1996; Beamish and Banks 1987; Buckley and Casson 1988; HanYan and Gray 1994; Harrigan 1986; Inkpen and Beamish 1997; Madhok 1995; Monczka, Petersen, Handfield and Ragatz 1998; Hoffman and Schlosser 2001; Rule and Keown 1998; Zaheer, McEvily and Perrone 1997).

In a mail survey of vertical partnerships between manufacturers and dealers in the computer industry, Mohr and Spekman (1994) measure trust in response to a statement that the dealer believed their partner would act fairly and in the best interests of the relationship. In a mail survey of distributor and licensing relationships between U.S. firms and firms from Asia, Europe and Central/South America, Aulakh, Kotabe and Sahay (1996) measure trust on a three-item scale adapted from Moorman, Deshpande and Zaltman (1993). Specifically they measured trust with responses to the following statements measured on a 5-point Likert scale from 1 = "strongly disagree" to 5 = "strongly agree":

- a. *Our business relationship with this foreign partner is characterized by high levels of trust*
- b. *Our firm and the partner firm generally trust that each will stay within the terms of the contract*
- c. *We and our partner firm are generally skeptical of the information provided to each other*

In our thesis the importance of trust on alliance success was examined with discussion of the following question:

- a. *Is the partnership based more on a shared informal understanding or specific terms and conditions of the agreement?*

III.4 Flexibility

Flexibility of the alliance to change with the changing objectives, resources and relative power of the partners has also been cited as a determinant of alliance success (Aulakh, Kotabe and Sahay 1996; Bleeke and Ernst 1991; Doz 1996; Dyer and Singh 1997; Heide and John 1992). In their study of 49 strategic alliances in the U.S., Europe and Japan Bleeke and Ernst (1991) measured flexibility in terms of ability to make changes in the initial scope of the alliances. In a similar vein, Aulakh, Kotabe and Sahay (1996) measure flexibility as a bilateral expectation of willingness to make adaptations in the relationship as circumstances change, using an adaptation of a three-item scale developed by Heide and John (1992). Specifically, they measured flexibility with responses to the following statements measured on a 5-point Likert scale from 1 = "strongly disagree" to 5 = "strongly agree":

- a. *In this partnership, our firm and our foreign partner expect to be able to make adjustments in the on-going relationship to cope with changing circumstances*

- b. *Flexibility in response to requests for changes is a strong characteristic in this partnership*
- c. *Whenever some unexpected situation arises, we would rather work out a new deal with our foreign partner rather than hold each other to original terms*

Following them, in our thesis the importance of flexibility on alliance success was assessed by looking at how the alliances had developed with a discussion of the following questions:

- b. *Has the purpose and scope of the alliance changed from when the alliance was initially formulated? If yes, in what way?*
- c. *Was this change initiated by one partner or both or a third party? Why?*
- d. *Have you tried to extend the alliance to other areas without success? If yes, what areas?*
- e. *Are there functional areas where you think the alliance would not be appropriate? If yes, what areas? Why?*
- f. *Are there things you hoped the alliance would achieve that it hasn't? What? Why do you think this is so?*
- g. *In what ways could the alliance be/have been better?*

7.1.6 Non-Use of Collaborative Relationships

Respondents were also asked about their non-use of collaborative relationships. The specific questions were:

- a. *Are there cases where you could have developed alliances but achieved your strategic/operational goals through other means?*
- b. *What were these other means? i.e. internal expansion, mergers, acquisitions*
- c. *Why did you use this route rather than forming an alliance?*

- d. *Were you wanting more authority over decision-making for the product than afforded by an alliance?*
- e. *In what areas? i.e. sourcing, production, transportation, advertising and promotion, sales policies and programs, product quality*
- f. *Were you concerned about the risk of dissipation of the firm's core competencies?*
- g. *What are these? i.e. technological knowhow, marketing knowhow*
- h. *Were you worried about expropriation of the firm's knowhow for purposes other than those originally intended?*
- i. *Were you unhappy with the possible level of resource commitments?*
- j. *If so what were these? Physical, human, time?*
- k. *Did you feel that the firm would be constrained in future changes in strategy?*
- l. *Did you feel that there might be future conflicts over strategic movements?*
- m. *Did you feel that any changes in strategy would be too costly?*
- n. *Have you had previous bad experiences of alliances?*
- o. *Were you unable to find suitable partners for this particular project? Why?*
- p. *Were you worried about confidentiality?*
- q. *Were you worried about over-dependency?*
- r. *Were you worried about lack of control?*
- s. *Were you worried about the threat of acquisition by your prospective partner?*
- t. *Did you think the potential scope of the alliance was too limited for your plans? If yes, in what ways?*

7.1.7 External Influences

In addition to the above measures, a number of questions were asked about the influence of external factors on strategic alliance formation and success. Three

specific areas were focused on, namely the supply chain, technological development and globalization of markets.

7.1.7.1 The Supply Chain

In Chapter 3 we discussed the fact that the bulk of empirical research has been undertaken in the manufacturing sectors where the characteristics of supply chains are quite different to this sector. In addition there has been little work from scholars examining strategic alliances that take any account of channel structure particularly the influence of a member of a channel on the structure of that channel.

Therefore, in this thesis, the construct examining the influence of changes in the supply chain on the propensity to form alliances was measured using questions about the relationship between producers and their retail customers and the changing demands and involvement of their customers in their business. The specific questions were:

- a. How would you describe your relationship with your retail customers?*
- b. How involved are your retail customers in your business?*
- c. In what ways are they involved in your business? i.e. on levels of quality control, new product development etc.*
- d. How does this affect your business?*
- e. How has your relationship with your retail customers changed over the last 10 years?*
- f. How have the demands of your retail customers changed over the last 10 years?*

7.1.7.2 Technological Development

Bucklin and Sengupta (1993) measured the influence of technological development on alliance activity responses to the following statements measured on a 5-point Likert scale from 1 = "to no extent" to 5 = "to a great extent":

Rate of technological change in the focal product:

- a. *With respect to the focal product, the technology is changing rapidly*

Rate of change of the complementary product:

- a. *With respect to the complementary product, the technology is changing rapidly*

In this thesis the impact technological development on the propensity to form alliances was assessed with discussion of the following questions:

- a. *What changes in technology are taking place within your industry?*
- b. *What impact is this having on your business?*
- c. *How have you reacted to this?*

7.1.7.3 Globalisation of Markets

In this thesis the impact of globalisation on the propensity to form alliances was assessed with discussion of the following questions:

- a. *Has your firm been affected by the increased globalisation of the fresh produce industry? i.e. increased access to the UK from international markets, increased access to international markets by UK producers*
- b. *How has this affected your business? i.e. increased competition, price erosion, increased pressure on product*
- c. *What has your reaction to this been? i.e. product development, product diversification, market development, market diversification*

7.2 Measurement Instruments

Additional details on the measurement instrument used in the personal interviews are provided in this section. Much of the content of the instruments has been presented in previous sections.

7.2.1 Interview Schedule

The interview schedule used for the research was a semi-structured instrument which acted as a guide for discussion as well as the collection mechanism for factual data, objective observations and subjective observations regarding the motives for alliance formation, the process of alliance formation and the success and development of the alliances formed. Respondents were asked a mixture of questions, from open-ended questions about the concepts to questions directed at specific dimensions of the main constructs. Respondents were initially asked questions about the scope of their business activities in general and were then asked a series of questions about each strategic alliance they had with producers from overseas. They were asked about the motivations for alliance formation; the process of choice of partner; the outcomes of the alliance and the costing of the alliance. They were initially asked to discuss what they thought of as their most important alliance and were allowed to define this themselves. They were then asked the same set of questions for their second most important alliance and so on. They were then asked a series of questions about how these alliances had developed and the external influences on alliance formation and success. They were finally asked a number of questions about their current and past financial position and historical financial information.

7.3 Pilot Testing

The interview schedule was pilot tested with five interviews with key people within the industry. Once these five interviews had been conducted, the researcher discussed the interview experience with her supervisor. This included the ease of the interview process; the workability of the interview structure; the interview findings;

and any problems that had arisen. The five interviewees all felt that the interview schedule was comprehensive, that most questions were clear and that the subject area would be of interest to others within the industry. The interview schedule was then fine-tuned before the second-stage of interviews. In this way proposed definitions and measures were tightened up and areas of ambiguity made plain.

7.4 Data Analysis

There is no consensus for the analysis of qualitative data but what is of central importance is that purpose guides analysis (Patton 2002). Creswell (1998) summarises common themes of qualitative data analysis advanced by three qualitative authors, reproduced in Table 7.1. These show common themes as well as areas of difference.

Each of the main propositions, constructs and measures was analysed across all interviews. This method was necessary due to the huge amount of data.

The evaluation process was as follows:

Each interview was taped and a master copy typed version prepared. The amount of data from each firm ranged from 1 hour to 3 hours of taped material. During the interviews the researcher took notes and afterwards wrote up the interviewer's evaluation of what was said. This was done to avoid interview bias in evaluation and to record the insights gained about the research topic. All interviews were transcribed by the researcher. Patton (2002) recommends that a researcher transcribes at least some of their interviews as this provides an opportunity to become immersed in the data, an experience that usually generates emergent insights. He argues that typing and organising handwritten field notes "offers another opportunity to immerse yourself in the data in the transition between fieldwork and full analysis, a chance to get a cumulative feel for the data as a whole."

Table 7.1 General Data Analysis Strategies by Authors

Analytic strategy	Bogdan and Biklen (1992)	Huberman and Miles (1994)	Wolcott (1994)
Sketching ideas	Jot down ideas in margin of fieldnotes	Write margin notes in fieldnotes	Highlight certain information in description
Taking notes	Write memos, write observer's comments	Write reflective passages in notes	
Summarise field notes		Draft a summary sheet on fieldnotes	
Getting feedback on ideas	Try out themes on subjects		
Working with words	Play with metaphors, analogies, concepts	Make metaphors	
Display data	Develop diagrams, continua, tables, matrices, graphs	Make contrasts and comparisons	Display findings in tables, charts, diagrams and figures; compare cases; compare with a standard
Identify codes	Develop coding categories	Write codes, memos	
Reduce information	Sort material into categories	Note patterns and themes	Identify patterned regularities
Count frequency of codes		Count frequency of codes	
Relating categories		Factoring, noting relations among variables, building	

		a logical chain of evidence	
Use systematic procedures of tradition of inquiry			Follow fieldwork procedures in ethnography
Relate to analytic framework in literature			Contextualise in framework from literature
Redesign study			Propose a redesign of the study

Reproduced from Creswell (1998)

Typed copies of all interviews were kept on disks as well as the computer hard-drive. The original taped interviews and handwritten field notes were also kept.

Following this the researcher read through all collected information to obtain a sense of the overall data, a procedure advocated by Creswell (1998), Patton (2002) and Tesch (1990) amongst others. Fieldnotes were then summarised and the researcher made comments on the interviews.

Patterns and themes were identified in the data following a variation on content analysis outlined by Miles and Huberman (1984). As they note, "for the method to be used effectively, the data needs to have been collected by means of a semi-focused interview....These methods are used when the researcher feels she knows fairly well what she is after but sees that a greater insight might be gained from permitting the respondent to choose his own path. The broad parameters are very clearly set by the researcher. In this type of analysis conceptual frameworks are encouraged and are used as boundary devices that need not work as straightjackets."

Analysis of the data was accomplished by drawing up matrices of all the measures with the respondents identified down the margin (Easterby-Smith, Thorpe and Lowe 1991). The researcher worked through each interview cataloguing the various responses made to the main themes. This analysis provided visual patterns and themes which were then qualified by reference to the individual transcripts.

As noted by Patton (2002):

“Classifying qualitative data produces a framework for organising and describing what has been collected during fieldwork. This descriptive phase of analysis builds a foundation for the interpretive phase when meanings are extracted from the data, comparisons are made, creative frameworks for interpretation are constructed, conclusions are drawn, significance is determined and in some cases, theory is generated.”

Following Patton (2002) our analysis dealt with the challenge of convergence in the data, by looking for what things fitted together. Patterns of data were assigned into categories and judged according to internal homogeneity and external heterogeneity. Following this links between constructs were examined. There was also careful examination of deviant cases that did not fit the dominant identified patterns. This analysis was compared with the researcher's evaluations.

Cognitive mapping was undertaken to find the causal chains in the data and so help in analyzing the levels of support for the postulated hypotheses. This allowed an in-depth analysis of the meaning behind individual measures.

Tables were also compiled for more generalized categorisation, for example the firm's business objectives. These tables are re-produced in Appendix 4.

Instead of statistical significance, qualitative findings are judged by their substantive significance. There are four facets of substantive significance outlined by Patton (2002):

- i) How solid, coherent and consistent is the evidence in support of the findings?
- ii) To what extent and in what ways do the findings increase and deepen understanding of the phenomenon studied?
- iii) To what extent are the findings consistent with other knowledge?
- iv) To what extent are the findings useful for some intended purpose?

He argues that significance is based on the intelligence and judgement of the researcher; the respondents and reviewers. The results of the data analysis are presented in Chapters 8 and 9.

7.5 Methodological Comparison

The data for this thesis has been collected using qualitative research techniques, namely a semi-structured interview. This is in marked contrast to most research in this area which is of a quantitative nature, mostly collected through mailed questionnaires (see Chapter 6 for a full discussion). A defence of the methodology used in this thesis has already been given in Chapter 6. The discussion of the measurement of the constructs under study in the earlier part of this chapter presents additional arguments in favour of qualitative research techniques over quantitative ones in this area. As discussed in Chapter 6, much of the criticism of previous empirical work has been based on the specific measurement instruments used to measure the concepts at the base of the hypotheses. Some measurement instruments used have been very simplistic (the use of market share to proxy performance (Burgers, Hill and Kim 1993)). Some theories have hardly been tested empirically because of the difficulties in quantifying the underlying concepts (transactions cost theory). Some concepts have been measured with a wide range of variables each of which can only measure a partial aspect of the concept (the measurement of a successful alliance by a host of variables including profitability, cost position, age of the alliance and renegotiation of contract). Finally, different theoretical schools have

used the same measures to validate entirely different hypotheses (firm size as a proxy for strategic interdependence (Burgers, Hill and Kim 1993) and market power (Dussauge and Garrette 1995)). Our approach is multi-paradigm. It is our argument that the different theoretical schools present only partial explanations for the motivations for and success of strategic alliances. Through in-depth interviews we can examine the crossover between different schools. We also argue that the motivations for alliance activity and the success of alliances are dependent on a variety of factors, both internal and external to the firm, which will vary with each alliance within each firm. The underlying explanations for alliance activity and the success of that activity can only be understood through a holistic view of a particular alliance. Finally, the flexibility of semi-structured interviews allows for the possibility of unspecified factors to emerge in the interviews and their importance to be discussed in depth. This is highly important given the 'partial' explanatory nature of previous studies.

7.6 Conclusion

This chapter described the development of the measurement instruments and the method of data analysis undertaken.

The measurement instruments have been developed through an extensive validation process. Their theoretical content was developed by an extensive review of previous empirical studies and the measures used. They have also been subject to pilot testing.

The data analysis has been structured around the research frameworks detailed in chapters 2 and 3 and the resulting propositions detailed in Chapter 5. Its results are presented in Chapters 8 and 9.

Data was analysed through a variety of techniques with the aim of providing a rich and layered explanation of the area under study.

A final conclusion to this chapter is that the use of qualitative research techniques may be particularly applicable to the factors under investigation.

CHAPTER EIGHT

STRATEGIC ALLIANCES IN THE FRESH PRODUCE INDUSTRY – OVERVIEW OF THE SAMPLE

8.0 Introduction

The purpose of this thesis is an empirical examination of the motivations for and success of international strategic alliances in the UK fresh produce industry. The theoretical underpinnings of the empirical work have been discussed in Chapters two and three and the frameworks used as the basis for empirical investigation presented. The propositions to be tested have been developed using a multi-paradigm approach, developed from the transaction cost perspective, the resource-based view and network school. These propositions were presented in Chapter five.

Chapters eight and nine present the results of the empirical study that was carried out in 1999/2000. This chapter examines the nature and characteristics of the strategic alliances in our study. It provides an analysis of the nature of these alliances, the forms of alliances and the degree of homogeneity between the alliances. These characteristics will be discussed in relation to the definition of strategic alliances and the typologies of strategic alliances discussed in Chapter two. Chapter nine examines the support of the data collected for the specific propositions presented in Chapter five.

As noted in Chapter seven, tables of all the measures were compiled for each alliance relationship. Tables were also compiled for more generalized categorisation, for example the firm's business objectives. These tables are re-produced in full in Appendix 4. In addition, tables are used in this and the following chapter to illustrate specific points under discussion. To ensure confidentiality the firms interviewed and

their alliances have been coded alphabetically. These codes are used in the tables will be referred to in this section when particular firms and alliances are being discussed.

8.1 The Sample

The fieldwork in this thesis involved in-depth interviews with 17 fresh produce firms based in the UK who had strategic alliances with producers from overseas. In addition 3 fresh produce firms were interviewed who had had previous alliances but had no current alliance activity. This sample covered all the main fresh product groups and geographical areas of production in the UK (Table 8.1). Ten of the firms were major producers in their product area, producing more than 25% of UK production of their product category. A further 5 produced between 15-25% of UK production of their product category. Only 5 firms had less than 15% market share of their product category. The average turnover of the firms interviewed was high relative to the industry average. Ten firms had turnovers over £20 million, with a further 5 with turnovers between £10m-£20m. Only 5 firms had turnovers below £10m. This compares to the fresh produce industry as a whole where only 13% of fruit growers and 7% of vegetable growers had sales of more than £1 million in 1999 and over half of all fruit and vegetable growers had sales of less than £100,000 per annum (Keynote Report 2000). The dominance of our sample by the largest firms in the industry was related to the fact that these were firms choosing to form strategic alliances to maintain supplies for their major retail customers. These tended to be the largest firms in the industry and the key producers in their product area. (For a detailed discussion of the polarisation of production in the UK fresh produce industry see Chapter 4).

The firms are a mix of ownership types. Five are grower co-operatives, 7 are limited companies, 3 are private companies, 3 are family-owned and run and one is a subsidiary. The primary activity of all the UK firms bar one is the production of fresh produce. One of the firms is a packer supplied by a grower group but they also grow product

Table 8.1 The Sample

Firm code	Geographical scope of own production	Product sourcing	Products	Turnover	Market share	Ownership type	Age	Markets	Customer base	No. of retail customers
A	UK (Lincolnshire)	Spain, New Zealand, Tasmania, Netherlands	Onions, lettuce, brussell sprouts, cabbage, potatoes	£17m	Major producer	Co-op (59 growers)	20 years +	Predominantly UK although sizeable exports	60% multiples, 40% wholesale and catering	?
B	UK (South Coast) and Portugal	UK, Spain, Netherlands, Portugal, Canaries	Tomatoes, peppers, herbs, cress	£20m	Largest tomato grower in UK	subsidiary	20 years +	Predominantly UK, some exports	Mainly UK multiples	3-4?
C	UK (Cambridgeshire) and Spain	UK, Spain	Lettuce, celery, onions, broccoli, beetroot		Major producer	Grower co-op and marketing company	20 years +	87% UK, 13% Export	65-70% multiples, 3-4% export, 10% processors, 10% wholesalers/food service, 10% direct to Spain	3-4?
D	UK (Kent)	UK, South Africa, South America, Northern Europe, Canada	Apples, pears	£15m	15% top fruit acreage in UK	Grower co-op (45 growers), joint marketing venture (100 members), processing business (1/3 rd)	49 years	UK	Predominantly multiples (80% values, 55% volumes), the rest wholesale and some processing	4
E	UK (Yorkshire) and joint venture in Spain	UK, Spain, Netherlands	Cucumbers, tomatoes	£34m	Major producer	Limited company	20 years +	Predominantly UK	Tomatoes - 90% multiples/processor, 10% wholesale, cucumbers - 65-70% multiples/processor, 30-35% wholesale	2

F	UK (Kent)	UK, South Africa, South America, Northern Europe, Canada	Apples, pears		Major producer	Co-operative (200 grower members)		Predominantly UK	Predominantly multiples	3
G	UK	UK, Spain, Netherlands, New Zealand, Tasmania, Chile, France, Spain, Italy	Onions, brassicas, potatoes, thyme	£30m	Major producer	Ltd company (40 grower members)	20 years	90% UK, 10% exports	Predominantly multiples	3-4?
H	UK (Yorkshire)	UK, Netherlands, Spain	Cucumbers and tomatoes	£5m	small	Private company (5 grower members)	5 years	UK	Multiples	1
I	UK (Lincolnshire, Spain - administration office)	UK, Spain, South Africa, France	Tomatoes, cucumbers, celery, iceberg, speciality tomatoes, sweet peppers	£65m	major producer	Subsidiary	9 years	Predominantly UK	95% multiples, 4% processing, 1% wholesale	4?
J	UK (Yorkshire and Berkshire)	UK, Spain, Canaries, Holland	cucumbers, iceberg, peppers, tomatoes, aubergines, mushrooms, exotics	£28m	major producer	Ltd company (3 partners, 350 staff)	6 years	UK	60% retail, 40% catering	2
K	UK (Yorkshire)	UK, Spain	Brassicas and onions	£8-9m	small	Group of 4 private companies		Mainly UK, some exports	Multiples (80%), CRS, processing, exports	1
L	UK (Lincolnshire)	UK, Spain, France	Brassicas, potatoes	£22m	major producer	Private family-owned and run.	34 years	Mainly UK, limited	80-85% multiples, co-op, wholesale	2

			and onions			Also have a co-op (14 members)		exports	and processors	
M	UK (Lincolnshire, Connersby, Suffolk). 3 sites	UK and Spain	Salads, potatoes, daffodils, cereal, sugar-beet and peas.	£8m	small	Family owned and run	12 years+	UK	Processing and catering (60%) and retail	3
N	UK	UK, South America, South Africa, Kenya, Zimbabwe, Israel, Spain, Holland	Flowers and bulbs	£23m+	major producer	Ltd company. 3 separate business units (customer exclusivity)	10 years	UK	Multiples, smaller retailers	2
O	UK (Berwickshire)	UK, Tasmania, Portugal, Spain	Swedes and sprouts	£7-£10m	Largest swede producer in UK	Ltd company	27 years	Mainly UK, minimal exports	Multiples, processing, prepared	4
P	UK (Perthshire) 2 sites	Scotland, Kent, Cornwall, Spain	Roots, salads, brassicas	£36m	major producer	Ltd company (70 growers)	22 years	UK	Multiples	6
Q	UK	UK	Maincrop potatoes	£41m	Major producer	Private company		UK	Predominantly multiples	3
R	UK (Airdrie and Cambridge) 2 sites	UK, Egypt, Israel, Spain, Jersey	Potatoes, onions, carrots, parsnips	£50m	major producer	Family-owned and run	49 years	UK	Multiples (80%), processors (20%)	2
S	UK (Scotland, Northumberland)	95% Scotland, England, Cyprus	Potatoes	£10-£20m	Major packer	Limited company (50 growers)	20 years	UK	Multiples	2
T	UK (Yorkshire)	UK	Lettuce	£5m	Small	Grower's co-operative (15 members)		UK	Major and minor multiples	2 major, 2 minor

The firms' main market is the UK. Half of the firms interviewed do not export any product (D, H, J, M, N, P, Q, R, S, T). Of the others, exporting is mainly of limited volumes (B, E, F, G, I, K, L, O). Exports are only more than 10% of the market share for 2 firms (A, C). The firms' main customers are the major retail multiples although the processing, catering and wholesale markets are important outlets for some of their produce. Most firms have been consolidating the number of retail customers they supply. Two of the firms only supply one major retailer, 7 others only supply two and 9 others supply 3-4 customers. Only one firm supplied all 6 major retailers.

The multiple retailers have reduced the number of their key suppliers for any one product and these suppliers have had to increase volumes of product supplied (see Chapter 4 for a full discussion). All firms felt that their relationship with retail customers had changed in that there was less focus on short-term price bargaining and more focus on improving the business and developing the market. Historically issues of contention and potential conflict had been things like quality standards, reliability of supplies, service levels and so on. Satisfaction with these areas of business are more and more being taken as a pre-requisite for trade and the multiple retailer's technical focus has moved away from areas like auditing and inspecting depots to product development. On the commercial side the focus has moved away from arguing about price on to how to mutually develop the business.

A number of firms felt that there was still an imbalance of both actual and exercised power between retailers and their suppliers and that the commitment to UK product was only there up to a point (A, C, G, H, J, M, O). Only a few firms felt that they had a good relationship with the multiples (B, D, I). These were the largest firms. This may be because the imbalance of power was less. The remaining firms had a more mixed relationship with their retail customers.

All firms are now expected to procure product for their multiple retail customers year-round and to source supplies from elsewhere when they could not supply product

themselves. If growers are not able to do this they said that they would be de-listed when their multiple retail customers found someone who could. Needs are discussed together and then growers are expected to take the lead in finding appropriate sources of product to appropriate specifications, volumes and so on. This need for year-round supply was the key driver cited by all the firms interviewed for alliance formation.

The exacting standards of the multiple retailers meant that growers had to be able to guarantee consistent volumes of product of exactly similar specifications and quality to that which they were supplying themselves. This meant that they needed control over their supply sources. This was only achievable through either supplying multiple retail customers by forming a strategic alliance with their overseas supplier or through expanding abroad themselves. Sourcing through spot trading which multiple retailers had done either direct or through intermediaries did not offer high enough guarantees of control over product and production methods.

For growers faced with these demands the only viable choice for most was the formation of a strategic alliance. As noted above, most growers did not have the resources to make a choice between expanding abroad or forming a strategic alliance.

Some of the focal firms had more than one international alliance. From the 17 firms in the study with international alliances, 32 international strategic alliances were studied.

8.2 The Alliances

8.2.1 Alliance Scope

All the alliances are between UK and overseas firms whose primary activity is the production of fresh produce, except one overseas partner who is an exporter (Table 8.2). The primary function of these alliances is to procure product for the focal firm's key customers at times of the year when the focal firm could not produce the product themselves. With one exception these UK customers are all multiple retailers (31 alliances). One alliance is to procure product for a catering customer.

The major motivation for all focal firms to form strategic alliances was to secure 12 month supply of product to ensure continued trade with their key customers. Secondary motivating factors were cost focused, specifically spreading overheads and labour costs through utilization of facilities year-round. Second alliances for the same product were used to spread risk associated with supplier dependency and geographical location. The major motivation for all partner firms to form strategic alliances was to access the UK market. This market was seen as highly lucrative with high barriers to entry. All partners assumed that they would not be able to access the end multiple customers independently of their alliance partners.

Most alliances started by trading in limited volumes and increasing these substantially to meet market demand (Table 8.2) (A1, A2, A3, B1, C1, G3, I1, J1, J2, J3, J4, K1, L1, L2, L3, N1, O1, P1, R1, R2). A few started with significant volumes from early on (G1, G2, H1, O2, O3). Other alliances developed from existing importing relationships where volumes traded have not changed significantly but where the relationship between the two firms has. The focus of most alliances has been to develop sufficient volumes of product to meet market demand. Having achieved this, some alliances are looking at developing the product range and also looking at other product areas (B1, D1, E1, H1,

Table 8.2 Partner Firm Indicators

Alliance Code	Partner country of production	Products traded	Time of year	Ownership type	Business growth	Scope
A1	Spain	Lettuce	Winter	Family farm-holding	from nothing	Grower
A2	New Zealand	Onions	June-Aug	Family-firm	10 fold from 100 tonnes	Grower
A3	Tasmania	Onions	June-Aug	Grower who became part of exporting company	from nothing to market capacity	Grower
B1	Spain	Tomatoes	Nov-May	Family-firm	From almost nothing to 2 1/2 million boxes	Grower
C1	Spain	Broccoli	Winter	Family-firm	From almost nothing to 1,500 tonnes	Grower
D1	South Africa, South America, Northern Europe, Canada	Apples and pears	Various	Various	Various	Grower
E1	Spain	Cucumbers and peppers	Winter	Family-firm	Developed from importing	Grower

Alliance Code	Partner country of production	Products traded	Time of year	Ownership type	Business growth	Scope
G1	Tasmania	Onions	June-Aug		Significant volumes from early on	Grower
G2	New Zealand	Onions	June-Aug		Significant volumes from early on	Grower
G3	Spain	Brassicicas	mid Dec-end March	Family-firm	100-150 hectares	Grower
H1	Spain	Midi-cucumbers, tomatoes	Winter	Family-firm	Significant volumes from early on	Grower
I1	Spain	Peppers, tomatoes, cucumbers aubergines	Winter	Co-op (90 members)	From 2% to 40% of Acrenar's turnover	Growing and marketing
I2	Spain	Little gem, lollo rosso, celery, cherry tomatoes	Winter	Ltd. Company (3 partners)	From top-up trading relationship to large volumes	Growing and marketing
I3	Italy	Raddichio	Winter	Family-firm	From trading to exclusive production partnership	Growing
I4	South Africa	Flavoured	Winter	Family-firm	From trading to exclusive	Growing

Alliance Code	Partner country of production	Products traded	Time of year	Ownership type	Business growth	Scope
J1	Spain	Peppers, cucumbers, aubergines, tomatoes	October to April	Co-op (37 growers)	production partnership from 50 to 200 lorry loads/season. HS buy 60% of business. At capacity.	Grower
J2	Spain	Cucumbers, peppers, tomatoes	Winter	Co-op (350 growers)	Initially small volumes, slowly building up	Grower
J3	Spain	Iceberg, celery, celery hearts	Winter	Co-op	Initially small volumes, Now 150 loads a year with ongoing 20-30% volume increase	Grower
J4	Tenerife	Speciality tomatoes	Winter	Single grower (70 hectares)		Grower
K1	Spain	Brassicas	Nov - end March/mid June		Trialling with small volumes	Grower
L1	Spain	Broccoli, artichokes, courgettes	Nov- end May		From small volumes to 50% of customers demands	Grower
L2	Spain	Cabbage	end April-	Family firm (father &	From small volumes to	Grower

Alliance Code	Partner country of production	Products traded	Time of year	Ownership type	Business growth	Scope
			beg. June	son)	current demand	
L3	France	Cauliflower	Nov-May	Limited company	From small to large volumes	Exporter
M1	Spain	Iceberg	Winter	Limited company (4 growers)	Were pursuing more formal partnership but ending at end of this season	Grower
M2	Spain	Iceberg	Winter	Joint Venture Limited Company	Currently concentrating on iceberg but willing to look at other products and markets	Grower
N1	Columbia	Spray carnations	Year-round, volumes increase towards year-end	Family firm	From small volumes up to 200 boxes a week	Grower
O1	Tasmania	Swedes	April-June		5 containers to 500 tonnes. In process of de-listing	Grower
O2	Spain	Swedes	April-June	Family-firm	100 acres +	Grower

Alliance Code	Partner country of production	Products traded	Time of year	Ownership type	Business growth	Scope
O3	Portugal	Swedes	April-June	Family-firm	60 acres +	Grower
P1	Spain	Broccoli	October-November	Co-op	35% volume growth	
R1	Spain	New potatoes	10 weeks (April-May and mid-Dec)	Co-op (30 farmers)	800 tonnes- 3,000 tonnes	Grower
R2	Jersey	Jersey Royals (potatoes)	Mid April-Mid June	P.O. (large number of growers)	Volume growth and change from loose to packaged product	Growing and Marketing

J2, L1, P1, R2). However, the scope of most alliances has not changed from inception. The primary motive for all alliances is the procurement of product. Table 8.3 shows the product mix of the alliances and the country of partner firm's operations. Most alliances are with producers within Europe, particularly Spain, although there are a number of alliances with partners from outside Europe (A2, A3, D1, G1, N1, O1). The location of alliance partner is partly dictated by product traded. Thus the most viable location choice open to onion producers for supplies outwith the UK season is New Zealand or Tasmania.

Product is traded within the alliance over the period when UK product is not being grown. For most this is over the winter period (A1, B1, C1, E1, G3, H1, I1, I2, I3, I4, J1, J2, J3, J4, K1, L1, L3, M1, M2). For onion production, this is from June-August (A2, A3, G1, G2). Other firms use alliances for smaller time periods between UK production (D1, L2, O1, O2, O3, P1, R1, R2).

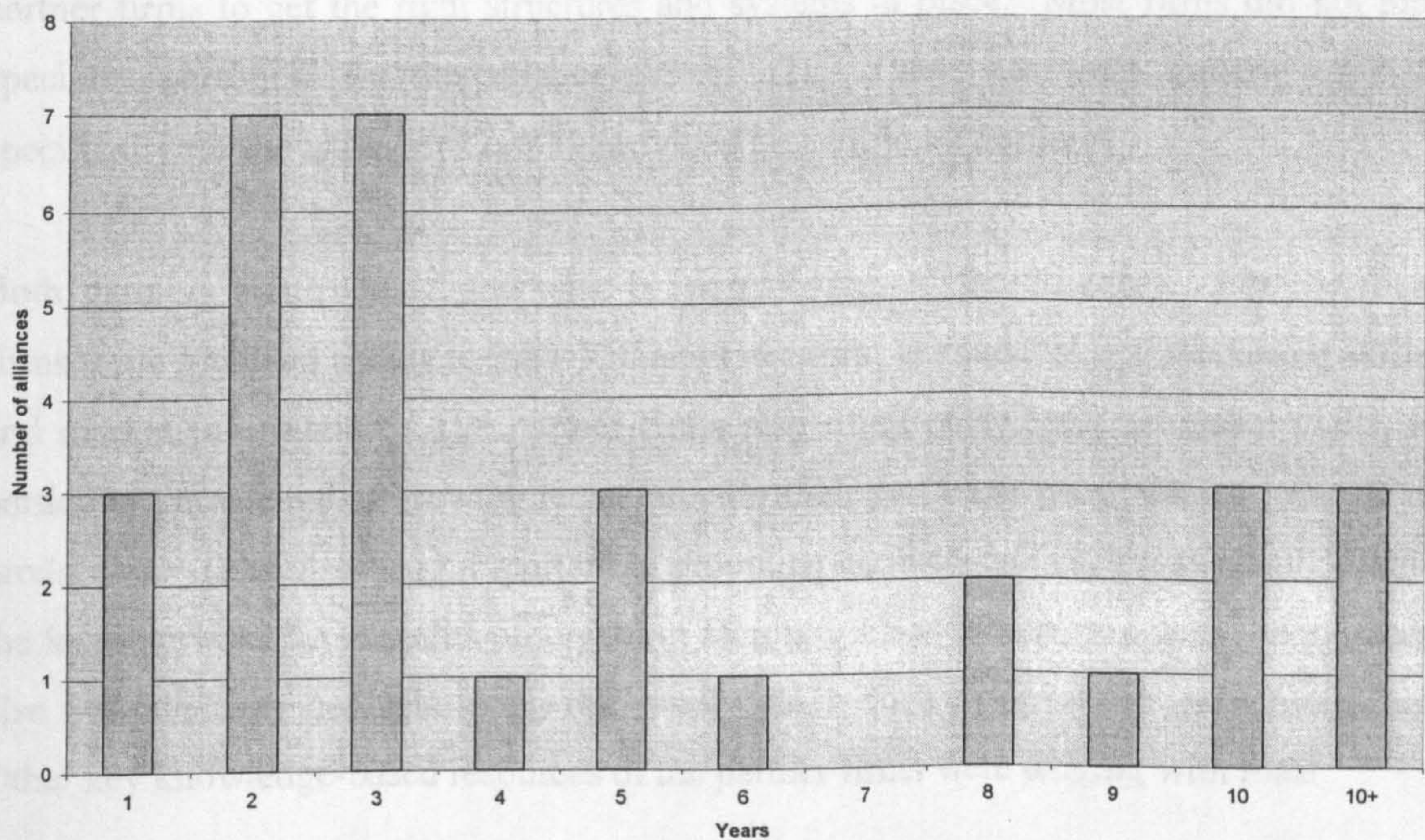
Table 8.3 Product's Traded and Location of Alliance Partners

	Spain	Portugal	Tenerife	Italy	France	Jersey	New Zealand	Columbia	South Africa	Tasmania
Tomatoes	B1, H1, I1, I2, J1, J2		J4						I4	
Lettuce	A1, I2, J3, M1, M2			I3						
Cucumbers	E1, H1, I1, I2, J1, J2									
Peppers	E1, I1, J1, J2									
Celery	J3									
Onions							A2, G2			A3, G1
Brassicas	C1, G3, K1, L1, L2, P1				L3					
Swedes	O2	O3								O1
Courgettes	L1									
Artichokes	L1									
Potatoes	R1					R2				
Apples and Pears									D1	
Flowers								N1		

8.2.2 Age of the Alliances

The alliances are predominantly young, with most operating for less than 10 years (Figure 8.1). None of the firms had had previous alliances with their partner. However, this is mainly due to the fact that most firms had very little alliance activity before these current alliances. A number of firms did have prior knowledge of their partners either through previous trading relationships or through third party contacts. Thirteen alliances were developments of prior trading relationships. Fourteen were through other third parties. In 2 cases this was a UK multiple retail customer; in 6 this was an importing or exporting agent; in 3 a wholesale customer; in 1 a subsidiary; 1 a UK grower customer; and 1 a seed company.

Figure 8.1 Age of the Alliances



8.2.3 Resource Input

Both partners input a number of resources into the alliances. The specific resources are discussed extensively in Chapter 9 but are briefly described here. Resource input can be categorised as either property-based or knowledge-based resources following Miller and Shamsie (1996) (discussed in detail on pages. 52-53). Property-based resources include financial capital, physical and human resources. Knowledge-based resources refer to a firm's intangible know-how and skills. Only one alliance was a joint venture (Table 8.4). In this case (M2) the UK firm and an overseas operator have set up a third company as a joint venture, in which they have equity and are the principal shareholders. Control of this company rests with the UK firm and the overseas operator. All the other alliances were non-equity alliances although 3 joint ventures were being discussed. Capital investment in the alliance by partners tended to be minimal. Most operated with no capital invested in them by the focal firm (25 of 32). Seven focal firms provided equipment to the partner firm. Where investment occurred it was mainly to enable partner firms to get the right structures and systems in place. Most firms did not hire specialist personnel for the alliance (23 of 32). There was little training of staff specifically for the alliance (22 of 32 provided no additional training).

Both partners contributed knowledge-based resources to the alliances. For the focal firms these included access to the UK market network; technical skills; marketing skills; and market information. The partner firms also often contributed technical skills, in particular knowledge of growing techniques for their particular geographical location of production. They also were important in providing contacts and access to people within the local network for supplies of key input factors such as labour, fuel and water. They also provided key contacts along the supply chain such as specialist seed producers. Other key knowledge-based resources of the partner firms were dealing with local

Table 8.4 **Categorisation of the Alliances**

	Boundary	Scope	Objective Focal Firm	Objective Partner Firm	Equity Investment	Financial & Equipment Investment	Employee Investment	Categorisation
A1	Producer-Producer Vertical marketing	Joint production	12 month supply	Access to UK market	No	No	Yes	Informal but close partnership. Involvement in all areas of business.
A2	Producer-Producer Vertical marketing	Joint production	12 month supply	Access to UK market	No	No	Yes	Informal but close partnership. Involvement in all areas of business.
A3	Producer-Producer Vertical marketing	Joint production	Second source of production to spread risk	Access to UK market	No	No	No	Informal but close partnership. Involvement in all areas of business
B1	Producer-Producer Vertical marketing	Joint production	12 month supply spread overhead and labour costs	Access to UK market	No	No	Yes	Unstructured – based on mutual trust. Involvement in all areas of business. Relationship has evolved over time.
C1	Producer-Producer Vertical marketing	Joint production	12 month supply	Access to UK market	No	No	Yes	Fairly informal. Based on trust. Relationship has evolved over time.
D1	Producer-Producer Vertical marketing	Joint production	12 month supply	Access to UK market	No	No	No	From informal to formal.

E1	Producer- Producer Vertical marketing	Joint production	12 month supply spread overheads and labour costs	Access to UK market	Under discussion	Yes	Yes	Currently very informal but strong. If JV goes ahead it will have to be contractual.
G1	Producer- Producer Vertical marketing	Joint production	12 month supply spread overheads and labour costs	Access to UK market	No	Yes	No	Fairly stable and committed. Inclination to trade but no formal commitment.
G2	Producer- Producer Vertical marketing	Joint production	Second source of production to spread risk	Access to UK market	No	Yes	No	Fairly stable and committed. Inclination to trade but no formal commitment
G3	Producer- Producer Vertical marketing	Joint production	12 month supply spread overheads and labour costs	Access to UK market	No	Yes	Yes	Not a JV, but parties tied in over time period.
H1	Producer- Producer Vertical marketing	Joint production	12 month supply	Access to UK market	No	Yes	Yes	Partners growing exclusively for them. Equity invested but owned by SW. Very open relationship.
I1	Producer- Producer Vertical marketing	Joint production	12 month supply	Access to UK market	No	Yes	Yes	Very much a team. Very open. Focal firm MD is non-exec director of partner firm. Likely to become more formal. As cash injected needs more safeguards i.e. minority shareholdings.
I2	Producer- Producer Vertical	Joint production	12 month supply	Access to UK market	Under discussion	No	No	Focal firm gives critical mass in return for priority. Likely to become more formal. As cash

	marketing								injected needs more safeguards i.e. minority shareholdings.
J3	Producer- Producer Vertical marketing	Joint production	12 month supply	Access to UK market	No	Yes	No	Yes	Informal. Based on trust. Involved in all areas of business. Relationship has evolved over time. Likely to get more formal.
J2	Producer- Producer Vertical marketing	Joint production	12 month supply	Access to UK market	No	No	Yes	Yes	Currently informal but strong. Partners intend to build new nursery to supply sweet peppers year round.
J1	Producer- Producer Vertical marketing	Joint production	12 month supply	Access to UK market	No	No	Yes	Yes	Currently informal but strong. Looking at co-op venture where focal firm provides the technical support and partners build new facilities to work on full-time basis.
J4	Producer- Producer Vertical marketing	Joint production	12 month supply	Access to UK market	No	No	No	No	Informal. Based on trust.
K1	Producer- Vertical marketing	Joint	12 month	Access to UK	No	No	Yes	Yes	Informal. Based on trust.

	Producer Vertical marketing	production	supply Spread overheads and labour costs	market									
L1	Producer-Producer Vertical marketing	Joint production	12 month supply Spread overheads and labour costs	Access to UK market	No	No	No	No	Informal. Understanding to trade. Open and up-front.				
L2	Producer-Producer Vertical marketing	Joint production	12 month supply Spread overheads and labour costs	Access to UK market	No	No	No	Informal. Understanding to trade. Open and up-front.					
L3	Producer-Producer Vertical marketing	Joint production	12 month supply Spread overheads and labour costs	Access to UK market	No	No	No	Informal. Market focused.					
M1	Producer-Producer Vertical marketing	Joint production	12 month supply	Access to UK market	No	No	No	Partnership ending. Trust broken.					
M2	Producer-Producer Vertical marketing	Joint production	12 month supply	Access to UK market	Joint venture	Yes	Yes	JV. Trust achieved through control.					
N1	Producer-Producer Vertical marketing	Joint production	12 month supply Manipulation of supply base	Access to UK market Stability of returns	No	No	Yes	Informal. Good relationship.					
O1	Producer-Producer	Joint production	12 month supply	Access to UK market	Under discussion	No	No	Informal. Easy to manage. Both sides try to make things					

	Vertical marketing								work.
O2	Producer-Vertical marketing	Joint production	12 month supply	Access to UK market	No	Yes	No	Informal. Good relationship.	
O3	Producer-Vertical marketing	Joint production	12 month supply	Access to UK market	No	Yes	No	Informal. Good relationship.	
P1	Producer-Vertical marketing	Joint production	12 month supply	Access to UK market	No	Yes	Yes	Informal but close. Involvement in all areas of business. UK firm coaching and coaxing partner.	
R1	Producer-Vertical marketing	Joint production	12 month supply		No	Yes	Yes	Informal but close. Involvement in all areas of business.	
R2	Producer-Vertical marketing	Joint production	12 month supply		No	No	No	Business to business.	

bureaucracy; accessing aid for production and marketing; language skills and local market information. These are discussed in detail in Chapter 9.

8.2.4 Degree of Integration

The alliances were mainly initiated and established by the UK firm. After some preliminary groundwork the UK firm would visit the partner's site and establish product specifications, installing quality control and assurance systems. Alliance formation would be based on a formal supply arrangement with a programme detailing volumes to be supplied over the coming season. In return the alliance partner would give the UK firm exclusive supplies into the UK.

The activities undertaken by the alliance partner include: growing, packing, visiting the UK site, visiting the end customer (often in-store to see product at point of sale), informal visits and technical interchange. The activities undertaken by the UK firm include: washing, grading, labelling, packing, quality control, product distribution, site visits by quality control and technical manager, site visits with the UK customer, informal visits, technical interchange, formal business reviews with partner, the temporary and permanent employment of people to work on partner's site (often technical quality controller), limited financial and capital input and provision of seed and plants. The activities undertaken by the end-customer include: site visits and audits.

There was daily telephone contact between the partners throughout the growing season for all alliances. The contact points varied, but included managing directors, technical and marketing employees. Firms also had contact through visits to each other's production sites. All alliances also had formal business reviews often on an annual basis, but sometimes more frequently. The types and frequency of interaction are discussed extensively in Chapter 9 (See Section 9.1 pages 171-175).

8.2.5 Categorisation of Alliances

Table 8.4 details the key features of the alliances in our sample illustrating the differences and similarities in our sample. Most alliances in our study would be categorised as informal (Table 8.4). All the alliances are non-contractual. This mirrors the relationship between UK suppliers and their retail customers where contracts are not used. That said there is a high level of commitment between alliance partners and an expectation that the alliance would continue as long as it was satisfying the strategic objectives of both parties.

Applying Das and Teng's (2000) typology of alliance structures (Chapter 2, p.6), all the alliances fall into the category of bilateral contract-based alliances. Das and Teng (2000) define alliances as being bilateral contract-based when the partners have sustained production of property-rights, that is that the alliance produces property-based resources that both partners have rights over, through patents, contracts and deeds of ownership (Miller and Shamsie 1996). Das and Teng (2000) argue that these alliances need partners to input resources and work together on a continuing basis so that there is a high degree of integration of the firms. Bilateral contracts are usually incomplete and open-ended and the co-operative relationship has to be allowed to unfold itself. In the alliances in this study there is a high degree of integration of the partner firms. Partners input resources and work together on a continuing basis. These alliances are also all non-contractual.

8.3 Conclusion

This chapter discussed the characteristics of the strategic alliances in our study. It provided an analysis of the nature of these alliances, the forms of these alliances and the degree of homogeneity of these alliances.

It showed that the alliances included UK firms from all the main fresh product groups and geographical areas of production in the UK. There were a mix of ownership types including grower co-operatives, private firms and a subsidiary. A large proportion of these firms were major producers in their product area. UK multiple retailers were the main customer for all the UK firms.

Most alliances are with producers within Europe, although there are a number of alliances with producers from further afield.

The major motivating factor behind alliance formation for all the focal firms was to secure 12 month supply of product to ensure continued trade with their key customers. Secondary motivating factors were cost focused, specifically spreading overheads and labour costs through utilisation of facilities year-round. The major motivating factor for partner firms was to access the UK market-place, specifically UK retail multiples.

The alliances are predominantly young and are all the first alliance between the focal and partner firm.

The alliances are all non-contractual. However, there is a high level of commitment between alliance partners and a high degree of integration of the partner firms. There is an expectation that the alliance would continue operating as long as it was satisfying the strategic objectives of both parties.

The next chapter examines the data from our empirical research in the specific context of its support for the propositions that have been developed from the literature review presented in Chapters 2 and 3. Specifically it will look at the motivational basis of alliance formation and the factors underlying successful alliances. It will also look at the interaction of the causative factors proposed by the theories examined.

CHAPTER NINE

TESTING THE PROPOSITIONS

9.0 Introduction

Chapter 8 was the first chapter to discuss the results of our empirical study. That chapter examined the nature and characteristics of the alliances in our investigation. This chapter presents a discussion of the specific propositions that were tested.

These propositions were developed from a review of the theoretical literature that is presented in Chapters two and three. Specifically these propositions have been developed using a multi-paradigm approach, developed from the transaction cost perspective, the resource-based view and from network theory. The propositions were presented in Chapter 5 and a discussion of the constructs and measures used was undertaken in Chapter 7.

The propositions are first discussed individually. There is then a discussion of the interaction of causative factors and the ranking of factors. Finally a number of case studies are presented to demonstrate the importance of the multi-paradigm approach taken.

9.1 Motivations for Alliance Formation

Proposition 1: Firms are motivated to form alliances when their transaction costs are of an intermediate level, but not high enough to justify vertical integration. These transaction costs are determined by asset specificity, uncertainty and frequency of transactions.

The transaction cost perspective proposes that a rational profit-maximising multinational corporation would use a wholly-owned subsidiary to achieve its strategic objectives under most circumstances. However, there are circumstances where alliances are preferable to vertical integration (Beamish and Banks 1987; Contractor 1990; Dunning 1995; Hennart 1991; 1998; Kogut 1988; Madhok 1997). These theoretical circumstances were presented in Chapter 2 and will be discussed in the light of our empirical findings below.

All the firms interviewed had chosen to form the alliances studied rather than expand abroad themselves through vertical integration. Most firms had a number of international alliances. Two firms also had overseas operations in addition to strategic alliances (B, C). The choice between forming an alliance versus vertical integration through expanding abroad as a firm, which is central to the transactions cost theory, was influenced by a number of factors. These are summarised in Table 9.1.

The first and most overwhelming factor was the relative costs of the two options. Expanding abroad was seen as a far more costly option than forming a collaborative relationship. The current state of the UK marketplace and the levels of profitability in the industry meant that most firms simply did not have the financial resources to even consider expansion. Firm B encapsulates this point:

“The costs of getting a partnership up and going are much lower than expanding abroad as a firm.....For us the capital requirements are enormous. If we wanted to have as much land under cultivation as in the UK it would require an investment of £50 million. This is not on. If you are not going to do this the only thing you can do is find a willing partner.”

Table 9.1: The Choice of Business Structure: Vertical Integration versus Alliance Formation

Vertical Integration	Alliance Formation
Control	Costs
Ability to take risk	Market uncertainty
Favoured by multiple retail customer	Risk
	Lower level of commitment
	Speed of entering marketplace
	Local knowledge
	Learning curve
	Utilisation of site

Source: Author's own table compiled from interviews

Allied to this is the risk of expansion in what is an uncertain marketplace. A number of firms noted that supply and demand conditions were highly variable over the short-term. There was thus a risk for a firm in expanding abroad and taking all the risk on themselves. Longer-term many firms felt that it was difficult to tell where the centres of production within Europe were likely to be. They argued that the marketplace was changing very quickly. At the time of our research production of fresh produce in Europe was becoming increasingly polarized with large increases in production in Southern Europe and particularly Spain (Chapter 4). However a number of producers warned against assuming that this trend was inevitably going to continue. This finding supports Beamish and Banks (1987) and Contractor (1990) who argue that alliances are efficient when there is a high degree of uncertainty which makes long-term contracts difficult and monitoring conditions costly.

A number of firms also viewed alliances as involving a lower level of commitment than expansion echoing the findings of Chi (1994) and Hennart (1988) (B, C, G, I). These firms felt that alliances could be rescinded more easily than when there had been internal expansion.

Some firms also felt that alliances gave them the flexibility to even out peaks and troughs in supply and demand. The importance of this function of alliances was related to the number of strategic relationships firms had. Specifically, the firms that found the flexibility of alliances to be important were those firms who had a number of alliance relationships. The flexibility of alliances was also a key feature in alliance choice for the two firms who had expanded abroad themselves (B, C). These firms chose to form alliances in tandem with expanding abroad themselves to give them a portfolio of structural forms with different levels of commitment.

For a number of firms, using a strategic alliance was also seen as a speedier way of achieving the objective of 12 month supply than expanding abroad, supporting Dunning (1995) who argued that alliances a more rapid means of establishing a competitive position than internal expansion. A number of UK firms needed significant volumes of product at the beginning of the relationship (E1, G1, G2, H1). These firms used alliances to achieve these volumes. In all but one partnership (H1) these alliances were formed with prior trading partners, where there was already a history between the two partners and prior knowledge of each other's operations. This made it easier to implement the product specifications needed and lessened the risk of misunderstanding between the partners. The importance of prior relationships is discussed at length below.

The choice to form partnerships rather than expand abroad was also influenced by the inimitable resources possessed by the partner firm. A number of firms pointed out that the partner firm had access to certain resources that they would not have access to if they expanded abroad themselves. These included the local knowledge of growing crops in the foreign climate, the local knowledge of the labour market; an

understanding of the best means to deal with the local bureaucracy; legal requirements; knowledge of local practices and access to EU support. Firm (C) notes that:

“It is probably easier in a partnership than expanding abroad yourself. Our partners already understand how to grow the crop in their area, they have an established land-base.....A lot of UK businesses have tried to expand and virtually all have stopped. It is very hard. There are different approaches to business and rules and regulations.....If you are doing it yourself there is a much bigger learning curve.”

The seasonality of crops is an important factor. The two firms who had overseas operations of their own were utilizing their production sites year-round. With seasonal production, the additional cost of having an overseas operation was in having facilities idle at certain times of the year if they did not diversify product. Firm (L) a producer of field vegetables, noted:

“The other problem with investing overseas ourselves is what to do with a massive Spanish operation in the summertime?.....Firm C is in salads and year round production. This makes a huge difference. Ours is very much seasonal business.”

A number of firms saw internal expansion as a possibility in the future (A, C, B, K, N). A number of others wanted to formalize their strategic alliances by developing them into joint ventures (E, N, O). Joint ventures are defined here after Das and Teng (2000) as a collaborative venture involving equity exchange by the partners whose purpose is to “substantially integrate the joint efforts of partners- separate entities in which the partners literally work together.” The primary reason for this choice by all firms was as a means of establishing control over the operations. Both

of the firms who had overseas operations felt that they had a higher degree of control over these operations than their international strategic alliances. Firm C notes that:

“We decided to expand over there ourselves because we felt as farmers we had the technical knowledge and also we would have control over what we did.”

A number of others who currently felt that the level of risk and costs made internal expansion impossible were looking at joint ventures as a means of establishing control. Firm N argues:

“Bringing capital into a business on a partnership basis is done to control supply not to make massive amounts of money. You are underpinning supply, guaranteeing your customer a constant stream of supply and thereby underpinning your business.”

Whilst Firm E notes:

“We are growing in Spain (through a JV) because we are not seeing improvements in cultural practices come through as quickly as we would like...”

The issue of control is partly a product of the size and location of potential overseas partners. For some products, such as pepper production in Spain, the average size of producer is relatively small and production is marketed through larger co-operatives. To ensure sufficient volumes for UK market demand strategic alliances are formed with the co-operative rather than an individual producer. Eight of the alliances were with co-operatives, 7 of whom were based in Spain (Table 9.2). These co-operatives had up to 350 members. It is far harder in this instance to ensure traceability of

Table 9.2 Partner Firm Structure

Partner Firm	Ownership Type
A1	Family farm-holding
A2	Family firm
A3	Grower who became part of an exporting company
B1	Family firm
C1	Family firm
D1	Various
E1	Co-operative, 300 grower
G1	Family firm
G2	Family firm
G3	Family firm
H1	Family firm
I1	Co-operative, 90 members
I2	Ltd. Company, 3 partners
I3	Family firm
I4	Family firm
J1	Co-operative, 37 members
J2	Co-operative, 350 members
J3	Co-operative
J4	Single grower
K1	Family firm
L1	Family firm
L2	Family firm
L3	Ltd. Company
M1	Ltd. Company, 4 growers
M2	Joint Venture
N1	Family firm
O1	Ltd company
O2	Family firm
O3	Family firm
P1	Co-operative
R1	Co-operative, 30 members
R2	P.O., large number of members

product and maintain control over product specifications and quality. Firm E who is developing a joint venture with their current alliance partner illustrates the point:

“Our partner (E1) currently takes from 300 growers. The chances of getting Nature’s Choice (Tesco’s quality control and product specification programme) established with 300 growers is non-existent. Tesco have been trying to do this for 2 years.... We are now considering setting up a nursery and dedicating the whole of that production to one customer.”

A number of firms argued that their multiple retail customers had said they would prefer the UK firms to supply them through their own overseas operations than through an overseas alliance as this would ensure complete control (A, B, C, E, O). As well as concerns about traceability they argued that the UK multiple retailers were far happier with joint management in the UK and abroad.

Finally, a number of firms argued that internal expansion allowed greater risk-taking than operating through a strategic alliance (A, B, C, N).

All the firms interviewed quantified parts of the costs of the alliance to their firm in advance of forming the alliance (Table 9.3). Most firms knew the costs they were likely to incur in terms of storage costs and transportation costs and the costs of handling and labeling the product. The firms expected the alliance to alleviate overhead costs but the contribution of the alliance towards a reduction in total overhead costs was very difficult to quantify. The larger firms with a larger number of alliances also evaluated the relative costs of individual alliances (G, I, J, L, O); although only one firm had a formalised value chain analysis which examined the relative costs and benefits of all projects (I).

Table 9.3 Costing the Alliance

Alliance	Costing of Alliance	Costs relative to Other Projects within the Firm
A1	All variable costs quantified. True overhead costs difficult to quantify, but small.	Relative costs not evaluated.
A2	All variable costs quantified. True overhead costs difficult to quantify, but small.	Relative costs not evaluated.
A3	All variable costs quantified. True overhead costs difficult to quantify, but small.	Relative costs not evaluated.
B1	All costs quantified.	Costs much lower than expanding abroad.
C1	All costs quantified.	Costs much lower than expanding abroad.
D1	Costs quantified.	Relative costs not evaluated.
E1	Costs quantified. Benefits of JV uncertain.	Relative costs quantified. Costs of JV much lower risk than expanding abroad.
G1	Costs quantified.	Looking to improve supplier base constantly. Relative costs quantified.
G2	Costs quantified.	Looking to improve supplier base constantly. Relative costs quantified.
G3	Costs quantified.	Looking to improve supplier base constantly. Relative costs quantified.
H1	Costs weighed up against earnings.	Relative costs quantified.
I1	Costs quantified.	Have a value chain analysis looking at relative costs and benefits of all projects.
I2	Costs quantified.	Looking to improve supplier base constantly. Relative costs quantified.
I3	Costs quantified.	Looking to improve supplier base constantly. Relative costs quantified.
I4	Costs quantified.	Looking to improve supplier base constantly. Relative costs quantified.
J1	Costs quantified.	Relative costs not quantified formally.
J2	Costs quantified.	Relative costs not quantified formally.

Alliance	Costing of Alliance	Costs relative to Other Projects within the Firm
J3	Costs quantified.	Relative costs not quantified formally.
J4	Costs quantified.	Relative costs not quantified formally.
K1	Cost benefit analysis undertaken. Costs quantified on the back of this.	Relative costs not quantified formally.
L1	Costs quantified.	Relative costs not quantified formally.
L2	Costs quantified.	Relative costs not quantified formally.
L3	Costs quantified.	Relative costs not quantified formally.
M1	Costs quantified.	Relative costs not quantified formally.
M2	Costs quantified.	Relative costs not quantified formally.
N1	Costs quantified.	Relative costs not quantified formally.
O1	Costs quantified.	Relative costs not quantified formally.
O2	Costs quantified.	Relative costs not quantified formally.
O3	Costs quantified.	Relative costs not quantified formally.
P1	Business expected to cover costs and make some contribution to overheads.	Relative costs not quantified formally.
R1	Costs quantified.	Relative costs not quantified formally.
R2	Take intermediary cut. Costs quantified.	Relative costs not quantified formally.

The point was made that there were unquantifiable benefits to the alliance that made quantifying costs and benefits more complicated. In noting that the alliance had enabled them to break the monopoly of a UK importer Firm (P) noted:

“We initially looked at the business to cover costs and make some contribution to overheads. We did not expect it to make a ‘full’

contribution in the same way that we would expect UK-sourced product to do.”

Another (Firm C) noted:

“There is the unquantifiable thing of having supply in a period when it’s difficult to supply because this adds value to the total process because it’s made us reliable in our customer’s eyes. Our business has probably grown faster in total because of what they (our partner) has added to the business.”

The specific components of transaction costs, namely asset specificity, transaction frequency and uncertainty of outcomes, are discussed below.

Asset Specificity

Asset specificity refers to the “degree to which an asset can be redeployed to alternative uses and by alternative users without sacrifice of productive value” (Williamson 1988). The levels of asset specificity in the fresh produce industry were discussed in detail in Chapter 4. As discussed, levels of asset specificity in the fresh produce industry are increasing, albeit from relatively low levels. The increased demands for product supplied to precise technical and quality specifications by end customers has resulted in production and packhouse facilities that are increasingly specialised and tailored to individual customer needs. Chapter 2 discussed the use of proxies for asset specificity in previous empirical work from the transaction cost perspective and Chapter 7 developed the discussion of the specific constructs and measures used in previous work and justified the choice of constructs and measures in our research. Thus levels of asset specificity in the alliances studied were gauged by examining the capital costs specific to the alliance, as a proxy for physical asset

specificity (Anderson 1984; Anderson and Coughlan 1987; Bucklin and Sengupta 1993; McNaughton 1996); and the labour costs specific to the alliance, as a proxy for human asset specificity (Anderson and Coughlan 1987; Bucklin and Sengupta 1993; McNaughton 1996; Monteverde and Teece 1982). These are summarised in Table 9.4 and discussed below.

One of the alliances was a joint venture (M2). All of the others stopped short of a formal joint venture, although there were three being discussed at the time of the interview (E, I2, O2). Most alliances worked with no capital invested in them by the focal firm (25). Of the others, 7 involved some capital input from the focal firm usually in the form of soft loans, with money either re-cooped after a set period of time or after harvesting (E1, H1, I1, I4, M2, O2, O3, P1, R1). A number of other firms provided equipment to the partner firm (G1, G2, G3, H1, I3, I4, O2).

The firms that invested in partner firms did so for a number of reasons. The main reason was to ensure reliable volumes of quality product as quickly as possible (H1, I1, I4). Investment enabled firms to get the right structures and systems in place. Another reason was control. Two firms had invested in firms in order to have control over the partnership (M1, M2, O2, O3). These two firms had both had bad experiences of alliances in the past and felt that without equity there was no real commitment to the partnership and the likelihood of short-term opportunism leading to one partner reneging on the partnership.

The firms that did invest some capital did not see it as a big issue, rather as a means to get the outcome they wanted. With the exception of two firms (H, O), these firms were the largest firms in the sample.

Table 9.4 Capital and Labour Costs

Alliance	Equity Investment	Capital Investment	Equipment	Hiring of Specialised Personnel	Training of Current Staff
A1	No	No	No	No	Yes. Language skills
A2	No	No	No	No	Yes. Technical skills of partners
A3	No	No	No	No	No
B1	No	No	No	No	Yes. Language skills.
C1	No	No	No	No	Yes. Some technical training.
D1	No	No	No	No	No
E1	Setting up JV. Initial investment of £1m.	Yes	No	Yes	No
G1	No	No	Yes	No	No
G2	No	No	Yes	No	No
G3	No	Yes. Packhouse.	Yes	Yes	No
H1	No	Yes. £52,000.	Yes. Machinery.	No	Yes
I1	No	Yes. £600,000-£1m p.a. in soft loans.	No	Yes	No
I2	Considering JV.	No	No	No	No
I3	No	No	Yes	No	No
I4	No	Yes. Provided money for structures.	Yes	No	No
J1	No	No	No	Yes	No
J2	No	No	No	Yes	No
J3	No	No	No	Yes	No
J4	No	No	No	No	No
K1	No	No	No	Yes	No
L1	No	No	No	No	No
L2	No	No	No	No	No
L3	No	No	No	No	No
M1	No	No	No	No	No

Alliance	Equity Investment	Capital Investment	Equipment	Hiring of Specialised Personnel	Training of Current Staff
M2	Joint venture	Yes. Working capital.	No	Yes	Yes. Some technical training.
N1	No	No	No	No	Yes. Training of partner firm employees.
O1	Considering JV.	No	No	No	No
O2	Considering JV.	Yes. Money to grow product. Invested money in irrigation.	Yes. Help with harvesting.	No	No
O3	No	Yes. Pay 50% towards growing.	No	No	No
P1	No	No	Yes. Loaning of harvesting equipment.	Yes	Yes. Training of partner firm employees.
R1	No	Yes. Supply of seed.	No	No	Yes. Language skills.
R2	No	No	No	No	No

Most firms argued that they did not need to invest in the strategic alliance. That said, these firms did not have spare financial resources to invest in any case. Most firms argued that their partners were not short of determination or money, rather that they needed guidance, technical support and market access. As noted in Chapter 8, the knowledge-based resources provided by the partners were often more important than the property-based resources. The focal firms provided the partner firms with access to the UK market, a market that would be inaccessible to most of them without a key supplier as a partner. The focal firms also provided their partners with market information and marketing skills. They were also instrumental in providing the technical skills and technical knowledge to help their partners produce product to the

specifications necessary for UK multiple retail customers. These specifications cover product quality markers in terms of appearance and taste; detailed growing specifications in terms of pesticide usage and production techniques; and picking, handling and storage of product. These specifications are particular to each UK multiple retail customer (see Chapter 4 and Appendix 4.1).

What is striking is the informality of the equity arrangements where they existed. Whilst the loans were all on a formal basis, only one firm had a formal marketing contract and this was only for two years (H). All of the others had no formal marketing contract. Rather there was a level of trust based on interdependencies, that is that both parties would lose more than they would gain by breaking the partnership. Firm I's comments on the arrangements are typical:

“If we (the focal firm) are not doing a good enough job for our partners they won't be in a position to pay the loan back....”

Most firms did not have to hire specialist personnel for the project (23 alliances). Of those that did, apart from M2 which was a joint venture, the hiring was of technical people. This is not surprising, given that technical ability is central to the alliances' objective outcomes.

Most firms did not have to train current staff (22 alliances). Where training did occur it was mostly of a technical nature (6 alliances). In 3 alliances it was language training.

Other costs tended to be technical input and visits to the partner. Again firms saw these as a necessary part of the alliance and were happy to provide this as and where necessary.

Frequency of Interaction

As noted in Chapter 7, frequency of interaction was measured by examining formal and informal contact between alliance partners and also the contact points in the firms (Anderson 1984; Bucklin and Sengupta 1993). Contact between the partners took a number of different forms. First there was telephone contact between the partners. Second, there were visits to the partner and focal firm's sites. Third there were formal business meetings. Finally, there were a number of informal meetings between the partners. The frequency and types of interaction are presented in Table 9.5.

There was daily telephone contact between the partners throughout the growing season for all alliances. The contact points varied, but included managing directors, technical and marketing employees. The point of the contact was to discuss production levels, quality issues and price. It was also to discuss and exchange wider market information, such as the state of competition. It was felt that daily contact was

necessary given the variability of short-term demand and supply conditions. Daily contact was also used to discuss any potential problems with the relationship before they became an issue. As one producer said:

“We have daily contact, at all levels. If we are close we can spot when things are going wrong and react before problems become insurmountable”.

Firms also had contact through visits to each other's production sites. Focal firms visited partner firms to assess production techniques and quality standards. The people involved were usually the quality control team and the technical manager. Occasionally the managing director would also visit. They also visited sites to help new product development and assess new varietal trialling. Multiple retail customers also visited the partner firm sites to assess production. Most multiple retailers visited sites with their UK supplier, but some visited independently (J1, J2, J3, L1, L2, P1).

Table 9.5 Frequency and Types of Interaction

	Telephone	Visit by Partner to Focal Firm	Visit by Focal to Partner Firm	Formal Business Review	Informal Meetings
A1	Daily in season, office and home	6 times a year, family members stay	3-4 times a year	Detailed seasonal planning, 2-3 times p.a.	Yes
A2	Daily in season, office and home	4 times a year	Once a year	Once a year	Yes
A3	Daily in season, office and home	4 times a year	Once a year	Once a year	Yes
B1	Daily in season, office and home	Several times a year	Several times a year	2 times a year	Yes
C1	Daily in season	When necessary	When necessary	Yes	Yes
D1	Daily in season	When necessary	When necessary	Yes	Yes
E1	Daily, in season	At least annually	At least annually	Yes	Yes
G1	Daily, in season	Visit with multiples once a year and more if needed	When necessary	Seasonal planning	No
G2	Daily in season	Visit with multiples once a year and more if needed	When necessary	Seasonal planning	No
G3	Daily, in season	Have had 3 technical visits with the multiples	When necessary	Yes	No
H1	Daily, in season	Currently more than desired, but setting up, includes multiples	When necessary	Yes	Yes
I1	Daily in season, at all levels	Visit when necessary, UK pickers work with individual growers	Visit when necessary, meet with multiple customers	Yes	Yes
I2	Daily, at all levels	As and when needed	As and when needed	Yes	Yes
I3	Daily, at all levels	As and when needed	As and when needed	Yes	Yes

I4	Daily, at all levels		As and when needed	As and when needed	Yes	Yes
J1	Daily, season	in	Multiples visit 2-3 times a year, UK technician on site	When necessary	Yes	Yes
J2	Daily, season	in	Multiples visit 2-3 times a year	Partner's whole committee	Yes	Yes
J3	Daily, season	in	When necessary	When necessary	Yes. Price fixed for 3 years	No
J4	Daily, season	in	When necessary	When necessary	Yes	Yes
K1	Daily, season	in	Informal monitoring	When necessary	Yes	Yes
L1	Daily, season	in	Multiples visit 3-4 times a year	When necessary	Annual business review	Yes
L2	Daily, season	in	Multiples visit 3-4 times a year	When necessary	Annual business review	Yes
L3	Daily, season	in	Visit individual growers	When necessary	Yes	No
M1	Daily, season	in	When necessary	When necessary	Yes	No
M2	Daily, season	in	UK technician employed on site	Monthly	Yes	Yes
N1	Daily, season	in	When necessary	When necessary	Yes	Yes
O1	Daily, season	in	Annually. Multiples visit as necessary	When necessary	Yes	Yes
O2	Daily, season	in	As necessary	When necessary	Yes	Yes
O3	Daily, season	in	As necessary	When necessary	Yes	Yes
P1	Daily, season	in	Team of agronomists. UK field technician on-site. Multiple team 1-2 times a year	Partner visits UK operation	Annual business review	Yes
R1	Daily, season	in	At least annually	When necessary	Annual business review	Yes
R2	Daily, season	in	6 years ago	No	Annual business review	No

All multiple retailer visits were paid for by their UK supplier. Some firms have a very flexible approach to visits and visit as and when necessary (A, D, E, G, H, I, J, K, M, N, O, P, R). Others have a more structured approach and visits are a pre-arranged part of negotiations (B, C, L). Most visit their partner firm at least once a year.

Some partner firms have also visited focal firms in the UK (A1, E1, I1, J2). The main purpose of this has been to examine growing techniques and technology. Many firms have also taken their partners to their multiple retail customers and shown them the product in-store. The firms that have done this have felt that this is an extremely important way for their partners to understand their businesses and business needs.

All alliances also had contact to review the business. This usually comprised a formal meeting to discuss business needs for the forthcoming season and as such was usually annually or seasonally.

Finally, there were various levels of informal contact between partners. In close partnerships, formal site meetings or business reviews were followed by informal socializing between partners. A number of firms highlighted the importance of the extent of discussions over dinner rather than in pack-houses. One alliance, A1, had involved all the members of the partner firm on extended visits to the focal firm to learn English.

Uncertainty of Outcome

Uncertainty of the outcome of the transaction was measured by examining the form and ease of monitoring of alliance partners and the need for formal documentation and specific terms and conditions (Bucklin and Sengupta 1993; McNaughton 1996). It was proposed that strategic alliances are used when these alliance partners are difficult to monitor and there is a need for documentation to negate uncertainty in the relationship (Williamson 1975, 1985). There were very few formal contractual

obligations within the partnerships studied. Only one of the alliances has a formal contract (H1). This is a 5 year contract with a 2-year get-out clause. This is to cover capital sunk into the project by the focal firm, but it is not a joint venture. None of the UK firms have a supply contract with their customers. Although most of them have programmes there is no certainty of the relationship continuing. Therefore none of them are in the position to have a contractual relationship with their overseas alliance partners. That said, most firms viewed their relationship with their alliance partners as potentially long-term relationships. Only one firm alluded to the inherent risk of having no contracts between partners (Firm B). This firm noted that:

“The problem with a partnership is that it can disappear overnight. They (partner firm) might decide to set up their own marketing organisation in the UK...in which case we are back where we were 20 years ago with lots of overheads and nothing to cover them.”

All the alliances had some written documentation detailing other aspects of the relationship. There were seasonal programmes agreed to by alliance partners. These detail expected weekly volumes required over a season. With the exception of one alliance (N1) prices are negotiated on an ongoing basis and are not part of any formal documentation. Written documentation also existed to cover any capital investment. Standard operating procedures and product protocols were agreed between firms and documented. All firms had agreed and documented exclusivity of the partner firm's supplies into the UK. Most other working practices tended to be based on informal understanding and not in any formal documentation.

Trust emerged as a key factor in the relationships. Most growers worked on a basis of open and honest relationships and regular contact as a means of leading to trust between partners to perform. Given the type of product being dealt with and the close involvement of the end customer it was felt that it would become quickly apparent to all if something was going wrong with the relationship.

Most firms felt that the relationships would not work with formal documentation. Firm I is typical in saying:

“We don’t have tick lists, that just intimidates people.....it is much more an informal discussion.”

Most felt that the relationship had to work on trust that both parties are committed to the relationship or it just wouldn’t work. Firm B encapsulated this:

“The trust is on each other as human beings. I don’t believe that strategic alliances work unless the chemistry is right between the interested parties. The best alliances are unstructured, loose, not written down but based on a mutual trust and acceptance of each others position, point of view and efforts. That is what we have.”

In all but one alliance, the prices that the alliance partner receives for product is negotiated with the focal firm based on the prices the focal firm negotiates with their multiple retail customer. The focal firm takes an intermediary cut of the price negotiated with the multiple retailer and will pay the partner firm the difference. In one alliance (R2) the multiple retailer negotiates prices directly with the partner firm and the focal firm then adds on an intermediary cost. Prices are generally agreed on a weekly basis. Most partner firms trusted the focal firms to give them fair prices within the agreement. Firm B notes of their alliance partner that:

“They never check that we return them the right money. They have a total trust in us which is quite something.”

Only one firm explicitly stated that their partner firm verified prices received using a benchmark firm (H1):

“Whilst they trust us to give them true prices they do their own verification. There is a company in Motril that they use as a benchmark.”

Most firms said that they were open with their partners. It was felt that both sides had to be open and committed to make the relationship work. There were very few formalised monitoring procedures in place. Nearly all firms trusted their partners to perform. Those that did monitor were those that had had their trust broken by other bad experiences of alliances (G1-G4, N1).

Firms formed strategic alliances rather than traded openly in order to be able to have more control over the tight specifications and standards to which they had to work to satisfy their end customer. Strategic alliances were formed because firms felt that they could not ensure consistent standards through a trading relationship. The ventures carried a level of risk in that the focal firm's whole relationship with their end customer was dependent on the success of the partnership. By bringing the partner firm into a relationship they made the partner firm also dependent to a greater extent on the success of the relationship.

However, other factors in the relationship make it quite low risk. As noted above, investments by the focal firm in the alliance tend to be small and the contractual basis of the partnership is non-existent, making for easy exit from the partnership. The specific level of risk to the individual grower is thus dependent on the strategic importance of the specific alliance in terms of supplies to the end customer, ease of replacement and the dependence of the grower on the end customer.

Summarising, the support for this proposition is mixed. The choice between expansion abroad or forming a strategic alliance which is central to transactions cost theory was not an option open to most firms in our study because of the prohibitive costs of internal expansion. In addition, expansion was seen as a high risk venture in an uncertain market-place. It was also seen as a much slower means

of achieving the aims of 12-month supply of product. A number of firms did feel however that internal expansion provided more control over supplies than working through alliances and given that they were not in a position to expand, were looking at setting up more formal ventures with equity investment to give them greater control over operations. The need for control was shown to be influenced by the type of product traded and the location of production.

The influence of levels of transaction costs on a firm's motivation to form an alliance is unclear. Levels of asset specificity in the industry are increasing, albeit from a relatively low base. Frequency of interaction is high, with daily contact and the need for regular visits between partners. These are both a result of the need by the focal firms for control over the specifications and standards of the product that they are supplying to their multiple retail customer. However the controls on the alliance put in place by the focal firms tended to be very informal. As noted above, most alliances operated with no contracts or formalised monitoring procedures. Instead, the partnerships worked informally, with trust between partners being crucial. Partners trusted each other to put their best into the alliance. Trust was nurtured through regular and open contact and the knowledge that it would become quickly apparent if something was going wrong.

Proposition 2: **Firms are motivated to form strategic alliances to access resources and achieve strategic competitive advantage when these resources cannot be acquired through market exchange or internalization.**

As discussed in Chapters 2 and 7, previous empirical research has examined the possession of and need for various resources as motivating factors in alliance formation (Barney 1991; Berg, Duncan and Friedman 1982; Hagedoorn 1993; Mariti and Smiley 1983; Pfeffer and Salancik 1978). It is proposed that the heterogeneous

possession of resources leads to strategic interdependence between firms and that this strategic interdependence leads firms to form alliances. Various factors have been proposed as leading to strategic interdependence between firms. These include country-specific resource advantages (Shan and Hamilton 1991), the distribution of strategic capabilities (Nohria and Garcia-Pont 1991), human resources (Combs and Ketchen 1999; Rasheed and Geiger 2001), technical resources (Rasheed and Geiger 2001) and competitive and demand uncertainty (Burgers, Hill and Kim 1993).

In Chapter 7 the specific constructs and measures used in previous work was examined and the choice of constructs and measures used in our research justified. Thus strategic interdependence between alliance partners has been assessed by examining the relative size and performance of focal firms (Burgers, Hill and Kim 1993); the relative financial attributes of alliance partners (Barley, Freeman and Hybels 1992; Gulati 1995; Kogut, Shan and Walker 1992); organisational niche (Astley 1985; Baum and Singh 1994; Fombrun 1986; Gulati 1995; Hannan and Freeman 1977) and organisational compatibility (Achrol, Scheer and Stern 1990; Bucklin and Sengupta 1993; Ruekert and Walker 1987).

Competitive Uncertainty

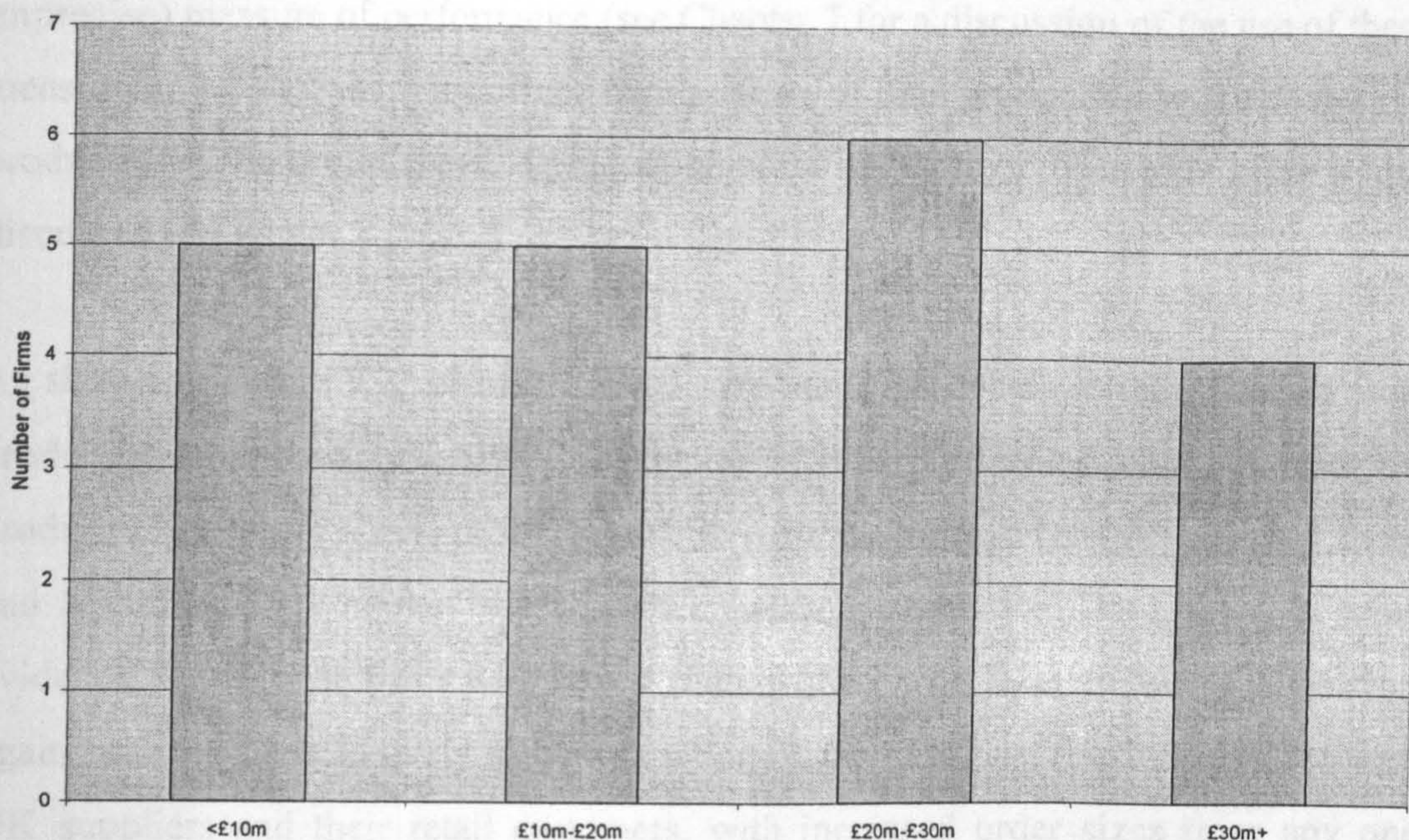
The notion of competitive uncertainty is discussed in Chapter 2 (Contractor and Lorange 1988; Kogut 1988; Pennings 1981; Pfeffer and Nowak 1979; Pfeffer and Salancik 1978). There it is argued that competitive uncertainty motivates firms to enter into alliances with each other in order to reduce uncertainty by reducing competition. Within a single industry the competitive uncertainty facing a firm varies with its position within the industry's size distribution (Burgers Hill and Kim 1993). Accordingly, so does the firm's incentive for entering into an alliance to reduce competitive uncertainty. Specifically it is argued that the incentive to enter into an alliance to reduce competitive uncertainty is greatest for intermediate sized firms and least for smallest and largest firms in an industry.

Firm size is proxied here by turnover, following Gulati (1995) and discussed in Chapter 7. As shown in Figure 9.1 the sample does seem dominated by the larger and medium-sized firms in the industry. As noted in Chapter 8, 10 Firms had turnovers over £20 million, with a further 5 with turnovers between £10m-£20m. Only 5 firms had turnovers below £10m. This compares to the total industry where over half of all producers had turnovers of less than £100,000 per annum (Keynote Report 2000) and where only 5 fruit and 60 vegetable growers in the UK had sales of more than £5 million in 1999. By extrapolating, our sample of 20 producers represents just under a third of the largest producers¹ in the industry

Although our sample is dominated by the larger firms in the industry, our data does not necessarily support a simple link between firm size and the motivations to form an alliance. The dominance of our sample by the largest firms in the industry was related to the fact that these were firms choosing to form strategic alliances to maintain supplies for their major retail customers. These tended to be the largest firms in the industry and the key producers in their product area. The multiple retail customers have reduced their number of key suppliers and required larger volumes from these suppliers (discussed in detail in Chapter 4). UK retailers are likely to select suppliers who can offer large volumes of UK product. In turn also, larger grower businesses are more likely to be able to handle the relatively sophisticated quality control and scheduling associated with dealing with supplies from non-UK companies. It is very much in their interests to do this effectively, with a wide range of close and secure overseas resource links to avoid being cut out of the overseas supply chain by direct dealing between UK retailers and overseas growers.

¹ Average turnover of more than £5 million.

Figure 9.1 Turnover of Focal Firm 1999



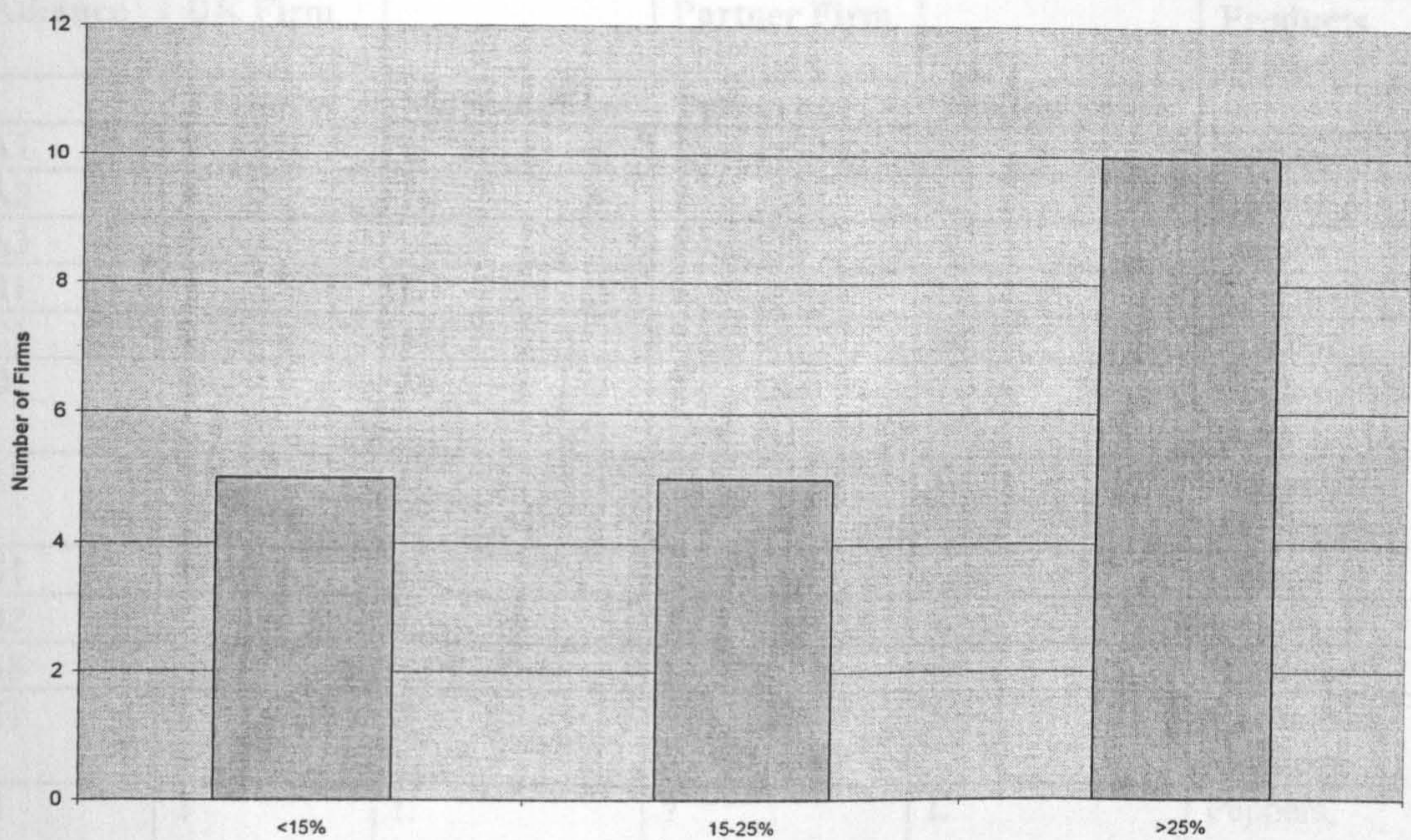
Demand Uncertainty

The notion of demand uncertainty is discussed in Chapter 3 (Burgers, Hill and Kim 1993; Kogut 1988; Nohria and Garcia-Pont 1991; Porter and Fuller 1986). Specifically it is argued that demand uncertainty motivates companies to enter into alliances and gain access to capabilities to cope with uncertainty. However, firms will only enter into an alliance if there is a clear incentive as they are prone to failure (Harrigan 1988), difficult to manage (Killing 1983), demand attention from top management (Berg and Friedman 1980; Koot 1988) and decrease organizational autonomy (Aldrich 1979; Provan 1982). It is argued that within a single industry, poorer performing firms have more incentive to enter an alliance than more efficient ones. This is due to the fact that poorer performing firms are probably less able to deal with the adverse consequences of demand uncertainty than their more efficient competitors (Burgers, Hill and Kim 1993).

Firm performance is measured by market share following Burgers, Hill and Kim (1993). This is closely linked to turnover but it is also a crude (and admittedly imprecise) measure of performance (see Chapter 7 for a discussion of the use of these measures). Market share is defined here as share of total production in the country of production. The use of share of production output as a proxy for market share is also discussed in Chapter 7.

As shown in Figure 9.2, 10 of the firms were major producers in their product area, producing more than 25% of UK production of their product category. A further 5 produced between 15-25% of UK production of their product category. Only 5 firms had less than 15% market share of their product category. Thus, there is some evidence that it is the firms with largest market share who form alliances. However, again, market share is likely to be a function of the changing relationships between UK suppliers and their retail customers, with increased order sizes from any one supplier and a reduction in the total number of suppliers for a product line. As discussed in Chapter 4, the industry is characterised by a polarization of firms, with a few large firms dominating production in each product category and then a large number of much smaller firms with low levels of production. As noted in Chapter 4, 11% of UK horticultural holdings account for 69% of the total land area under horticultural production (DEFRA 2000). It is argued here that it is these larger suppliers who are supplying the retail multiples who are the ones who are developing alliances to maintain their multiple retail relationships.

Figure 9.2 Market Share of Focal Firm 1999



Financial Attributes

The significance of partner firms' relative financial attributes in indicating strategic interdependence was discussed in Chapter 3 (Burgers, Hill and Kim 1993; Gulati 1995; Paulson 1976; Rasheed and Geiger 2001). Specifically it was asserted that firms seek partners with different attributes who are unlikely competitors and will have complementary resources (Burgers, Hill and Kim 1993, Paulson 1976). The relative financial attributes of the focal firm and their alliance partners that were examined were firm size and performance. These were proxied by turnover and market share as before, but here the focus is on the relative size and performance of the focal firm and their alliance partners.

There are only 3 alliances where the focal firms knew their partner's turnover accurately (Table 9.6). This is interesting in itself in that the firms did not feel the need to know these financial details when entering into the alliance. The exact

Table 9.6 Financial Indicators, Alliance Partners

Alliance	UK Firm		Partner Firm		Products Traded
	Turnover	Market Share	Turnover	Market Share	
A1	2	L	1	L	Lettuce
A2			?	L	Onions
A3			?	L	Onions
B1	3	L	?	L	Tomatoes
C1	2	M	?	S	Broccoli
D1	2	M	?	?	Apples and pears
E1	3	L	?	L	Cucumbers and peppers
G1	3	L	?	L	Onions
G2			?	L	Onions
G3			?	S	Brassicas
H1	1	S	?	S	Cucumbers, tomatoes
I1	3	L	?	L	Peppers, tomatoes, cucumbers, aubergines
I2			3	L	Little gem, lollo rosso, celery, cherry tomatoes
I3			?	S	Raddichio
I4			?	L	Flavoured tomatoes
J1	3	L	?	S	Peppers, cucumbers, aubergines, tomatoes
J2			?	L	Cucumbers, peppers, tomatoes
J3			?	L	Iceberg, celery
J4			?	S	Speciality tomatoes
K1	1	S	?	?	Brassicas
L1	2	M	?	L	Broccoli, artichokes, courgettes
L2			?	S	Cabbage
L3			?	L	Cauliflower
M1	1	S	?	S	Iceberg

M2			?	S	Iceberg
N1	3	L	?	S	Spray carnations
O1	1	L	?	M	Swedes
O2			?	S	Swedes
O3			?	S	Swedes
P1	3	M	1	L	Broccoli
R1	3	L	?	?	New potatoes
R2			?	L	Jersey royal potatoes

Key: Turnover: 1<£10m; £10m<2>£25m; 3>£25m

Market Share: S<15%; 15%<M<25%; L>25% (defined as own production as % of total country's production of product)

?: Focal firm did not know information

market share of partner firms was also not known, although most focal firms did have some idea of firm size and production. Of the alliances, 17 were with large firms who were major producers of their product in their production area. However there are a sizable number of alliances with small firms (13). The association between size of focal firm and size of partner firm is affected by the type of product procured and the number of alliances a firm has for any particular product. Some focal firms have a number of alliances with firms of differing sizes (G, I, J, L, O). Some large firms have alliances with major producers (A, B, D, E) and some with small (C). For some of their key products the larger UK firms need alliances with firms of a certain minimum scale to be able to procure the volumes necessary to satisfy customer demand (Table 9.6). For other niche products they can have alliances with smaller firms (I, J). The decisive factor is the ability to produce consistent quality and sufficient volumes of product when needed.

Allied to this is the fact that all firms prefer to deal with only 1 or 2 partners for a specific product at a specific time of year. Mirroring movements at the other end of

the supply chain, producers are reducing the number of key suppliers of product. With a smaller number of suppliers they are better able to implement the technical specifications of the product and monitor. A second supplier is sometimes used to spread both geographical risk in supply of product, or because the first supplier has reached capacity. A couple of other firms currently have a second supplier because the first relationship is ending and it is a transitional move (M, O). Most UK firms do not see the need for a second supplier.

The relationship between relative financial attributes and the propensity to form an alliance is more complicated than suggested, dependent on the specific product needs of the focal firm. Our examination here is on the perspective of the purchaser not the supplier in contrast to most previous research which has examined alliance formation from the suppliers perspective.

The data also shows the significance of relationships with a number of suppliers on the strategic options of the firm. Focusing on the single dyad is shown to be too simplistic, in that the motivations for formation of an alliance are affected by the other supplier relationships that a focal firm has. Most of the literature in this area focuses on the dyad and takes no account of the other relationships the firms are involved in.

Organisational Niche

Organisational niche refers to a set that includes firms possessing similar sets of resources and capabilities (Gulati 1995; Hannan and Freeman 1977). In Chapter 2 it was argued that firms with differing capabilities (belonging to different niches) are likely to share greater interdependence than firms with similar capabilities (belonging to the same niche) and are thus more likely to form strategic alliances (Astley 1985; Baum and Singh 1994; Fombrun 1986). The constructs and measures used to proxy organizational niche in previous work were discussed in Chapter 7 as was the justification of the choice of constructs and measures in our research.

Strategic alliances have been formed with partners from around the world, although they are predominantly in Europe, particularly Spain (8 outwith Europe, 20 in Spain, 5 other Europe, see Table 1 in Appendix 4). This is primarily a function of suitable growing conditions for particular crops. Spain in particular has good growing conditions at the time of year when product is needed. But there are a number of other factors. Some crops are marketed through export bodies and therefore the opportunities for alliances are limited (Enza in New Zealand; Capespan in South Africa); and growers in some countries are forced to trade through auction houses (France, Holland at the time of our study). Thus the choice of possible partners for the UK focal firms is constrained by external structural characteristics (this is discussed in detail in Chapter 4). Some countries also seem less attractive source choices due to suspicions about cultural incompatibility or trust. Spain may also be a common partner because of a good balance of needs and abilities. Spanish partners have the resources (in terms of land, growing conditions etc.) but often need technical input from the focal firm to produce product to the specifications necessary to enter the British market. With other more developed producer countries this is not always the case.

All the alliances are between UK growers and growers from overseas, except one overseas partner who is an exporter (L3). This partner is a French exporter. The focal firm had to deal with him because it could not deal with a grower directly in France but had to trade through a licensed exporter (see Chapter 4). Growing is the main function performed by both the UK and partner firms, except for the exporter (L3) (Table 9.7). Some of the UK firms are also involved in propagation of seeds (B, K, N), both for themselves and for their alliance partners. Some are also involved in some primary processing and pre-packing of product (I, J, K, O, P, R). This ranges from producing pre-packed salads and mixed vegetable packs to one of the larger firms (I) who was developing its own processing site at the time of the study.

Table 9.7: Scope of Operations, UK Firms

Firm	Growing	Marketing	Processing	Propogation	Other	Partner Firm(s)
A	√	√				Grower
B	√	√		√		Grower
C	√	√				Grower
D	√	√	√			Grower
E	√	√				Grower
F	√	√				Grower
G	√	√				Grower
H	√	√				Grower
I	√	√	√			Grower
J	√	√	√			Grower
K	√	√	√	√	√	Grower
L	√	√				Grower L3: Exporter
M	√	√				Grower
N	√	√		√		Grower
O	√	√	√			Grower
P	√	√				Grower
R	√	√	√			Grower

All these alliances are with producers procuring product for highly specific times of the year when the focal firms are unable to produce themselves. Although both partners are growers the UK growers are actually performing a marketing function for their partners whereas the partner firms are performing a growing function. The UK firms are handling product for the end customer. Most firms receive product loose into the UK and pack and label it in their own packhouses. Some are also be involved in primary processing of product as described above. Thus the alliances are between non-competitors at the times of the year they are functioning. Some subsequent problems in the functioning of alliances have been due to this distinction being blurred, such as with lengthening growing seasons in both the UK and in the partner's country. This is discussed in the success and development of strategic alliances (Section 9.2).

The partnerships are between firms from different countries of origin who are performing different functions. They are offering complementary resources and skills and are not in direct competition with each other. Where this distinction becomes blurred the mutual interdependence between the firms becomes weaker and the firms become competitive and the alliances can break down.

Organisational Compatibility

Organisational compatibility refers to the complementarity of goals and objectives; operating philosophies and corporate cultures of alliance partners (Achrol, Scheer and Stern 1990; Bucklin and Sengupta 1993; Ruekert and Walker 1987). The measurement of organizational compatibility used in this and other empirical work is discussed in Chapter 7.

Most firms cited similar goals and operating philosophies as key criteria in choice of partner. Of the 32 alliances 30 were ones where firms said they had similar goals and operating philosophies. Firms were motivated to form alliances with particular firms partly based on the subjective judgement of key people in the focal firm (usually a director) on whether there was compatibility between the two firms. This judgement was described in a number of the interviews as 'gut feeling'. The feeling that firms were both working towards the same goals instilled trust in the relationship. This is of particular importance in the fresh produce industry where all the strategic alliances were notable for the absence of any contractual agreements. All UK suppliers worked without contracts with their customers and their alliances operated on the same basis. Trust played a critical factor in the day to day operations of the business. In this context, personal relationships and both alliance partners wanting similar goals were highly important. Firm I described their first alliance as a "meeting of minds."

Firm H highlighted the importance of organizational compatibility:

“We are a young company in terms of the people involved and our suppliers. We are looking for a long future. So are our partners. There is a father at the head of the business (partner firm) and then two sons, one running the commercial side and the other the growing side who are also early to mid thirties. We all have similar aims and aspirations.”

There were only 2 alliance relationships where the focal firms said they did not share similar goals and operating philosophies with their partners. One of these (M1) was an alliance that had been formed through an established intermediary for another part of their business. This alliance was ending at the time of our study because the two partners had differing views of the future of the business relationship. Specifically the partner firm had been in negotiation with the focal firm's end customer about supplying them directly. The only other relationship where goals and operating philosophies were not deemed important (R2) was one where the relationship had been initiated by the UK multiple retail customer and they had chosen the partner firm. Whilst it was a long-standing relationship (10 years) and the focal firm was happy with the relationship the managing director said it was very different from their other strategic alliance. With this alliance (R2) the partner firm graded their own product by size and all product development is done between the UK multiple customer and the partner firm. The focal firm pack and label product and are involved in packaging development. The managing director noted that:

“The relationships with R2 and R1 are very different. The relationship with M2 is strictly business to business whereas that with M1 is quite friendly. It is a factor of the nature of the people we are dealing with....The relationship with Spain is our own, the relationship with R2 is the supermarkets.”

Discussions suggested that management styles were a less critical factor to firms, provided that there was overall goal compatibility (23 of 32 alliances). That said,

there was a feeling that if the personal chemistry between the firms was not right the partnership would not work. Mutual understanding, respect, attitude and willingness to develop the partnership were also cited by most firms as highly important.

To summarise, there is direct support for the proposition that strategic interdependence is a motivating factor in alliance formation supporting previous empirical work (Achrol, Scheer and Stern 1990; Astley 1985; Barley, Freeman and Hybels 1992; Baum and Singh 1994; Bucklin and Sengupta 1993; Burgers, Hill and Kim 1993; Fombrun 1986; Gulati 1995; Hannan and Freeman 1977; Kogut, Shan and Walker 1992; Ruekert and Walker 1987). All the alliances under study were formed because of the supply needs of the focal firm which could be met through an alliance with their partner and the market needs of the partner firm which could also be supplied through an alliance with the focal firm.

However, the support for the specific measures of strategic interdependence tested above was more mixed. Support for the importance of competitive and demand uncertainty as motivating factors, measured by examining firm size was inconclusive. Our sample was dominated by the larger firms in the industry who had both relatively high turnovers in comparison to the industry average and also large market shares of the product they were producing and procuring through their alliance relationships. However, as argued above, this is a function of the nature of the supply chain in the UK industry. Specifically, the firms in our sample were choosing to form strategic alliances in part to satisfy supply demands from major retail customers. These tended to be the largest firms in the industry and key producers in their product area. Thus a minimum firm size was a pre-requisite condition of a supply relationship with a major UK retailer for a large number of the firms in our study. Thus the significance of firm size as a motivating factor in alliance formation cannot be assessed independently of this.

There is no direct link either between the financial attributes of the focal and partner firm as postulated. Firm size was not seen as an indicator of competition. Firms did

not actively seek partners with differing firm size, rather there was a mixture of firm size relationships in our sample, with some firms in relationships with firms of a similar size and some with larger or smaller firms. Those with a number of alliances often had partners of varying sizes. Firms seek partners who can provide them with sufficient volumes of product to the specifications needed. For some producers in key product areas this meant finding partners with similar resources to themselves. For other products, a smaller firm may be able to satisfy volume demands. The size of the partner firm was less important than the ability to supply the required product. This was illustrated by the fact that in most cases focal firms did not know their partners turnover or market share accurately.

The concept of analyzing organizational niche as a means of assessing strategic interdependence and thus a motivation for alliance formation (Astley 1985; Baum and Singh 1994; Fombrun 1986; Gulati 1995; Hannan and Freeman 1977) was given some support. The alliances were between UK growers and growers from overseas. Although the primary function for both partners was growing product (with one exception), the UK growers were performing a marketing function in the alliance and their overseas partners, a growing function. In this way the partners are offering complementary resources and skills and are not in direct competition with each other. Where this distinction becomes blurred the mutual interdependence between the firms becomes weaker and the firms become competitive and the alliances can break down.

Finally, the importance of organisational compatibility in the motivations to form an alliance was supported (Achrol, Scheer and Stern 1990; Bucklin and Sengupta 1993; Ruekert and Walker 1987). Of particular importance were similar goals and operating philosophies. There were only 2 alliance relationships where the focal firms said they did not share similar goals and operating philosophies with their partners. For the others, similar goals and operating philosophies were found to be key criteria in the choice of an alliance partner. The feeling that firms were both working towards the same goals instilled trust in the relationship, of particular

importance in the fresh produce industry where all the strategic alliances were notable for the absence of any contractual agreements. Trust was shown to play a critical factor in the day to day operations of the business. In this context, personal relationships and both alliance partners wanting similar goals were highly important

Proposition 3: The social network that a firm operates within influences both the motivations for firms to form alliances and the alliance opportunities made available to that firm.

The network perspective proposes that the social network that the alliance partners operate within influences both their motivations to form alliances and also the opportunities to form alliances (Giddens 1984; Gulati 1995; Gulati 1999; Khanna, Gulati and Nohria 1998). The social network is defined in Chapter 2 and refers to the prior direct and indirect relationships between firms that are used as an important source of information for firms about the reliability and capabilities of potential partners. The influence of the social network on various facets of alliance formation have been studied empirically by researchers. Some have examined the role of networks in the cumulative frequency of future alliances by firms (Cook and Emerson 1978; Gulati 1995; Kogut, Shan and Walker 1992; Eisenhardt and Shoonhoven 1996); others to alliances with new partners (Walker, Kogut and Shan 1997); others to the precise nature of inter-firm relationships (Gulati 1995; Gulati and Singh 1998); and others to their effects on the structure and performance of alliance relationships (Zaheer and Venkatraman 1995; Dyer 1996).

Below, we examine the factors that influenced alliance formation in our study and also the process of alliance formation. The focus of most empirical research has been on motivations with little empirical work on the process of formation. It is argued below that understanding how an alliance is formed is linked to the motivations to form alliances and will add to the richness of the data obtained. Thus we examine

both the motivations to form alliances and the process of alliance formation and any links between the two.

Motivational Factors

The specific network influences assessed were prior knowledge (Bucklin and Sengupta 1993; Contractor and Lorange 1988; Gulati 1995; Nohria and Garcia-Pont 1991) and third party ties (Gulati 1995). Prior knowledge was measured by examining the extent of prior business relationships between the two firms, examining both the extent of previous alliances and also all other business relationships (Bucklin and Sengupta 1993; Contractor and Lorange 1988; Gulati 1995; Nohria and Garcia-Pont 1991). Indirect ties have been examined by measuring the number of common third party ties partners shared prior to alliance formation (Gulati 1995). These are defined after Gulati (1995) as firms' indirect connections through common partners. The specific constructs and measured used in prior empirical work and in our study are discussed in Chapter 7.

Most firms had some prior knowledge of their partner before the alliance was formed. Thirteen of the alliances were where firms had a prior trading relationship with their partner which they then developed into an alliance. Fourteen learnt about their potential partner through a third party tie (either an agent, wholesale customer, subsidiary, seed company or multiple retail customer); 4 firms learnt about their potential partner through informal networks within the industry; and only 2 had no previous knowledge of their alliance partner and found them through cold-calling (Table 9.8). None of the firms had had previous alliances with their partner. However, this is mainly due to the fact that most firms had very little alliance activity before these current alliances.

Those alliances developed from trading relationships supported the arguments in the literature for the beneficial effects of prior knowledge. First, it emerged very strongly

Table 9.8 Prior Knowledge of Partner

Alliance Code	Previous Alliance(s) with Partner	Previous Trading Relationship with Partner	Other Previous Involvement with Partner	No. of 3 rd Party Ties	Type of 3 rd Party Ties
A1	No	No	No	0	N/a
A2	No	No	No	0	N/a
A3	No	No	No	0	N/a
B1	No	No	No	0	N/a
C1	No	Yes	No	0	N/a
D1	No	Some	No	?	?
E1	No	Yes	No	1	Export agent
E2	No	Yes (when different company)	Personal contact between firms	1	Export agent
G1	No	No	No	1	Wholesale customers
G2	No	No	No	1	Wholesale customers
G3	No	No	No	1	Agent
H1	No	No	No	1	Agent who was family friend
I1	No	Yes	No	0	n/a
I2	No	Yes	No	0	n/a
I3	No	Yes	No	0	n/a
I4	No	Yes	No	1	Subsidiary
J1	No	Yes	No	0	n/a
J2	No	Yes	Personal contact between firms	0	n/a
J3	No	No	No	0	n/a
J4	No	No	No	0	n/a
K1	No	No	No	1	seed companies
L1	No	No	No	0	n/a
L2	No	Yes	No	0	n/a
L3	No	Yes	No	0	n/a
M1	No	No	No	1	UK grower/marketing firm - customer of focal firm
M2	No	No	No	1	Importer
N1	No	No	No	0	n/a
O1	No	No	No	1	Wholesale customer
O2	No	Yes	No	0	N/a
O3	No	No	No	1	Multiple customer
P1	No	No	No	2	Growers' association, importer
R1	No	Yes - but in other products	No	0	N/a
R2	No	No	No	1	multiple customer

that for these firms it was much easier to try and form a relationship with someone you knew rather than approaching someone cold. This was for a number of reasons. First, a number of firms argued that it was less risky to form an alliance with a prior partner than someone new (C, I.) (Eisenhardt and Schoonhoven 1996; Zajac and Olsen 1993). Some also felt that prior trading relationships meant that firm's had better knowledge about a partner's resources and capabilities (Gulati 1995; Kogut, Shan and Walker 1992). The alliances that had developed from prior trading relationships were all for the same product and customers that were being supplied through trading. Thus the partner firms already had some knowledge about the product quality specifications needed by the focal firms and the focal firms had some knowledge of the ability of the partner firms to provide that quality. This was an important factor in partner choice, even if the subsequent alliance meant that the definition and monitoring of product specifications were to change.

Previous good relationships also helped to instill a level of trust between the alliance partners (Bradach and Eccles 1989; Gulati 1995; Gulati, Nohria and Zaheer 2000). Part of the motivation to form an alliance with a partner with whom they had had a prior trading relationship was the assumption that there was a presence of trust in the relationship that would help to mitigate concerns that the partner firm would abuse the relationship, particularly important in this industry where the relationship is non-contractual. Prior business knowledge leading to trust was seen to be a critical factor. Trust was seen to be one of the key criteria in choice of firm. Finally, a number of firms argued that prior relationships meant that their partners had a greater awareness of the correct rules, routines and procedures needed in the relationship and that they therefore didn't need costly controls (Arnaud and Khanna 2000; Gulati and Singh 1999; Gulati 1993; Westney 1988).

Firm I encompasses these reasons:

“Our partnership strategy is a development of our trading relationships. These are pushed further. We like to try and open doors we already know about rather than going in cold. I like going into areas that I know and trust”.

Most of these trading relationships evolved into alliances over time. In some cases this was a strategic decision (C, I, J, L, O). In others there was not a conscious decision to form an alliance, rather an alliance developed out of a trading relationship in an unstructured way (E).

Some firms make a conscious strategic decision that all their alliances are developments of trading relationships (E, I). For most it is not that clear cut with some alliances formed with previous trading partners and others not. The most common pattern is that the first alliance develops from a trading relationship with other similar trading relationships curtailed. Then when a firm has either reached capacity with Partner 1 or wants to expand into other products it approaches ‘new’ firms, but still ones that it has some prior knowledge about (see above).

Those firms who have not developed alliances from trading relationships have, with one exception, not had the appropriate trading relationship to develop, that is they have had no previous involvement in the country concerned. There is only one firm (K) who made a conscious decision not to use their existing trading relationships when looking for an alliance partner. For them it was nothing to do with bad experience or opportunism, rather a matter of ethics:

“We have not tried to form a relationship with our trading partners. We didn’t look at anyone that we had traded with through our importer because I feel that ethically it wouldn’t be correct to do that. I would feel like I was taking someone else’s business away from them. If our current supplier decided to jump ship and

approached us direct, then obviously it is something we would look at.”

A sizeable proportion of firms did not have prior knowledge of their alliance partners through a trading relationship or had any other previous involvement with their partner (Table 9.8). The majority of these firms used other information from their position in the social network to aid their decision of choice of alliance partner. The importance of common third party ties was highlighted in other empirical research and is supported here.

In 14 alliances there was some third party tie prior to the alliance. In 6 cases this was an importing or exporting agent; in 3 a wholesale customer; in 2 a multiple retail customer; in 1 a subsidiary; 1 a UK grower customer; and 1 a seed company. All these ties helped in providing knowledge of potential partners to the focal firm and in making firms feel that their partners would bring more goodwill to the alliance than if the partner came to the alliance cold, supporting other studies (Burt and Knez 1995; Kreps 1990; Portes and Sensenbrenner 1993; Raub and Weesie 1990; Van de Ven 1976).

The most important facet of common third party ties that emerged from our research was that it made the focal firms aware of potential alliance partners (Van de Ven 1976). This network information provided by third party ties was critical in these cases to an alliance being formed with the chosen partner. Firm H's comments are typical:

“We got to hear of them (our partner) by talking to an agent working in Spain who happened to be a friend of the family. He brought the two of us together.....Both of us talked to him about possible contacts at the same time....”

The importance of this aspect of the social network is underlined by the fact that most firms who used contact information from third parties did not look outside this initial information base when choosing partners. Thus most firms selected partners from a limited number, often only visiting one firm. This is discussed in detail in the following section on the process of alliance formation.

Whilst the focal firms felt that a third party tie helped to add additional knowledge about a partner and their skills and resources, the specific reputational effects of third party ties on alliance partner behaviour (Burt and Knez 1995; Kreps 1990; Portes and Sensenbrenner 1993; Raub and Weesie 1990) did not emerge in the interviews. Third party presence was not cited as a factor in establishing trust in alliance partner's behaviour. However, this may be because the informal network in the industry is so strong. The industry picture that emerged from the interviews was one where there is a very strong informal grapevine both between growers and also along the supply chain, where information about individual firms is relatively accessible. When a firm abuses a relationship, it is quickly discovered and the affects on the firm's reputation swift. For example, Firm M discovered on the grapevine that one of their alliance partners was abusing their relationship and retribution was swift:

“We got wind from one of our customers that our Spanish grower was trying to approach our customer base directly....We went to see them and asked them about this directly...The upshot of this was that we said that whilst we had the current season to safeguard we could not go through any more seasons knowing this was in the frame. We took the decision at that point to come out of the partnership and that we needed to set something else up.”

The Process of Alliance Formation

Empirical research on the affect of social networks on the process of alliance formation is very limited (Cyert and March 1963; Doz 1996; Gulati 1995; Hamel 1991; Nelson and Winter 1982; Ring and Van de Ven 1994). We argue below that understanding how an alliance is formed is linked to the motivations to form alliances and will add to the richness of the data obtained. The specific parts of partner selection assessed were the selection process and the selection criteria.

Most alliances were initiated by the focal firm (Table 9.9). Of the others, 5 were initiated by multiple customers, 4 by an intermediary, 2 by the partner firm and 1 by the focal firm and importing agent together.

End customers tended to be very hands-off in choice of partner. In nearly all of the partnerships, customers only became involved after the choice of partner had been made, usually by auditing the partner firm, although there were exceptions (E2, R2). Firm A was typical in saying:

“multiple retailer involvement in choice of partner was that it was up to us (Firm A) to establish a link and then openly discuss the opportunities of these links with the buyer....the buyers will often send a technologist out and make a secondary assessment.”

There were various means of selection of potential partners but what is notable about these partnerships is that there does not seem to be a systematic selection process or any exhaustive searching. Typically a firm would decide on a limited number of possible alliance partners. As described above, in a lot of cases this would be a firm or firms that the focal firm already had some prior knowledge of, either through previous trading relationships or third party ties. They would then conduct a site visit and discuss the volumes and specifications of product required. Of the alliances in our study, 23 were formed with the focal firm only visiting one company. Of the rest 4 were formed with visits to 4 firms or less; 3 with visits to a number of firms and

Table 9.9 Partner Choice

Alliance code	Initiator of Alliance	Customer/ Third Party Guidance	Means of Initiation	Partner Selection	Knowledge of potential partner	Formality of Selection	Selection Criteria
A1	Firm	Vetted once choice made	by Firm	2 visits to 4 possible partners.	Informal industry information.	Informal	Technical skills, management competencies
A2	Partner	Vetted once choice made	Partner visited BG	BG visited partners site	Cold calling	Informal	Technical skills, management competencies, countries infrastructure
A3	Firm	Vetted once choice made	by Firm	Went to explore investment opportunities and visited every grower in region	Some prior knowledge	Informal	Framework of standards to build on
B1	Firm	Vetted once choice made	by Firm	Visited partner	Informal networks	Informal	Technical skills, management competencies, personal chemistry between parties
C1	Firm	Vetted once choice made	by Firm	Visited Spain 'vaguely' looking for a supplier.	Informal network and cold calling	Informal	Keen to meet requirements, expertise, climatic and locational advantages
D1	Firm	Vetted once choice made	by Firm	Visit site	Industry network	Informal	Attitude and technical excellence
E1	Exporting agent	Vetted once choice made	by Firm	Evolved from importing relationship	Prior trading relationship	Informal	Mutual understanding and respect, keen to meet qc and technical needs, whole firm interfaces well
E2	Multiple	Vetted once choice made	by Firm	Multiple chose			
G1	Firm	Vetted after first approaches made. Three-way relationship.	by firm	Developed from wholesale trading relationships. Followed up by company visits	Prior trading relationship	Informal	Expert in their own field, major producers, price
G2	Firm	Vetted after first approaches made. Three-way relationship.	by firm	Developed from wholesale trading relationships. Followed up by company visits	Prior trading relationship	Informal	Expert in their own field, major producers, price
G3	Firm	Became involved after relationship commenced	Through agent	Visited site	Through agent	Informal	Location, technical ability, local knowledge, price
H1	Exporting agent	No prior auditing. Did not visit until mid season (on	by Agent	Visited site	Through agent	Informal	Technical expertise, no other involvement in UK, similar aims and

Alliance code	Initiator of Alliance	Customer/ Third Party Guidance	Means of Initiation	Partner Selection	Knowledge of potential partner	Formality of Selection	Selection Criteria
		other supplier visits)					aspirations.
I1	Firm and Parent firm	?	by Firm and Parent firm	Visited their 12 suppliers in that area	Prior trading relationships	Formal analysis of who did the best job and who had the most potential	Technical capabilities, most efficient, office mentality. (Money can sort everything else out).
I2	Firm		by Firm	Visited site, offered increased volumes	Prior trading relationships	Informal	Technical capabilities, size
I3	Firm		by Firm	Visited site, offered exclusive business	Prior trading relationships	Informal	Technical capabilities
I4	Multiple		Firm through multiple	Visited site	Prior trading relationships	Informal	Technical capabilities
J1	Firm	Audited once choice made	Firm	Visited three existing suppliers	Prior trading relationships	Informal	Willingness to develop technical capabilities with HS's input and facilities with own capital
J2	Firm	Audited once choice made	Firm	Visited site and invited back to the UK to see production techniques	Prior trading relationship (when previous company)	Informal	Very forward thinking, willingness to develop technical capabilities with HS's input and facilities with own capital
J3	Partner	Audited once choice made	Partner had previously approached them and HS re-contacted	Visited site	Partner approached them	Informal	Technical skills, capacity, ability to invest, willingness to fix price (3 year)
J4	Firm	Audited once choice made	Firm	Visited site	Industry network	Informal	Technical skills, willingness to invest
K1	Firm	Vetted once choice made	by Firm	Visiting 2 growers in May	Through seed company contacts and cold calling	Informal	Technical specifications, traceability, minimum scale. Cost benefit analysis and personal factors subsequent to this.
L1	Multiple asked them to find Spanish	Audited once choice made	by Firm	Visited number of companies and chose two	Industry network	Informal - gut feeling	Technical specifications, management capabilities, set-up, exclusivity of

Alliance code	Initiator of Alliance	Customer/ Third Party Guidance	Means of Initiation	Partner Selection	Knowledge of potential partner	Formality of Selection	Selection Criteria
	grower						supply, personal chemistry
L2	Multiple asked them to find Spanish grower	Audited once choice made	by Firm	Visited number of companies and chose two	Known for 2 years	Informal - gut feeling	Technical specifications, management capabilities, set-up, exclusivity of supply, personal chemistry
L3	Firm	Audited once choice made	Firm	Developed from trading relationship	Prior trading relationship	Informal	Most reliable supplier
M1	Firm	Audited once choice made	Through another UK firm (intermediary for another part of their business)	Visited 2 growers	Industry network	Informal	Exclusivity of supplies, private grower group, technical ability
M2	Firm and importer	Audited once choice made	Through importer	Set up company contacts through importer	Prior trading relationship	Informal	Symbiosis of skills, local knowledge, same mentality
N1	Focal firm	Audited once choice made	by Firm	Cold called number of producers	Cold calling	Informal	Strict regulations on chemical usage, strong ethical policy, clean, nice people, both wanted to deal
O1	Wholesale customer	Audited once choice made	by Firm	Firm cold called and then visited site	Through wholesale customer	Informal	Quality. Price was secondary.
O2	Firm	Audited once choice made	by Firm	Visited site	Prior trading relationship	Informal	Already had trading relationship
O3	Firm	Audited once choice made	by Firm	Visited site	Through multiple customer	Informal	Multiples choice
P1	Intermediary	Audited once choice made	by Firm - put deal on table	Visited site	Industry network	Informal	Met criteria in terms of - delivery requirements, volumes, quality, personnel, growing ability.
R1	Firm	Audited once selection made	by Firm	Visited site	Prior trading relationship	Informal	Technical skills, number of grower members. Financial aspects are secondary.
R2	Multiple		Multiple insisted on relationship	Multiple chose	Long-standing relationship with multiple customer	Informal	Largest producer, long-standing relationship between partner and multiple customer

only 2 with visits to a region to explore opportunities without any definite pre-decision to form an alliance (A3, C1).

The key criteria in the selection of firms were technical skills and management competencies and the ability to produce sufficient consistent volumes of the desired product. As noted by Firms K and A respectively:

“Technical specifications are all important. Knowing that the supplier can achieve what the customer wants and that produce is grown to appropriate technical standards.”

“The choice of partner was based on their sheer technical skills. That is primarily the driving force. Product quality is number one. Everything else can be added or bolted on to that concept. The fundamental thing is that you get people with a vision of quality production. If you haven't got quality production you will not meet the demands and expectations of your clients.”

Other important factors were mutual understanding, similar aims and aspirations, personal chemistry, partner and focal firm interface, ability and willingness to develop the business, local infrastructure and location.

Product price was seen as something that was negotiable once the key criteria were met. Without the ability to produce sufficient volumes of the required product to appropriate standards, a potential partner would not be chosen.

All the partnerships, except one, were formed after a highly informal selection process. One firm conducted a formal analysis of who did the best job and who had the best potential out of their 12 existing suppliers in the area (I). All of the others were chosen following a highly informal selection process based on the judgment of

key people in the focal firm (usually a director), described in many interviews as 'gut feeling'. For these firms there was no formal selection criteria. As noted by Firm A:

“Our choice of partner was based on personal judgement and gut feeling that they had an experience and knowledge of the business that was driving it forward rather than any formal set of criteria.”

The evidence is that growers did not undertake deep or exhaustive analysis of potential partners. When they had found or knew of someone that was a potential alliance partner, they stopped searching. As noted above, most firms developed alliances with partners they already knew about. Thirteen were developments of prior trading arrangements and 14 were through other third parties. Those who developed an alliance with firms they had previously traded with did not look outside these relationships for a potential alliance partner. If they had more than one trading partner with the appropriate product specifications they chose one of these to form an alliance with.

Thus this proposition is supported. The importance of social structural explanations for alliance formation is highlighted here and with it the emergence of trust as a dominant factor in alliance formation. Giving empirical support to other's work (Bradach and Eccles 1989; Gulati 1995; Zajac and Olsen 1993; Eisenhardt and Schoonhoven 1996) these results illustrate the importance of information provided by the network that the alliance operates within and how critical this is as a basis in enhancing trust between potential partners.

The social network that the alliance partners operated within influenced both their motivations to form alliances and the opportunities to form alliances. Prior history was found to be a highly significant factor influencing alliance formation. It was shown to lead to a greater understanding of the resources and capabilities of the partner (Gulati 1995; Kogut, Shan and Walker 1992); to reduce the risks associated

with alliances (Eisenhardt and Schoonhoven 1996; Zajac and Olsen 1993); to instill a level of trust between alliance partners (Bradach and Eccles 1989; Gulati, Nohria and Zaheer 2000); and to heighten awareness of correct rules, routines and procedures (Arnaud and Khanna 2000; Gulati and Singh 1999; Gulati 1993; Westney 1988), supporting previous studies.

Third-party ties were also found to be important as a source of information. The most important facet of common third party ties that emerged from our research was that it made the focal firms aware of potential alliance partners (Van de Ven 1976). The importance of this aspect of the social network was underlined by the fact that most firms who used contact information from third parties did not look outside this initial information base when choosing partners.

Whilst the focal firms felt that a third party tie helped to add additional knowledge about a partner and their skills and resources, the specific reputational effects of third party ties on alliance partner behaviour (Burt and Knez 1995; Kreps 1990; Portes and Sensenbrenner 1993; Raub and Weesie 1990) did not emerge in the interviews. Third party presence was not cited as a factor in establishing trust in alliance partner's behaviour. However, this may be because the informal network in the industry is so strong. There is a very strong informal grapevine in the industry, both between growers and also along the supply chain, where information about individual firms is relatively accessible. When a firm abuses a relationship, it is quickly discovered and the affects on the firm's reputation swift.

The social network was also an important factor in the process by which these alliances were formed. UK growers did not undertake deep or exhaustive analysis of potential partners. When they had found or knew of someone that was a potential alliance partner, they stopped searching. Most alliances were between firms with prior knowledge of each other. Those who developed an alliance with firms they had previously traded with did not look outside these relationships for a potential alliance partner. If they had more than one trading partner with the appropriate product

specifications they chose one of these to form an alliance with. Technical skills and management competencies and the ability to produce sufficient and consistent volumes of the desired product were key criteria in the selection of firms.

9.2 Alliance Success

9.2.1 Measurement of Alliance Success

Proposition 4: Alliance success can be measured through a perceptual measure based on the firm's evaluation of alliance performance.

The measurement of alliance success has been a matter of contention in past theoretical and empirical work (Cameron 1986; Chakravarthy 1986; Eccles 1991; Glaister and Buckley 1998; Glaister and Buckley 1999; Goodman and Pennings 1980; Jacobson 1987; Lewin and Minton 1986; Varadarajan and Ramanujam 1990; Venkatraman and Ramanujam 1986). This is discussed at length in Chapter 3, but is summarised briefly here. Some authors have advocated the use of traditional financial measures of success such as return on investment, growth or profits and the extent to which other indicators are relevant, such as maximising shareholders' wealth; or customer satisfaction (Lecraw 1983; Tomlinson 1970). Other authors have argued that an alliance's success cannot be viewed in isolation from the nature of the organisation's environment; the resource capabilities of the partnering firms and the motivations for the alliance formation in the first place. They argue that given the multifaceted objectives of many alliances, performance is inadequately measured by the use of purely financial measures or objective measures such as alliance termination (Anderson 1990; Bleeke and Ernst 1991; Bucklin and Sengupta 1993; Glaister and Buckley 1999). They argue that a focus on individual measures does not adequately reflect the extent to which the alliance has achieved its aims and objectives (Geringer and Herbert 1991).

Empirical studies examining international alliance performance have mainly dealt with equity joint ventures. In these studies a large number of criteria have been used to assess performance (Chowdhury 1992). In summarising prior empirical research Geringer and Herbert (1991) note that early studies relied on a variety of financial indicators such as profitability, growth and cost position (Tomlinson 1970; Lecraw 1983). Others have examined the stock market reaction to the announcement of alliance formation (McConnell and Nantell 1985; Woolridge and Snow 1990). Other studies have used objective measures of performance such as survival of the alliance (Franko 1971; Geringer 1990; Harrigan 1986; Killing 1983; Park and Russo 1996); its duration (Day 1995; Harrigan 1986; Kogut 1988; Parkhe 1991); instability of its ownership (Franko 1971; Gomes-Casseres 1987); shifts in competitive strength (Hamel, Doz and Prahalad (1989) and renegotiation of the alliance contract (Blodgett 1992).

Concerns about the ability of financial and objective measures to gauge effectiveness of alliance performance have led other scholars to use perceptual measures of satisfaction with alliance performance (Beamish 1985; Bleeke and Ernst 1991; Bucklin and Sengupta 1993; Dussauge and Garrette 1995; Glaister and Buckley 1999; Harrigan 1985, 1988; Killing 1983; Parkhe 1993; Schaan 1983).

In Chapter 7 we present the arguments for the use of a perceptual measure of alliance performance in our study. Our sample focus was international strategic alliances in the UK fresh produce industry. The alliances varied in age from ones that were at inception to ones that were over 10 years old, although most had been operating for less than 10 years (see Section 8.2.2). A key driver for alliance formation by the UK focal firms was to secure year-round supplies of produce. However there were other motivating factors behind alliance formation such as improvements in strategic positioning; spreading overhead costs; spreading risk; adding value to the business; aiding new product development; expanding expertise and accessing technical innovation amongst others. The importance of these individual motivations differed amongst firms according to their resource capabilities and the external environment

they were operating within. It is also argued here that strategic alliances are dynamic entities and as such objectives and satisfaction with alliance performance will differ over time. We therefore argue that the best measure of the success of an alliance is by measuring an individual firm's satisfaction that the alliance has met the firm's objectives. The importance of these factors and the satisfaction with these factors will differ over time and also between firms and is thus dependent on the time period under study. Our measure of success will also be influenced by what our data was able to measure and thus outcomes can only be measured at the time of the study.

In our thesis, following Glaister and Buckley (1999), we use a perceptual measure of the success of the alliance, asking firms about the extent to which the alliance had achieved its overall objectives and the extent to which the firms perceived the alliance to be "successful". Even using a perceptual measure, there are differences in the evaluation of the success of the partnership dependent on whose assessment one is using. A manager's assessment will differ from that of other people involved in the alliance. The perception of those involved in the focal firm may differ markedly from those in the partner firm. The perception of those inside the alliance may differ markedly from others outside the alliance. In this study we use the perception of the managing director of the focal firm. There is a discussion and justification of the measurement used in this study compared to the measurements used in previous empirical work in Chapter 7.

Success was defined by all the focal firms in terms of the ability of the alliance to achieve its objective. Nearly all the alliances had achieved their objective (Table 9.10). This was to provide consistent high quality product when the focal firm could not provide it themselves. This is encapsulated by Firm C:

"They (our partner) have become a key supplier for us. We have a very amicable relationship. They believe we do a good marketing job and earn them good money. We think they do a good supply job."

Table 9.10 Outcomes

Alliance code	Achieved Objective	How	Time period	Impact on profitability/sales	How quantified
A1	Yes	Provides high quality product when focal firm can't	None. Relationship started tentatively and evolved.	Made firm more efficient. Not necessarily bottom-line profitable. Able to employ long-term.	Not quantified down to the specifics of this particular relationship
A2	Yes	Provides high quality product when focal firm can't	None. Relationship started tentatively and evolved.	Challenge to be cost efficient given storage and transit times	Difficult. Use 2 sources for risk spread and market segmentation
A3	Yes	Provides a second source of product when focal firm can't	None	Challenge to be cost efficient given storage and transit times	Difficult. Use 2 sources for risk spread and market segmentation
B1	Yes	Focal firm sells 40% of partner firm's production.	None. The relationship was started on spec. and evolved.	Made firm more efficient	Assessment of how project works within total business
C1	Yes	Partner is a key supplier. Very amicable relationship.	None. The relationship was started on spec. and evolved.	Having supplies out-of-season adds value to total process. Made firm more reliable for customers. Business probably grown faster in total	Assessment of how project works within total business at various levels. Try to analyse where money is generated from.
D1	Yes	Developed specialised product niches where there are markets creating stable market conditions	None	Made firm more efficient and helped to consolidate niche areas	Looking at maximising value of the whole business
E1	Yes	Provides high quality product when focal firm can't	None. Relationship started tentatively and evolved.	Made firm more efficient.	Looking at maximising value of the whole business
G1	Yes	Provides high quality product when focal firm can't. Spreads risk.	None. Relationship developed from trading.	Made firm more efficient	Assessment of how project works within total business
G2	Yes	Provides high quality product when focal firm can't. Spreads risk.	None. Relationship developed from trading.	Made firm more efficient	Assessment of how project works within total business
G3	Yes	Provides consistent high quality	None. Although	Has made supplies more	Assessment of how project works

		product when other sources can't	early days, seen as successful.	predictable	within total business
H1	Trialling	In infancy, but good core product coming through. Trialling of other products more mixed.	No finite time period - ongoing process	Has made them more efficient and helped them get a foot in the door of the multiples.	Assessment of how project works within total business
I1	Yes	Provides high quality product when focal firm can't	None - ongoing	Made firm more efficient	Value-chain analysis
I2	Yes	Provides high quality difficult to do product	None - ongoing	Made firm more efficient	Value-chain analysis
I3	Yes	Has reduced supply risk on high value product	None - ongoing	Made firm more efficient	Value-chain analysis
I4	Yes	Developed a speciality product	None - ongoing	Made firm more efficient	Value-chain analysis
J1	Yes	Volumes increased to extent that at capacity, but still the major supplier of cucumbers and peppers	No finite time period - ongoing	Helped to keep multiple customers	Assessment of how project works within total business
J2	Yes	Developing, provides a base for cucumbers, peppers and tomatoes. Specifications. Trying to expand productivity to 12 months	No finite time period - ongoing	Helped to keep multiple customers	Assessment of how project works within total business
J3	Yes	All the leafy veg side of their business	No finite time period - ongoing	Helped to keep multiple customers	Assessment of how project works within total business
J4	Trialling		Will assess product in 2 months time and take from there	Helped to keep multiple customers	Assessment of how project works within total business
K1	n/a	n/a	n/a	n/a	n/a
L1	Yes	Partner provides 50% of main product for retail customer and has developed others	None - relationship has evolved	Made firm more efficient	Assessment of how project works within total business
L2	Yes	Provides high quality product when focal firm can't	None	Made firm more efficient	Assessment of how project works within total business
L3	Yes	Provides high quality product when focal firm can't	None	Made firm more efficient	Assessment of how project works within total business
M1	Yes(?)	Extremely high quality produced but relationship now ending because partner was approaching retail	Initially had 3-4 years after which relationship would	Made firm more efficient	Assessment of how project works within total business

		customer directly	become more formal if working No formal timescale - take it as it goes		
M2	Just starting		n/a		n/a
N1	Yes	Provides reliable supplies at known prices	None	Reduces uncertainty	Assessment of how project works within total business
O1	Not really	Have never had adequate supplies	5-6 years	Made firm more efficient	Assessment of how project works within total business
O2	Not yet	Quality highly variable	?	Made firm more efficient	Assessment of how project works within total business
O3	Not yet	Quality highly variable	?	Made firm more efficient	Assessment of how project works within total business
P1	Yes	Provides high quality product when focal firm can't	None	Probably not cost effective. Not expected to make a full contribution, rather to make some to overheads	Assessment of how project works within total business
R1	Yes	Provides high quality produce when focal firm can't - increased the confidence of their customers	None	Increases efficiency. Increases customer confidence. Positive impact on profits and sales	Assessment of how project works within total business
R2	Yes	Provides high quality produce when focal firm can't - increased the confidence of their customers	None	Relationship at insistence of customer	Assessment of how project works within total business

Of the others, 3 were just starting, with product being trialled (H1, J4, M2), 2 still had quality concerns (O2, O3) and 1 had volume concerns (O1). One had established high quality product but the relationship was now ending due to a direct approach from the partner firm to the focal firm's UK customer (M1).

Most alliance partnerships had no formal time-scale on which to judge success. Most evaluated the alliance in an ongoing way without any finite time period to assess it. As discussed below, most alliances started with small volumes and were allowed to evolve to meet market demand. In this context a finite time period on which to judge the alliance was inappropriate. Even those alliances that were trading significant volumes from inception did not have a specific time period agreed at inception on which to grade success. Most regarded their alliances as dynamic forms which needed to be flexible enough to change and adapt according to market conditions. Firm H encapsulates this notion:

“We have no finite time period to judge the relationship's success or failure. Rather it is an ongoing process.”

Most new relationships started with very small volumes and increased supplies year-on-year (A1, A2, A3, B1, C1, G3, I1, J1, J2, J3, J4, K1, L1, L2, L3, N1, O1, P1, R1, R2). A few new relationships started with significant volumes from early on (G1, G2, H1, O2, O3). Others developed from trading relationships where volumes have not changed significantly. There was no correlation between volume growth and success.

Most firms thought that the alliance had had a positive impact on profitability or sales, in a number of ways. Most thought it had made them more efficient. Others also cited the benefits of out of season supplies in adding value to the total process, making firms more reliable. However formal quantification of this impact was only undertaken in five alliances, four of which had the same partner firm. One alliance, C1, formally assessed how the alliance project worked within the total business at

various levels. Their MD said “we try to analyse where the money is generated from.” Four other alliances, I1, I2, I3, I4, conducted formal value-chain analyses.

Our results show that given the perceptual measure we have used in this study, nearly all the alliances were successful. The use of a perceptual measure enabled us to evaluate the alliances in terms of whether they had met the key objectives of formation by the focal firms. It should be noted that for a number of firms this evaluation is over a very short time horizon, with most alliances less than ten years old and 21 alliances only 5 years old or less. Most partnerships had no formal timescale on which to judge success and most were an evolving structure with an in-built flexibility to change according to the changing objectives of the partners. In this context most alliances were not judged according to objective criteria and most of the interviewees thought that objective criteria would be an inappropriate means of assessing the partnership. There was no correlation between product volume growth and success. Although most firms thought that the alliance had had a positive impact on profitability or sales they pointed out how difficult it was to quantify this and accordingly few had tried. They also felt that financial measures were far too narrow a measure of alliance success.

9.2.2 Factors Contributing to Alliance Success

A large number of factors have been cited in the literature as having an impact on alliance success (see Chapter 3 for a full discussion). Most empirical studies of alliance performance have linked levels of performance, however defined and measured to particular explanatory factors describing given attributes of the observed alliances. Most studies have examined these explanatory factors in isolation from each other. In contrast, Bucklin and Sengupta (1993) develop a framework incorporating strategic, organisational and environmental factors. They categorise influencing factors into three groups. First, factors grouped under the term ‘Project Management’ reflecting the distribution of ownership, control and conflict resolution.

Second, 'Project Payoff' reflecting alliance partners ex-ante views about the benefits and costs of the alliance. Third, 'Partner Match', reflecting the capability of the alliance partners to cooperate and work with each other.

Our analysis uses this framework to examine the factors leading to successful strategic alliances in the UK fresh produce industry. These have been developed into the three propositions below. The specific constructs and measures used are discussed in Chapter 7.

Proposition 5: Imbalances in power and in the managerial resources that each partner provides to the alliance are drawbacks to alliance operations and have an important role in limiting alliance success.

The analysis of power in alliance relationships has been examined in two distinct ways. First, some researchers have looked at it in terms of control of the relationship (Beamish 1984; Killing 1982; 1983). This perspective has emerged from analysis of joint ventures by multinational corporations in less developed countries where the focus is on the location of control in the relationship. The second perspective is of power in terms of market power defined according to financial resources and market presence (Bleeke and Ernst 1991; Bucklin and Sengupta 1993; Cook 1977; Harrigan 1988; Prahalad 1989). Here the focus is on the balance of power between alliance partners and the consequences of alliances between partners with similar or different levels of market power. Previous research has argued that if an alliance is out of balance the weaker party may try and limit its vulnerability to the detriment of the alliance and the stronger party may be loath to put forward effort (Bucklin and Sengupta 1993). The definitions of power used by researchers and the implications of power imbalances on the success of an alliance are discussed in detail in Chapter 3. In this study we focus on the second perspective of power, that is the relative

market power of the alliance partners. The measurement of power used in previous empirical work and our study is discussed in Chapter 7.

As discussed in proposition 2 there were a variety of alliance relationships involving firms of differing sizes. Some focal firms have a number of alliances with firms of differing sizes (G, I, J, L, O). Some large firms have alliances with major producers (A, B, D, E) and some with small (C). Nearly all of these alliances were described as successful by the focal firms. The relative strengths of the alliance partners was not a sufficient factor in itself in the success of the alliances. For some of their key products the larger UK firms need alliances with firms of a certain minimum scale to be able to procure the volumes necessary to satisfy customer demand. In these cases finding partners with comparable financial resources was a necessary through not sufficient factor in alliance success. Firm A notes:

“All 3 partnerships are with producers who are major players in their own markets. This was not deliberate, but just the way it happened. The way the volumes have gone we need to be dealing with major operators.”

Some of these firms also had alliances with smaller firms for other niche products (I, J). The decisive factor in success is the ability to produce consistent quality and sufficient volumes of product when needed.

What emerged in our study was that the power balance in these relationships was not determined by financial resources or market presence but rather by a balance of needs between both parties. The relative dependencies of both partners on each other was cited by most firms as a critical factor in alliance success. In all cases the focal firm needed the partner firm to provide product and the partner firm needed the focal firm to provide access to a market. This is summarised by Firm M:

“There is great symbiosis. Both parties are as dependent on each other for things to work.”

In addition, as described in Proposition 6 this dependence on each other often increased as the alliance developed. This is described by Firm J:

“Our supplier has a business now that is worth 4 times what it was 3 years ago and it is still growing. Both of us are now very dependent on each other.”

Where there were changes to this balance of needs between partners, alliances could falter. This was most clearly seen when the demarcations between supply seasons of product became blurred. For most of the year the source of product is clearly defined by the growing conditions in the countries concerned. Thus, for example for tomatoes, the UK growers were growing product from May to end of October and then alliance partners were growing and supplying product from November to May. (See Chapter 4 for a discussion of product seasonality). Therefore the period when the UK partner needed their alliance partner to supply product is clearly demarcated. However, technological improvements in growing and storage techniques have meant that the crossover periods from end of season in one country and beginning of season in another are becoming increasingly blurred and longer in duration. This has meant that at these times alliance partners are both growing product that they want to supply and therefore the dependence on each other has changed. As Firm B put it:

“The key factor that is likely to affect our relationship is the ever lengthening seasons. We (Firm B) want to grow longer into the autumn and start earlier and our partners want to continue longer into the traditional UK summer season and start earlier in the autumn. This is likely to become a bigger issue.”

A number of firms felt there was some scope for conflict with their partners over the ever-lengthening seasons (B, C, D and I). Three of these firms were sourcing salad products and one apples and pears. These are the product areas where the differences between the seasons in the UK and overseas had become most blurred at the edges. The UK firms were all large firms with large market shares in the UK of their product. Their partners were of varying sizes and the partnerships were of varying ages from 20 years to just 2 years. These partners were also the sole suppliers of the particular product outwith the UK season.

Most firms did not see scope for conflict over season length as a factor in their alliance. For some, the products they were growing still had clearly defined seasonal windows (A, K, L, N, O1, P, R). For others, alliance partners had not attempted to push for increased trading periods (E, H, J). All these alliances bar one (H1) were relatively new alliances (all under 5 years old and most only a couple of years old). It is proposed that the newness of the alliances might have some bearing on the lack of importance of this factor. Finally, for others the alliance relationship was viewed as part of a whole unit, not two competing potentially competing parts. This happened either when the alliance was developing into a joint venture (E, I2, O2), or where the UK partner had a number of growers, both in the UK and overseas, and sourced where it was most appropriate. Firm I noted:

“There is some conflict between our Spanish and UK growers over shoulders of the season. There are a lot of English growers trying to go earlier and earlier but the flavour is awful and they are incurring high costs in what is basically a commodity market. I would rather lower costs by starting a bit later, let Spain run for longer keeping the market with higher eating quality, hit the market when it starts to lift and keep going longer at the other end when it’s more difficult to grow in Spain. We can take a European view and persuade our growers.”

The balance of needs was also affected when the focal firm was no longer necessary to provide the key resource driver for the partner firm, notably access to the UK market. Two firms had had experience of their partners trying to cut them out of the supply chain (G, M). For both of them this had led to the end of the alliance relationships. As noted by Firm G:

“Partnerships can go wrong. We have had lots of experience of suppliers sending product to a more profitable customer or claiming not to have a crop. Trust is crucial.”

What is notable that this experience was only cited by 2 of the firms. What seems to be key to success is the strategic importance of the alliance to both parties and the commitment to the alliance by both parties. This commitment led to a level of trust in partner behaviour. Commitment to the alliance is discussed below.

Managerial resource commitment has also been cited as an important factor in alliance success (Bucklin and Sengupta 1993; Ouchi 1980; Rule and Keown 1998). Bucklin and Sengupta (1993) argue that within an alliance framework, participants will look intensely at the resource contributions made by partner firms as a factor affecting their continued willingness to participate in the alliance. They found that imbalances in managerial resources each partner provides to the alliance are significant drawbacks to the success of an alliance. This concept is discussed in detail in Chapter 3. The measurement of resource commitment used in previous empirical work and our study is discussed in Chapter 7.

Commitment to the relationship emerged strongly as a factor influencing alliance success and more generally, positive feelings towards the alliance. For most firms that commitment was seen in terms of both partners being seen to be doing a ‘good job’ and being committed to the alliance relationship. Thus Firm B noted:

“The key is that both parties believe the other is doing their best for the good of the whole relationship.”

This is echoed by Firm C:

“They (our partner) believe we do a good marketing job and earn them good money. We think they do a good supply job.”

However, for others the commitment was seen in more concrete terms of resources put into the relationship, particularly a willingness of the partners to invest in the business (J, M). Thus Firm J noted:

“Partners 2 and 3 (J2 and J3) have invested heavily themselves and part of partner choice is picking people who have the capital to invest.”

This is reiterated by Firm M:

“They (our partners) have put together a very good skills base and everyone is investing their own time and money. That is important.”

For these firms, investment in the relationship by their partners was seen as an indicator of commitment to the relationship. This counteracted feelings of mistrust towards alliance relationships either because of historical experience (Firm M) or because of cultural mistrust (Firm J). Firm M had had experience of a partner not being committed to an alliance relationship and felt that there was a need for investment by their partner to indicate commitment to the relationship in the absence of any contractual basis to the relationship. Firm J's reasons for the need for partners to invest encompass cultural mistrust, need for control and necessity. Firm J has 3 alliances in Spain and 1 in Tenerife yet has a general feeling of mistrust of the

Spanish industry as a whole. That firm's MD argues that their strategic alliances were forged because of a need to control their supply base and input appropriate product specifications. However, Firm J is a small company and what spare capital it has it wants to invest in its UK business. Therefore they needed to find partners who were willing and able to invest in the appropriate facilities themselves. In return Firm J provides them with access to the UK market. The investment by their alliance partners is interpreted by Firm J as showing commitment to the alliance relationship, counteracting general feelings of mistrust of the industry as a whole.

Thus the proposition is not supported. Our findings are that it is relative dependencies and commitment to the relationship that are critical factors in alliance success rather than a balance in power between alliance partners or a balance in the managerial resources brought to the relationship.

Bleeke and Ernst (1991) note that:

“Whilst it is important that partners have complimentary skills and capabilities, an even balance of strength is also crucial. This is especially true in product-for-market swaps when one partner brings product or technology and the other brings access to desirable markets, there is often a certain amount of suspicion. Each partner fears that the other will try to usurp its proprietary advantage.”

However, it is our contention that in our study this balance of needs between the partners was enhanced by a feeling of trust most partners had in their alliance partners and in their commitment to the relationship. With this, partners did not feel it necessary to have an even balance of strength. As is discussed in proposition 7 trust was cited by all firms as a key factor in a successful alliance. The antecedents of trust in its importance in alliance success are discussed fully in proposition 7.

Proposition 6: The higher the project payoff from a strategic alliance the more likely it is to be successful

Project payoff is defined as the strategic value of the alliance net of development cost (Bucklin and Sengupta 1993). It is argued that the higher the project payoff from an alliance the more likely it is to be successful (Benson 1975; Bucklin and Sengupta 1993; Glaister and Buckley 1999; Schermerhorn 1975). Project payoff defines alliance partners' ex ante views about market opportunity and cost. Bucklin and Sengupta (1993) argue that alliances with well-defined market opportunities and well-defined costs are more likely to perform well. The notion of project payoff is discussed in Chapter 3 and the measurement of the concept in Chapter 7.

The strategic value of all the alliances to the focal firms was to provide consistent high quality product when they could not provide it themselves. This was the key objective of all the alliances and was clearly defined as such before alliance formation. Implicit in a number of interviews was that without the alliance the firms would not keep their main customer(s).

A second key reason for alliance formation was to enable the focal firms to spread overhead costs. As discussed in Chapter 4, fixed costs form a large proportion of total costs of production in the fresh produce industry. Whilst varying by sector, average fixed costs are almost twice variable costs (see Table 4.13). There is a high incentive for producers to spread these costs over a 12 month period to increase efficiency by lowering overhead costs. Producers can either do this by growing product with complementary seasons of production, or through dealing with product from other sources when not in production itself. Utilisation of UK facilities year-round also impacted on the labour profile. As discussed in Chapter 4, the most important component of costs is labour costs. A large proportion of this is seasonal and casual workers. Whilst cheaper on an hourly basis, they have the added costs of increased administration and training. A number of firms identified this factor ex-ante as a benefit of the alliance (C, E, I, J). The alliances meant that firms could hire

more full-time labour and rely less on seasonal labour. Reduced labour turnover also meant that firms could train labour, increasing productivity. Firm A noted:

“If we weren’t handling this product in the winter we may not employ all those people consistently, so we would have a more hit and miss labour profile.”

Second alliances for the same product were used to spread risk associated with supplier dependency and geographical location. A number of firms developed alliances with more than one partner for a specific product to spread geographical risk (A, G, I, J, M, O).

Many growers also felt that there was an unquantifiable benefit of adding value to the business. This was argued by Firm C:

“There is the unquantifiable thing of having supply in a period when it is difficult to supply because this adds value to the total process because it has made us (Firm C) more reliable in the customer’s eyes. The difficult periods are not just difficult for us, they are traditionally difficult. In these periods we perform a lot better than many of our competitors. This adds value in a difficult to quantify way. The business has probably grown faster in total because of what they (Partner firm) have added to the business.”

Firm A in describing his first alliance said:

“Where you gain is you swing literally from one day to the next, from a product source. Your liaison, your continuity with your buyers, your flow of product through the system, your continuity of your labour employment, all just flows....”

The major motivation for all partner firms to form strategic alliances was to access the UK market. This market was seen as highly lucrative with high barriers to entry. For all but the largest of these firms this was the only means of gaining access to this market.

As discussed above (page 300, Table 9.3) all the firms interviewed quantified parts of the costs of the alliance to their firm in advance of forming the alliance. Most firms knew the costs they were likely to incur in terms of storage costs and transportation costs and the costs of handling and labeling the product. The firms expected the alliance to alleviate overhead costs but the contribution of the alliance towards a reduction in total overhead costs was very difficult to quantify. The larger firms with a larger number of alliances also evaluated the relative costs of individual alliances (G, I, J, L, O); although only one firm had a formalised value chain analysis which examined the relative costs and benefits of all projects (I).

Developmental costs identified were costs of development of the product and the costs of marketing the product. Product development costs in general were significantly lower than if the UK firm was expanding abroad itself. All firms formed alliances with growers who were already producing the required product. Technical input was needed at the start of nearly all the alliances to ensure that product was grown to the required specifications of the focal firm and the end customer. This entailed site visits, some training of current staff and occasionally the hiring of technical personnel to work at the partner firm's site (10 of 23 alliances). Technical input was then usually through site visits on an annual or bi-annual basis. Continued product development costs again tended to be small. However, product development costs were often ill-defined and the distinction between what were identified as costs prior to alliance formation and costs that emerged once the alliances were formed was often blurred.

Marketing costs included transportation, storage, product handling and labeling costs. The scale of these depended to a large extent on the type of product and the country

of origin of the partner firm. All focal firms quantified what levels of these costs they could handle to ensure the partnership remained profitable.

Thus this proposition is supported. The project payoff from the alliances seems to be high. All firms felt that the developmental costs of the alliances were outweighed by the strategic value of the alliances to both parties. It is theorized that because of this the focal firms were willing to commit to funding costs incurred in developing the alliance that were not necessarily identified ex-ante alliance formation, such as in training the partner firm in product development.

The high project payoff of most of the alliances was directly linked to the success of these alliances. Nearly all firms felt that the alliance had achieved its objective which was to provide high quality product when the focal firm could not. The alliance that was ending (M1) had achieved its aim of providing high quality product but the trust in the relationship had broken down. Only one alliance had not met the supply objective (O1) and this was being forced to end by the focal firm's customer.

The high project payoff imbued a positive feeling about the alliances to the firms interviewed. Most firms felt that the alliances had achieved a symbiosis of individual strengths and that there had been numerous additional benefits to the partnership. These are outlined in detail in Table 9.11. The most common of these were that they helped to keep current customers; provided access to resources and stimulated sales. Other benefits included expansion of product range; aiding new product development; expansion of firm's range of expertise; access to specialist skills; technical innovation; access to market innovation; contacts; enhancing product value; access to new markets, both in the UK and overseas; lowering of marketing costs; reduction of risk; helping to deal with local bureaucracy; aiding in language skills and a providing a front for buying.

Table 9.11 Additional Benefits

Code	Enhanced product value	Expanded product range	Stimulated sales	Aided exports	Access to new UK markets	Access to new overseas markets	Expanded firm's range of expertise	Access to resources	Access to specialist skills	Technical innovation	Access to market information	Contacts	Helped to keep current customers	Lowered production costs	Lowered marketing costs	Other
A1		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	language skills
A2			✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
A3			✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	
B1		✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	
C1			✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	front for buying
D1																
E1		✓	✓		✓		✓	✓	✓				✓	✓	✓	EU grants, deal with local bureaucracy
G1					✓							✓	✓	✓	✓	
G2						✓						✓	✓	✓	✓	
G3			✓			✓		✓	✓	✓	✓	✓	✓	✓	✓	risk reduction, deal with local bureaucracy
H1		✓	✓	✓	✓	✓		✓					✓	✓	✓	
I1			✓	✓	✓		✓	✓	✓	✓	✓		✓	✓	✓	risk reduction
I2			✓	✓			✓	✓	✓	✓	✓		✓	✓	✓	
I3		✓					✓	✓	✓		✓		✓	✓	✓	risk reduction
I4			✓	✓				✓			✓		✓	✓	✓	
J1		✓	✓	✓	✓	✓		✓		✓			✓	✓	✓	
J2			✓	✓		✓		✓		✓			✓	✓	✓	
J3			✓	✓		✓		✓		✓			✓	✓	✓	
J4		✓			✓					✓			✓	✓	✓	
K1		✓							✓				✓	✓	✓	
L1		✓	✓	✓				✓	✓	✓			✓	✓	✓	
L2			✓	✓				✓		✓			✓	✓	✓	
L3				✓									✓	✓	✓	
M1			✓	✓		✓		✓					✓	✓	✓	
M2		✓		✓			✓	✓	✓				✓	✓	✓	
N1			✓	✓				✓					✓	✓	✓	
O1			✓	✓				✓		✓			✓	✓	✓	
O2			✓	✓				✓					✓	✓	✓	
O3			✓	✓				✓					✓	✓	✓	

Code	Enhanced product value	Expanded product range	Stimulated sales	Aided	Access new UK markets	Access new markets overseas	Expanded firm's range of expertise	Access to resources	Access to specialist skills	Technical innovation	Access to market information	Contacts	Helped to keep current customers	Lowered production costs	Lowered marketing costs	Other
P1		✓	✓	✓				✓					✓	✓	✓	
Q1																
R1			✓	✓				✓					✓	✓	✓	
R2	✓		✓										✓			

The differences in the number and type of additional benefits cited by the firms interviewed was a function of the attitude towards the alliance by the firm and the functions undertaken by the alliances. In general, the more integrated the alliance was in the firm and the more open the alliance the more additional benefits the firms got from the alliance. Thus firms who saw the alliances as a key part of their supply network where both parties were working towards the development of the business tended to have alliances where partners were involved in all areas of each others business such as new product development; where there were open books; and where no part of the business was out of bounds (A, B, C, D, E, H, I, J, O, P, R1). These alliances all brought with them a number of additional benefits other than those that were the key drivers for alliance formation themselves. Thus Firm A's alliances had helped them to expand their product range; aided new product development; helped them to access new markets both in the UK and overseas; given them market contacts and market information; expanded the firm's range of expertise; given them access to specialist skills; and lowered marketing costs in addition to the main drivers of securing 12 month supply of product and lowering production costs.

The range of these benefits was a function of the age of the alliances in that the full extent of alliance benefits had not been realized by some of the newer alliances. However, the potential benefits were still a function of the attitude towards the alliance by the alliance partners and the integration of the alliances in their businesses. This is illustrated by examining Firm G whose alliances are all 15-20 years old. This firm sees their alliances as "fairly stable and committed" but still sees them as relationships where there is an "inclination to trade" not a relationship where there is any formal commitment to each other. As such the benefits they are looking for are fairly finite, namely, securing 12 month supply of product, lowering production costs, making market contacts who may be alternative customers.

Other alliances like this are L3, N1 and R2. These firms see their alliances as important sources of product but these are business rather than personal relationships. Alliances L3 and R2 are with a French exporter and a Producer's Organisation in

Jersey respectively. These alliances are seen by their UK partners as marketing relationships that are business to business. The UK partners are involved to only a limited extent in their partner's production. These alliances exist to secure supply of product and additional benefits are limited. What is of note is that both the UK partners have very different alliances with other partners (L1, L2 and R1). In these other alliances the relationship between alliance partners is far closer and the alliance is more integrated into the two businesses. The additional benefits of the alliances L1, L2 and R1 are far greater than those for alliances L3 and R2.

Alliance N1 is with a small Columbian producer. Neither partners are large amounts of each other's business and whilst the alliance is important for continuity and reliability of supply it is not a critical part of either partners' business. Again additional benefits of the alliance are limited.

The key motivator and benefit for the partner firm of the alliances was that they provided access to the UK market. Additional key benefits included new product development; development of technical skills; market information; technological interchange; interchange of academic knowledge; expansion of potential markets and networking opportunities.

Proposition 7: Alliance success is dependent on partner match. This is facilitated through similar organizational cultures, prior history, trust and flexibility.

Partner match refers to alliances in which the partners are similar in management style and company culture (Bucklin and Sengupta 1993). This is facilitated through similar organizational cultures (Barkema and Vermeulen 1997; Fedor and Werther 1995; Rule and Keown 1998; Shenkar and Zeira 1992); a long and stable history of prior business relations (Bucklin and Sengupta 1993; Glaister and Buckley 1999; Heide and John 1990; Parkhe 1993; Saxton 1997); mutual trust (Beamish and Banks

1987; Buckley and Casson 1988; HanYan and Gray 1994; Harrigan 1986; Inkpen and Beamish 1997; Madhok 1995; Monczka, Petersen, Handfield and Ragatz 1998; Hoffman and Schlosser 2001; Rule and Keown 1998; Zaheer, McEvily and Perrone 1997) and flexibility by alliance partners (Bleeke and Ernst 1991; Doz 1996; Dyer and Singh 1997).

Cultural compatibility between organizations reflects complementarity in goals and objectives, operating philosophies and corporate cultures (Bucklin and Sengupta 1993). It is argued that similar cultural values can reduce misunderstanding between partners and enhance the success of an alliance (Barkema and Vermeulen 1997; Fedor and Werther 1995; Rule and Keown 1998; Shenkar and Zeira 1992).

Complementarity in goals and objectives, operating philosophies and corporate cultures was seen to be significant factor in alliance success. All firms cited similar aims and aspirations as well as mutual understanding, respect and a willingness to develop the partnership as key reasons for the partnership's success. A key factor in the success of an alliance is that both parties were working towards the same goals and that their views and attitudes coincide.

Firm A said:

“One of my criteria for assessing the achievements of the relationship is asking whether the partners could work in each others' businesses, would they work as a team? I think our people could work with theirs (alliance partner) and theirs with ours. There is a chemistry of knowledge and understanding that is international.”

There was no evidence that the partner's country of operations had any bearing on the success of the alliances. Most firms saw the fresh produce industry as increasingly international and felt that suppliers were tuned in to the UK market. They were mostly working with producers of the same product that they were growing

themselves and most felt that there were no great production or processing differences. Firm A summarized this:

“Technology improvements and new product development is becoming far more international. There is far more international dialogue than many people realize....the world is now very small.”

However, it should be noted that relatively few countries were involved as sources of alliance partners. The UK firms formed their international strategic alliances with partners from 10 countries worldwide, 6 of which were within Europe. Twenty one of the 33 alliances were with Spanish producers (see Chapter 8 Section 8.2.1). Therefore some cultural factors may have had a bearing on alliance partner choice and thus have been factored out already.

Language is not seen as a barrier to success by most firms. Where there are language difficulties, both firms in a partnership have generally worked together to address the problem by training staff and in some cases employing an interpreter.

Cultural differences only seem to become a significant factor for those firms that have had bad experiences of partnerships where particular experiences have become generalized to represent the characteristics of a whole nation. Firm Q who had had bad past experiences with strategic alliances argued that:

“Collaboration is much easier within the UK than overseas. The cultural factor is a big thing. Different cultures have very different ways of doing things. For example Italians are very different from anyone else and I could never see myself in collaboration with an Italian partner.”

Prior history allows partner firms to know each other better and thus they are likely to have a greater understanding of the respective capabilities and resources they are

seeking to access and the likely behaviour of the expected partner (Bucklin and Sengupta 1993; Glaister and Buckley 1999; Heide and John 1990; Parkhe 1993; Saxton 1997). It is also argued that prior knowledge of potential partners can lead to alliances that begin their existence with an existing stock of 'relationship assets' (Fichman and Levinthal 1991) and a high degree of inter-party trust (Gulati 1995). The importance of prior history as a motivator to alliance formation was shown in proposition 3. This also showed the importance of prior history leading to trust between alliance partners.

Only 13 of the 33 alliances had prior business history with each other. This was in all cases a prior trading relationship. All these alliances were deemed to be successful by the focal firm. However, prior business relationships were not cited explicitly as a success factor by the firms themselves. Rather, as with all the successful firms the key factors cited were relative dependencies, belief in a commitment to the relationship and trust in each other. Prior relationships may have some bearing on the success factors in that they may help the relationships begin with an existing stock of relationship assets and a high degree of inter-party trust ((Fichman and Levinthal 1991; Gulati 1995). However, no difference was found in our study in the degree of successful alliances between those who had prior relationships with their alliance partners and those who did not.

This finding is similar to those found by Glaister and Buckley (1999) and Saxton (1997). Glaister and Buckley (1999) did not find any significant support for the influence of prior history on alliance success. They conclude that prior relationships are not a good predictor of successful alliance performance. They argue that this finding is similar to Saxton (1997) who reported that prior affiliation was linked to initial satisfaction but not to longer term benefits to partners. Saxton (1997) explained this by noting that although prior affiliation may affect the "propensity to engage with a firm... it does not have a commensurate impact on subsequent performance." Glaister and Buckley (1999) concluded that while prior relationships may encourage the initial formation of the alliance it is the broad set of ongoing long-

term relationships that endure between the partners that promotes successful alliance outcomes.

Numerous researchers have argued that that mutual trust is essential for successful alliances (Beamish and Banks 1987; Buckley and Casson 1988; HanYan and Gray 1994; Harrigan 1986; Inkpen and Beamish 1997; Madhok 1995; Monczka, Petersen, Handfield and Ragatz 1998; Hoffman and Schlosser 2001; Rule and Keown 1998; Zaheer, McEvily and Perrone 1997). The various facets of trust are discussed in Chapter 3 and the measurement of trust in Chapter 7.

Trust emerges as a key factor in the success of the alliances in our study. Every successful relationship cited trust as a key factor in that success. Firm O said:

“Trust forms an incredibly large part of the relationship. Trust is crucial.”

Trust was engendered through a belief that both partners were doing their best for the good of the whole relationship which in itself was a function of believing that both partners needed each other and that both partners knew and understood each other and were working towards the same goals. Most firms believed that this trust was best established through openness between partners and daily communication. Firm P noted:

“We are very open in what we show. We tell them (our partner) the prices the multiples are paying and the contribution that we feel we need. We speak constantly about availability of produce in Spain, in the UK, deliveries...”

Most firms felt that any problems needed to be articulated and dealt with as soon as they became apparent. This was expressed by Firm P:

“If there are problems they are dealt with immediately on the phone.”

Openness and regular contact mitigated the need for formal antecedents to trust such as monitoring or contracts. This finding supports Parkhe (1998) who argues that openness between partners creates trust by mitigating uncertainty. He argues that uncertainty is an inherent feature of alliances and external uncertainty cannot generally be controlled but that internal uncertainty can be minimized by openness and information sharing between partners.

There was a strong feedback from performance to trust. Firms that had successful alliances that worked to a large extent on trust between partners were more willing to continue trusting each other in the light of the positive benefits of the alliance.

The few firms that had had bad experiences of alliances had a more cynical view of the collaborative process. Three firms (G, M, and Q) had had experience of suppliers sending product to a more profitable customer or claiming not to have a crop. Two firms (M and Q) felt that truly co-operative behaviour was very difficult to achieve and that someone had to have control otherwise things tended to fall apart. They felt that the temptation for their partner firm to behave opportunistically was too great. These firms felt that control was only achieved through a financial stake in the partnership so that both parties are less likely to leave the partnership. Firm Q said:

“You need fairly formal relationships and have to tie up loose ends. You can only have no formal contractual relationships with those people you know well.”

There were several other positive benefits of trust identified in this study confirming previous empirical work (Axelrod 1986; Beamish and Banks 1987; Bleeke and Ernst 1991; Bradach and Eccles 1989; Dwyer, Schurr and Oh 1987; Heide 1994; Ouchi 1980; Parkhe 1993; Stitchcombe 1986; Wilkins and Ouchi 1983). There was strong support for the argument that trust can be a deterrent to opportunistic behaviour

(Axelrod 1986; Beamish and Banks 1987; Stitchcombe 1986). The fresh produce industry is one with uncertain short-term supply and demand conditions which can change the relative values of short and long term gains. The relative rewards of a partnership deal that seems lucrative to both partners at one moment in time can change over a limited space of time and other opportunities for both partners can also emerge. However, what emerged from our study was the strong commitment of most alliance partners to the long term interests of the alliance over any potential short-term individual gains. This we argued was due in part to the trust that was embedded in the partnership. There were only three alliances out of the 32 studied where the alliance partners had behaved opportunistically and pursued short-term gains to the long-term detriment of the relationship. This behaviour led directly to a breakdown of trust in the relationship and affected the view of those focal firms involved on the ability of trust to act as a deterrent to future alliance relationships. In these instances the focal firms felt that the temptation for their partner firm's to behave opportunistically in this industry was too great.

In most, but not all cases, trust was also seen to be a substitute for hierarchical governance (Bradach and Eccles 1989; Dwyer, Schurr and Oh 1987; Heide 1994; Ouchi 1980). The mutuality of interests between partner firms led to trust between them so that formal authority structures based on ownership were not thought to be necessary by most alliance partners (Bradach and Eccles 1989; Dwyer, Schurr and Oh 1987). The presence of trust between alliance partners meant that they could use the alliance structure to accomplish individual goals for independent organizations through joint accomplishments, shared beliefs and mutual concern for long-term benefits (Heide 1994; Ouchi 1980). A number of firms did feel in the future that they would like to formalise their alliances through the development of joint ventures because of concerns over control of the operation. These included those who had had bad experiences of alliances but also those who felt they needed more formal control over the partnership through capital and that trust in itself was not a sufficient substitute for hierarchical governance.

Flexibility of the alliance to change with the changing objectives, resources and relative power of the partners has also been cited as a determinant of alliance success (Bleeke and Ernst 1991; Doz 1996; Dyer and Singh 1997). A key feature of all the strategic alliances studied, apart from the joint venture, was that there were no contractual documents. The alliances were typically unstructured, based on mutual trust. This gives them the flexibility to respond to short-term changes in supply and demand. Most of the alliances had not changed in purpose or scope from when they were initiated (Table 9.12). The primary purpose of all the alliances was still as it had been at inception to procure product for UK customers. All of the alliances were still trading in the same products that they started with, although in all cases the volumes of product traded had grown. Seven of the alliances had also diversified into other products. In 3 cases these were niche varieties of the main product traded in 4 cases these were other product areas. Product development has mainly been in conjunction with UK multiple retailer customers and in the 7 alliances where there has been product development, all UK alliance partners have found their alliance partners to be very responsive to changing product demands.

Most alliances were also the same structure that they were when they started. Three were looking at setting up a joint venture and one was actually setting up a joint venture (D1, E1, I2, O2). In all these cases, as discussed above, the desire for equity was linked to a wish for control over the alliance.

The changes in the scope and structure of the alliances where they occurred had all been led by the UK alliance partner usually in response to changing market demands although also to aid strategic positioning (B, H).

Table 9.12 Alliance Development

Alliance	Change in purpose/scope	If yes, how?	Change in structure?	If yes, how?
A1	No	Just volume growth	No	
A2	No	Just volume growth	No	
A3	No	Just volume growth	No	
B1	Yes	Developed speciality product	No	
C1	No	Just volume growth	No	
D1	No	Developed niche products	No	
E1	Yes	Moving into other products	Yes	Setting up a JV
G1	No	Just volume growth	No	
G2	No	Just volume growth	No	
G3	No	Just volume growth	No	
H1	Yes	Trialling other niche products	No	
I1	No	Just volume growth	No	
I2	No	Just volume growth	Yes	Looking at a JV
I3	No	Just volume growth	No	
I4	No	Just volume growth	No	
J1	Yes	Just volume growth	No	
J2	No	Trying to develop 12 month productivity	No	
J3	No	Just volume growth	No	
J4	No	Initial trialling stage	No	
K1	n/a	n/a	n/a	
L1	Yes	Moving into	No	

Alliance	Change in purpose/scope	If yes, how?	Change in structure?	If yes, how?
		other products		
L2	No	Just volume growth	No	
L3	No	Just volume growth	No	
M1	Yes	Relationship ending	No	
M2	No	Just starting	No	
N1	No	Just volume growth	No	
O1	Yes	Relationship ending	Yes	Relationship ending
O2	No	Trying to develop consistent quality	Yes	Discussing a JV
O3	No	Trying to develop consistent quality	No	
P1	Yes	Increased volumes for prepared lines	No	
R1	No	Just volume growth	No	
R2	No	Evolved into more pre-pack business	No	

The flexibility of the alliance structure was a factor in the success of the alliances studied. The alliances were able to provide UK firms with a reliable source of appropriate quality product at the times when they needed it. The alliances provided the overseas firms with a lucrative market for their product that they would not be able access independent of their alliance partner. They were able to do this in part by being unstructured and non-contractual with the ability to change product volumes demanded and supplied over the short-term and to develop other product areas over the longer term if both partners felt it was appropriate. The resources brought to the alliances by the partners and the relative power of the alliance partners had not

changed significantly over the lifetime of the alliances studied, even though most of the alliances had grown in terms of volume of product traded.

Thus this proposition is supported. Alliance success is dependent on partner match. The support for the proposed influences on partner match was more mixed. There was support for the positive influence of similar organizational cultures on alliance success. Specifically, complementarity in goals and objectives, operating philosophies and corporate cultures was seen to be a significant factor in alliance success. However, there was no evidence that the partner's country of operations had any bearing on the success of the alliance.

Prior history was not found to influence alliance success, with no difference found in our study in the degree of successful alliances between those who had prior relationships with their alliance partners and those who did not.

Trust emerged as a key factor in alliance success. Every successful relationship cited trust as a key factor in that success.

Finally, the flexibility of the alliance structure was a factor in the success of the alliances studied.

Table 9.13 Support for the Propositions

Propositions	Support
<p>Proposition 1: Firms are motivated to form alliances when their transaction costs are of an intermediate level, but not high enough to justify vertical integration. These transaction costs are determined by asset specificity, uncertainty and frequency of transactions.</p>	mixed
<p>Proposition 2: Firms are motivated to form strategic alliances to access resources and achieve strategic competitive advantage when these resources cannot be acquired through market exchange or internalization.</p>	Yes
<p>Proposition 3: The social network that a firm operates within influences both the motivations for firms to form alliances and the alliance opportunities made available to that firm.</p>	Yes
<p>Proposition 4: Alliance success can be measured through a perceptual measure based on the firm's evaluation of alliance performance.</p>	Yes
<p>Proposition 5: Imbalances in power and in the managerial resources that each partner provides to the alliance are drawbacks to alliance operations and have an important role in limiting alliance success.</p>	No
<p>Proposition 6: The higher the project payoff from a strategic alliance the more likely it is to be successful</p>	Yes

<p>Proposition 7: Alliance success is dependent on partner match. This is facilitated through similar organizational cultures, prior history, trust and flexibility.</p>	<p>Yes</p>

9.3 Case Studies

Below we present 3 case studies to illustrate the motivations underlying the formation of 3 individual alliances, how these alliances were formed and the factors contributing to the alliance success. They illustrate 3 different types of alliances.

Case 1 – Alliance A1

The focal firm is a large UK producer of a variety of field vegetable crops in the UK. They grow onions, speciality lettuce, brussel sprouts, cabbage and potatoes. It is a co-operative business. Turnover in 1999 was £17 million. Sixty percent of production goes to multiple retail customers across the entire business. They also have a wholesale marketing department which handles product not suitable for multiple retail trade but this product is increasingly going to the catering sector which is replacing the wholesale markets as a secondary customer for them. They have 3 key international alliances, one in Spain, one in New Zealand and one in Tasmania.

This alliance is with a lettuce grower in Spain. It is a family-farm holding. Turnover in 1999 was about £10 million. It has between 40-50% of market share in its production area. The alliance was set up to secure winter supplies of lettuce for one UK multiple retail customer. The alliance is 8 years old. Business has grown from nothing seven years ago to satisfy market demand.

Seven years ago Firm A decided they needed a supply of winter lettuce to satisfy demands for 12 month supply of product from their multiple retail customer. They decided that they wanted to be involved in Spain but did not know who they would deal with. They undertook a fair amount of groundwork looking at various people and their opportunities for the sort of markets they anticipated at the time would emerge. Two of the directors chose four companies to visit based on information from the grapevine in the industry. Their choice of partner was based on technical skills and the vision of the alliance partners, particularly their commitment to product quality. Their partner had one small line of little gem lettuce, but it was some of the finest quality the focal firm had ever seen. There was no available financial data to take into account. Partner choice was based on personal judgement and gut feeling.

The multiple retail customer was not involved in the initial partner selection but vetted the partner through a site visit once the provisional choice had been made.

The incentive for the partner to become involved was access to the UK market.

The volume of product traded was initially very small, but volumes have doubled year on year. Product is packed in Spain and then transported to Firm A's packhouse where it is quality controlled, labeled and distributed to their customer's depots.

The two companies jointly put the initial infrastructure into place and the Spanish partner has invested all earnings from the business back into the business. Firm A costed the relationship before it was set up. Both sets of quality control and technical managers visit eachothers' sites several times a year. Their partners visit firm A in the UK every 2 months to look around their business and to visit their customers. They try to make the relationship as close and as simple as possible. They have very good business relationships and a close informal relationship with their partners. A lot of discussions take place informally over dinner etc.

The relationship is non-contractual. Things are agreed verbally and the partners trust that both partners will keep to their word. Firm A described the relationship as 'very open'. They speak daily during the supply season and have more formal meetings over the year. There is detailed seasonal planning on production and strategy.

New product development is through joint liaison with their partner and their multiple retail customer.

It is a very successful relationship. It has also brought a number of additional benefits to Firm A. It has made them a more efficient business; it has helped them employ more full-time labour; it has expanded their customer base on the processing sector; it has given them potential access to overseas markets through meetings with key industry specialists; it has made them better informed and given them access to market information; it has given them continuity to the business so that they can swing from one day to the next from one product source to another; it has allowed them to diversify their product range; it has enabled them to look at new crop development; and it has given them a technical infrastructure. The challenge is to manage the alliance as it gets bigger. The biggest opportunity is new crop development but Firm A is cautious about the level of product diversification and will keep to the general crop areas where they are established in the UK. In terms of their key crop Firm A feels there is a risk in having only one geographical source of supply. Firm A will look to find a second supply source of product in another part of Spain within the next 5 years.

Case 2 – Alliance H1

The focal firm is a small UK producer of cucumbers and tomatoes. It is a private company with 5 grower shareholder members. All these members moved from another UK company that went into liquidation. In 1999 it was in its fifth season of trading and had a turnover of £5 million. It grows both commodity and niche salad

varieties. It has 25 acres of cucumbers and 35 acres of tomatoes. It is dedicated to supply one UK retail multiple. Ninety percent of their tomato production and just over half of their cucumber production is for this retail customer. The rest goes to wholesale markets and catering outlets although they would like to phase out the wholesale markets altogether.

Their alliance is with a Spanish grower. They are a small family firm. The business is headed by a father with one son running the commercial side of the business and one running the growing side. The firm was an olive grower who then put up greenhouses and started growing beans, melons, cucumbers and courgettes for the local auction markets. They then decided to target the UK market. The alliance was set up to secure winter supplies of midi-cucumbers (a niche product) for their UK customer. The alliance is 1 year old. It is their only overseas alliance.

Firm H were looking for a partner who would be an extension to their grower base, who they could treat as a sixth supplier, but based in Spain. They wanted someone who had not been involved with a UK company. They didn't want to trade with a co-operative as traceability was vital. They also wanted exclusive supplies of the sourced product. Firm H heard about their partner through an agent working in Spain who happened to be a friend of the family. Their partner also asked the agent about possible UK partners at the same time. The agent brought the two sides together.

Firm H visited their partner to discuss product needs and assess the technical skills of their partners. They decided to choose this partner based on their technical skills. Their technical expertise was the same standard as Firm H's UK growers. The only difference between Firm H and their potential partner was that Firm H had glasshouses with ventilation and heating, whereas their partner had polythene with vents that just open and closed and no heating. They also felt that the partner firm was similar in them in terms of outlook and aspirations and organisational structure. Both firms are young companies in terms of the people involved and supplying them.

All were mid thirties. The focal firm felt that both parties were looking for a long future.

The focal firm needed a partner who could supply them with comparable volumes of midi-cucumbers in the winter as their summer production. They needed significant volumes from the first year of trading. Their UK retail customer had an alternative supplier if this could not be met. Their partners were prepared to change to grow exclusively for Firm H and the UK market.

Their UK multiple customer was not involved in their choice of partner at all. They were desperate to get winter supplies of midi-cucumbers and needed the Firm H to find a partner quickly. Their multiple customer relied on Firm H to ensure that their partner was working to appropriate standards. The multiple customer did not visit Spain until their normal round of suppliers when their partner was actually in production and supplying them. Thus they were supplying them before the multiple customer had audited the premises.

The biggest problems at the start of the relationship were that Firm H had to work on site to implement the product standards and specifications that their UK customer wanted. They also had to educate their partner on grading of product quality. Their partner also had no money to invest in machinery.

Firm H set up a packhouse for their partner. This cost them £52,000. Previously all their partners products had been sent straight from the field to the auction houses. They also supplied capital to buy machinery. This included a grader, a forklift, an electric pallet truck and a fridge. This was all bought in Firm H's name and is owned by them, but on permanent loan to their partner. They have a 5-year contract with their partner to pay back the packhouse loan. They are contracted to pay back £12,500 at the end of each season for 5 years.

The contract stipulates that the Spanish partner will supply Firm H for a minimum of 2 years. If then either partner feels that the other is not doing a good enough job they can end the alliance. The Spanish partner would keep the machinery.

The other initial set-up costs were fairly minimal. There have been more visits than they would want to make on an annual basis. There have also been some training costs and costs of taking customers to their partner's site. These will all be costed at the end of the year and weighed up against earnings from the partnership.

There was very little trialling of product prior to the alliance formation. Firm H did some trialling with their seed company in Spain and then asked their partner to put down 2 ½ acres of seed as a trial crop in the first year. This was against the advice of the seed company as they did not think the trial product was good enough. However it was the Spanish partner's most profitable crop over winter.

Their Spanish partners are also now trialling some new varieties of tomatoes for them. These are speculative crops as they have no customer programme as yet. However Firm H knows these varieties are preferred over winter by their customers and hopes if they show they can produce product to appropriate specifications they will get the supermarket programme. The Ferrari tomatoes were a good quality but the size was not right for the UK market, so they didn't get samples to their UK customer. The first crop of Daniella tomatoes was lost to a virus. The second crop will be harvested next month.

Firm H feels that it has been good to start this partnership with a product that their partner had not previously been growing as it has enabled them to get their partner to work from Firm H's standards from the start.

Contact is daily through the season. Firm H's partners verify the prices they receive for their product using another Spanish company as a benchmark. (One of their partner's daughters is married to the commercial director of this company).

Firm H market all of their partner's product over the winter. They also take some of their tomatoes over the summer for their catering customers as 90% of Firm H's own supplies go to their multiple customer. They speculate on cucumbers and cherry tomatoes as well, depending on price. Their partners are happy with this arrangement. Both sides see it as a joint development, trying to get other product ones into the UK customer. The two year contract gives Firm H's partner a get-out clause and Firm H time to prove themselves.

Next year Firm H's partners are going to plant up 4 hectares of midi-cucumbers. This will represent over half of their production and will all go to the UK retail customer. If they could ensure sales of Ferrari tomatoes as well that would take up the other half of their production and they would have 100% of their winter production going through the UK multiple retail customer. Therefore there isn't that much more to develop. Any subsequent growth in production area would be looked at jointly through a formal joint venture.

If Firm H develop a winter business with their UK retail customer they will look for a second overseas alliance. Spanish tomatoes and cucumbers only go to early January so Firm H would have to look for another 3-4 months from another region, probably the Canary Islands.

Firm H's customer have not given them any promises on future demand. They have sufficient suppliers from Spain and if anything are looking at rationalisation. Thus Firm H has to find niche products to get them in the door. This is what they have done with midi-cucumbers. They are now supplying over half of all their midi-cucumber supplies. When they set up the business with cucumbers their partner told them that they were not looking for suppliers of any other products. However Firm H had £2 million of business with them from tomatoes last year and thus feels that opportunities arise and you have to make the most of them.

Firm H have a very close relationship with their Spanish seed company. They helped develop the midi-cucumber and speciality tomatoes to suit Spanish growing conditions. This links in with their retail customer as a 3-way partnership and gives them unique opportunities in Spain. They met the Spanish seed company through their UK seed company (it is a subsidiary). This company worked very closely with their Spanish partners before the alliance was initiated. Their families are close. Firm H get opportunities on product development because of this and their partner is kept informed of any developments in the Spanish seed company as well.

They have a very open relationship. Firm H's MD couldn't think of anything he would want to keep from his partner. Anything they develop through the summer they would try and get their partners to develop through the winter. This is very easily done and much easier than through a co-operative where there would be problems over which grower was going to be involved in product development as this would be seen as a dead area.

Although there is a 2 year opt-out clause, Firm H would not use it unless they had some major ethical problems or problems in the way their partners were handling things.

They have no finite time period to judge the relationships success or failure. They see it as ongoing and dependent on the ability to secure multiple retail programmes. It has worked tremendously well so far.

There is no conflict between the partnership and their UK growers as the majority of dealings with their Spanish partner is in the winter months but there will be some crossover. However because all their growers are shareholders there is a vested interest for them in the firm doing well.

Case 3 – Alliance R2

The focal firm is a UK producer of potatoes, onions, carrots and parsnips. Their business is located in two sites in the UK, one in Scotland, one in Cambridge. It is a totally family-owned business with two brothers as directors. Current turnover is about £50 million which is split £30 million and £20 million between their two sites. They have a base of 50 farmers in Scotland who are dedicated to grow all their potatoes and provide 90% of their potato supplies. They get another 2% from Merchants and non-dedicated growers; and 8% from overseas suppliers. They are the largest producers of carrots in the UK and one of the largest producers of onions and parsnips. They have two major multiple retail customers and 80% of their supplies goes to them. The other 20% goes to processors and cattle feed. 95% of product is for the domestic market.

Of the 8% of their product that is sourced from overseas, some is imported on a pure trading basis and some through strategic alliances. They have 3 strategic alliances to source potatoes, two in Spain and one in Jersey.

This alliance is with a producer organization in Jersey. The purpose of the alliance is to source Jersey Royal Potatoes for 2 months of the year. This producer organization is the largest of the producers on the island, accounting for 60-70% of the total volumes produced on the island. There are 3 other major producers of Jersey Royals on the island. Their alliance partner has a large number of individual growers. The alliance is 10 years old.

They chose their alliance partner at the insistence of their multiple retail customers. Their multiple retail customers had both had a long-standing trading relationship with them. They also wanted this particular partner because they were the biggest producer on the island and could supply them with the volumes of product needed.

The relationship started with significant volumes. Firm R buy the product already sized. Quality is the responsibility of their alliance partner. Their alliance partner

has their own quality assurance and quality control staff. When the alliance started, all product was sold loose, so Firm H was just responsible for washing and grading. Now the product is sold pre-packed in punnets or polythene bags and the functions of the relationship have evolved so Firm R is responsible for all packing.

Their multiple customers agree a price per pound with their alliance partners and Firm R add on their intermediary cost. The biggest cost in packing is product wastage with average wastage after washing of 20%.

All product development is carried out between the multiple retail customers and their alliance partner. Firm R concentrates on packaging development.

Their alliance partners do limited packing of product but Firm R does not see much scope for them extending this and muscling Firm R out of the supply chain because as soon as product is handled it starts deteriorating. Also Jersey Royals are a premium product commanding high prices and at the moment there is scope for everyone in the supply chain to make money on them. Even with product wastage of 20% it is still a profitable part of their business.

The last time Firm R visited their partner's site was 6 years ago. Their MD maintained that there was no need to visit the site as the main product factors are quality and price and these can be determined at the packing site in Scotland. Their partners do not need them to visit for technical input. This is in contrast to their Spanish alliances.

They phone them daily throughout the growing season to arrange daily volume requirements.

Their relationship with this alliance partner is described as 'business to business' and Firm R's MD feels that the relationship is between their partner and the multiple

retailers rather than them, in contrast to their other strategic alliances. However he regards the alliance as a success and one that has managed to develop successfully.

There are potential problems in the future with increasing competition from their suppliers. The geographical sourcing of new potatoes is highly seasonal with a limited production time from any one geographical source. Technological improvements have meant that these production periods are lengthening with the consequence that product is available from more than one supplier at the same time. Their alliance partner is facing increased competition from producers in Cornwall. Firm R feels that the multiple retailers are not interested in alleviating the problem.

9.3 Conclusion

This chapter examined the empirical support of our study for the specific propositions presented in Chapter 5 that were developed from a review of the theoretical literature presented in Chapters 2 and 3.

These propositions were developed using a multi-theoretical approach and focused on the motivations for forming strategic alliances, the process of alliance formation and the factors underlying alliance success.

The preceding analysis highlights the importance of using a multi-theoretical approach in informing the analysis. It shows that transactions cost theory, the resource based view and network theory can be used together to analyse strategic alliances and that when done so the understanding of the factors underlying alliance activity is greater than when any one perspective is used independently. It is our contention that no one perspective gives a sufficient understanding of the area of study by itself.

Whilst factors highlighted by the transaction cost school were shown to be important as contributors to an understanding of the motivations to form an alliance, they did not adequately reflect the firms' decision process. The original form of transactions cost theory focused on costs and did not stress longer term strategic issues. But as illustrated here costs did not dominate the motivations to form an alliance and were not drivers of alliance formation in themselves.

Strategic interdependence was shown to be a key motivating factor in alliance formation. All alliances were formed because of the supply needs of the focal firm and the market needs of the partner firm. However, support for the specific measures of strategic interdependence used in previous empirical work was more mixed. Absolute and relative financial measures of strategic interdependence were not found to be significant in our study. What was found to be significant was where firms found a strategic fit in terms of needs and resources and where firms found organisational compatibility in terms of complementary goals and objectives.

The inclusion of social structural explanations of alliance formation added to the explanatory power of the data. Supporting Gulati (1995) we found support for the use of social structural explanations of alliance activity in determining not only with whom an alliance partner should form an alliance but also in helping to understand the process of alliance formation.

Trust emerged as a dominant factor in alliance formation. The social network was shown to be of importance as a basis of instilling and enhancing levels of trust between alliance partners. Trust was also instilled through organisational compatibility and was nurtured through open and regular interaction between partners.

This study used a perceptual measure of alliance success following other empirical work (Beamish 1985; Bleeke and Ernst 1991; Bucklin and Sengupta 1993; Dussauge and Garrette 1995; Glaister and Buckley 1999; Harrigan 1985, 1988; Killing 1983;

Parkhe 1993; Schaan 1983). It showed the importance of assessing success by more than pure financial measures. Whilst most firms thought that the alliances had had a positive impact on their profitability and sales, this was not the yardstick they used to measure success. The alliances were critical to the strategic operations of the firms interviewed and were assessed according to whether they met the objectives behind alliance formation, namely to effectively supply the partner firms with product at certain times of the year, meeting the demands of their end customers. There were numerous additional benefits to the alliances. This helped to instill a positive feeling towards the alliances, which was a success factor in itself.

The power balance of the relationship was shown to be dependent on the relative dependencies of alliance partners on each other. This was a critical factor in alliance success and was not simply a function of the relative market power or size of alliance partners, rather the relative resources and capabilities each partner had.

Alliance success was also shown to be dependent on commitment to the relationship by both parties in terms of both managerial and financial resources. Complementarity in goals and objectives, operating philosophies and corporate cultures and the flexibility of alliance structures were also significant factors. Prior relationships did not have a bearing on alliance success.

Trust emerged again as a key factor in alliance success. This was engendered through a belief that both partners were doing their best for the good of the whole relationship which in itself was a function of believing that both partners needed each other and that both partners knew and understood each other and were working towards the same goals. There was a strong feedback from performance to trust. Firms that had successful alliances that worked to a large extent on trust between partners were more willing to continue trusting each other in the light of the positive benefits of the alliance. The few firms that had had bad experiences of alliances had a more cynical view of the collaborative process.

CHAPTER TEN

CONCLUSIONS

10.0 Introduction

The purpose of this thesis was to investigate the key factors motivating fresh produce suppliers in the UK to form strategic alliances with producers from overseas; the process of alliance formation; and the success and development of these alliances.

A metatheoretical approach was developed based on a synthesis of the resource based view and the transaction cost perspective including social structural explanations for alliance formation and the success and development of alliances. This approach was developed after extensive reviews of previous literature in this area (Chapters 2 and 3) and a review of the UK fresh produce industry at the time our research was undertaken (Chapter 4). Frameworks were developed for both motivational and success factors (see Sections 2.5 and 3.4). Propositions were developed based on these frameworks and tested. A qualitative methodology was used. The propositions were explored and developed through the use of in-depth semi-structured interviews. In-depth interviews were conducted with 20 fresh produce firms in the UK and information on 32 international producer alliances was obtained.

The methodology is described in Chapters 6 and 7 and the qualitative analysis and findings in Chapters 8 and 9.

In this final chapter we first summarise our study's main findings. These results are discussed in the context of the literature discussed in Chapters 2 and 3. This is followed by a discussion of the implications of our results for the firm. The study's contributions

to theory and methodology are identified. Finally we highlight the limitations of our study and suggest avenues for future research.

10.1 Conclusions

10.1.1 Motivations for Alliance Formation

Figure 10.1 is a reproduction of the conceptual framework developed in Chapter 2 (Figure 2.6) which was used as the basis of the investigation of the motivations for international alliance formation by producers in the UK fresh produce industry. Our analysis used this framework to examine the factors leading to alliance formation through 3 specific propositions. These are reproduced below to aid the summary of our study's main findings.

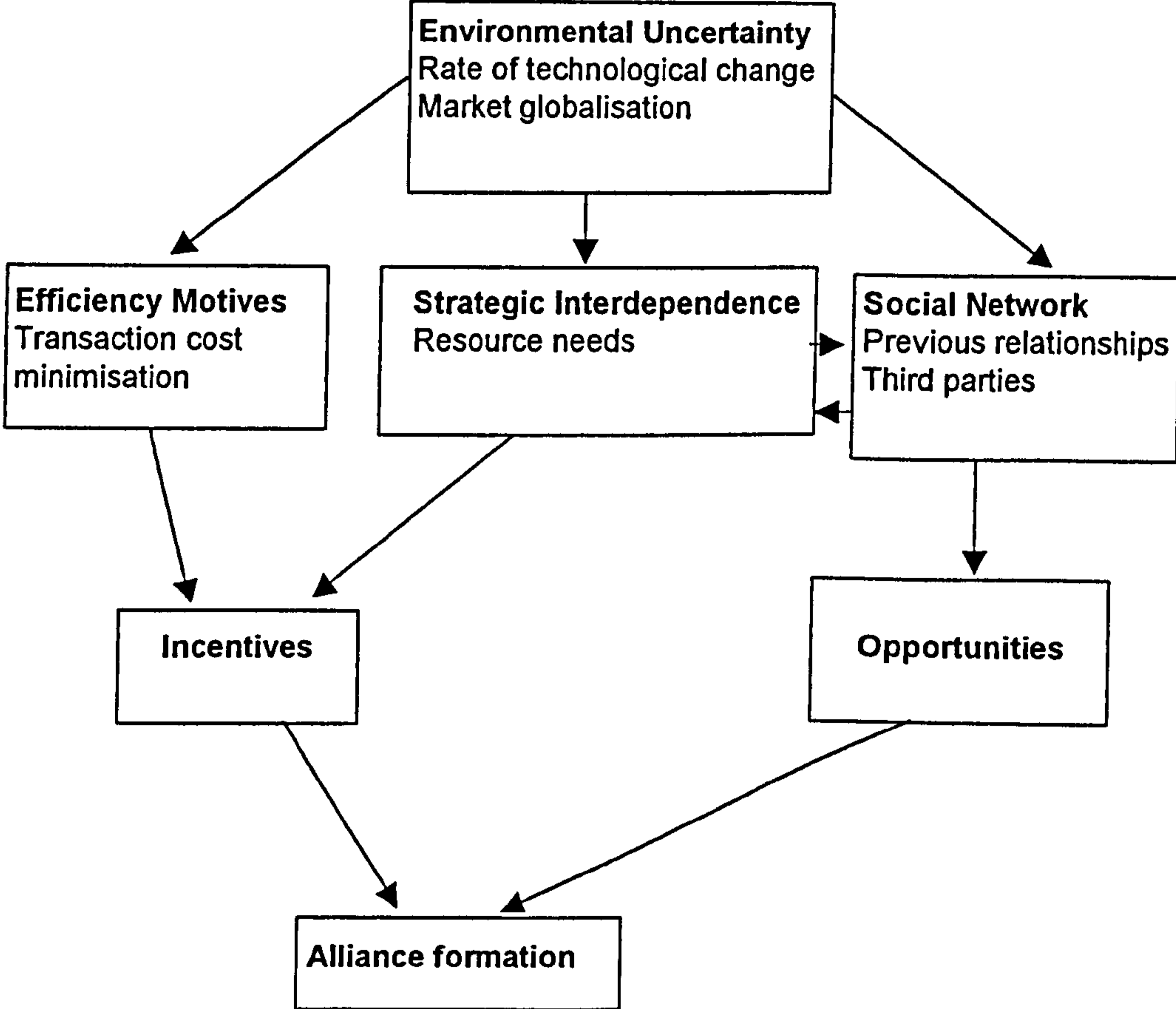
There is a wide range of strategic partnerships that fall within the definition of an alliance. The definition of an international strategic alliance used in this research was after Parkhe (1991 and 1993) as:

“Relatively enduring inter-firm cooperative arrangements, involving flows and linkages that use resources and/or governance structures from autonomous organisations based in two or more countries, for the joint accomplishment of individual goals linked to the corporate mission of each sponsoring firm.”

The specific scope and function of each alliance varied according to the particular objectives of the alliance. The research studied a range of alliances from ones that were little more than spot trading to one that was a joint venture.

Figure 10.1

International Alliance Formation in the Fresh Produce Industry



Proposition 1: **Firms are motivated to form alliances when their transaction costs are of an intermediate level, but not high enough to justify vertical integration. These transaction costs are determined by asset specificity, uncertainty and frequency of transactions.**

This proposition is derived from the transaction cost perspective and highlights the efficiency motives of alliance formation that form the basis of this perspective (Figure 10.1).

All the firms interviewed had chosen to form the strategic alliances studied rather than expand abroad themselves through vertical integration. Costs were shown to be an important factor in the choice of forming a strategic alliance over vertical integration as a strategic option for firms. For most firms interviewed the costs of internal expansion meant that this was not a viable strategic option. Allied to this was the risk of vertical integration into an uncertain marketplace with highly variable short-term supply and demand conditions, supporting the findings of Beamish and Banks (1987) and Contractor (1990) amongst others.

A number of firms also felt that alliances afforded them a lower level of commitment to their partner than vertical integration, supporting Chi (1994) and Hennart (1988) and also that an alliance gave them greater flexibility in terms of their total strategic options available than if they had integrated vertically.

There was a link between ownership and control made by some firms. These firms argued that ownership through a joint venture or internal expansion gave them greater control over operations than through a strategic alliance. However, other firms did not agree. The issue of control was shown to be partly a product of the size and location of potential overseas partners and partly their prior experiences of alliances and the effect

that this had had on the trust they had in alliance partners. The importance of trust and the antecedents of trust in strategic alliances are discussed extensively below.

Our study found the influence of levels of transaction costs on a firm's motivation to form an alliance to be unclear and thus support for the proposition mixed. The choice between expansion abroad or forming a strategic alliance which is central to transactions cost theory was not an option open to most firms in our study because of the prohibitive costs of internal expansion.

The influence of the specific components of transactions costs on alliance formation was also unclear. The specific components of transactions costs studied were levels of asset specificity, uncertainty and frequency of interaction (Williamson 1985). Levels of asset specificity in the industry are increasing, albeit from a relatively low base. The increased demands for product supplied to precise technical and quality specifications by end customers has resulted in production and pack-house facilities that are increasingly specialised and tailored to individual customer needs. That said, for most firms, alliances were a far less costly option than expanding abroad themselves. Most partner firms did not need help with capital costs, rather they needed technical support and guidance. However, when they did need help, the focal firms were willing to provide them with whatever resources they could contribute to ensure that the alliance achieved the desired outcome as successfully as possible. Arrangements tended to be highly informal and trust was critical.

Frequency of interaction between alliance partners is high, with daily contact and the need for regular visits between sites. These are both a result of the need by the focal firms for control over the specifications and standards of the product that they are supplying to their multiple retail customer. However the controls on the alliance put in place by the focal firms tended to be very informal. Most alliances operated with no contracts or formalised monitoring procedures. Instead, the partnerships worked informally, with trust between partners mitigating uncertainty. Trust was nurtured

through regular and open contact and the knowledge that it would become quickly apparent if something was going wrong.

Transactions cost theory was found to present a narrow view of motivations and did not adequately reflect the decision processes of the firms' interviewed. In a critique of the theory, Bell (1996) argued that it takes no account of relative benefits of strategic options in a firm's decision process and specifically that when choosing a governance structure, the firm, within the constraint of bounded rationality, would make a comparison of all the gains and losses that attach to one governance structure relative to others. In our study the potential benefits of an alliance as well as the prospective costs were a critical factor in the firm's choice of its strategic options.

Proposition 2: **Firms are motivated to form strategic alliances to access resources and achieve strategic competitive advantage when these resources cannot be acquired through market exchange or internalisation.**

This proposition is derived from the resource-based view. It highlights the possession of and need for various resources as motivating factors in alliance formation (Barney 1991; Berg, Duncan and Friedman 1982; Hagedoorn 1993; Mariti and Smiley 1983; Pfeffer and Salancik 1978). It proposes that the heterogeneous possession of resources leads to strategic interdependence between firms and that this strategic interdependence leads firms to form alliances (Figure 10.1). The potential benefits of alliance formation are central to this view (Barney 1991; Berg, Duncan and Friedman 1982; Hagedoorn 1993; Mariti and Smiley 1983; Pfeffer and Salancik 1978). *There was direct support for the proposition that strategic interdependence is a motivating factor in alliance formation supporting previous empirical work (Achrol, Scheer and Stern 1990; Astley 1985; Barley, Freeman and Hybels 1992; Baum and Singh 1994; Bucklin and Sengupta 1993; Burgers, Hill and Kim 1993; Fombrun 1986; Gulati 1995; Hannan and Freeman 1977;*

Kogut, Shan and Walker 1992; Ruekert and Walker 1987). The inimitable resources possessed by one side of the partnership and needed by the other was a critical factor in strategic alliance formation in the firms studied. The key motivation for alliance formation by all the focal firms was the securing of consistent supplies of product of a particular quality and specification at the times of year when they could not grow that product themselves. The key motivation for all the partner firms was access to the UK marketplace. This was seen as an extremely lucrative market with high barriers to entry by alternative routes. For overseas partners, forming an alliance was seen as the only means of gaining access to this marketplace.

As noted in Chapter 9 there have been numerous measures used by researchers in previous empirical work to try and determine levels of strategic interdependence between firms including examining the relative size and performance of focal firms (Burgers, Hill and Kim 1993); the relative financial attributes of alliance partners (Barley, Freeman and Hybels 1992; Gulati 1995; Kogut, Shan and Walker 1992); organisational niche (Astley 1985; Baum and Singh 1994; Fombrun 1986; Gulati 1995; Hannan and Freeman 1977) and organisational compatibility (Achrol, Scheer and Stern 1990; Bucklin and Sengupta 1993; Ruekert and Walker 1987). *The support for the specific measures of strategic interdependence that were tested was more mixed.* Our study found that organisational compatibility between partners was key to levels of perceived strategic interdependence. In contrast, structural factors such as the relative size and performance of firms or relative financial attributes were not in themselves necessarily an indicator of strategic interdependence. Firms looked for partners who had similar goals and operating philosophies. Similar expectations of the alliance and similar ways of working were shown to be important in creating trust between alliance partners. Inter-party trust was a critical factor in the day to day operations of the alliance and thus organisational compatibility was highly important.

Proposition 3: **The social network that a firm operates within influences both the motivations for firms to form alliances and the alliance opportunities made available to that firm.**

This proposition is derived from the network perspective and highlights the influence of the social network that the alliance partners operate within on both their motivations to form alliances and also the opportunities to form alliances (Giddens 1984; Gulati 1995; Gulati 1999; Khanna, Gulati and Nohria 1998). The social network is defined in Chapter 2 and refers to the prior direct and indirect relationships between firms that are used as an important source of information for firms about the reliability and capabilities of potential partners (Figure 10.1).

There was direct support for this proposition. The importance of social structural explanations for alliance formation is highlighted here and with it the emergence of trust as a dominant factor in alliance formation. Giving empirical support to other's work (Bradach and Eccles 1989; Gulati 1995; Zajac and Olsen 1993; Eisenhardt and Schoonhoven 1996) these results illustrate the importance of information provided by the network that the alliance operates within and how critical this is as a basis in enhancing trust between potential partners.

This piece of research has highlighted the critical importance of network theory in addressing both the specific choice of alliance partner (as opposed to the need for a strategic alliance) and the process of alliance formation. These are aspects that have been largely ignored by both the transaction cost perspective and the resource based view.

Network theory also highlights the importance of prior knowledge of potential alliance partners in the motivation to form an alliance. Specifically, prior knowledge was shown to lower the perceived risk in alliance formation; provide information about a partner's resources and capabilities; be an important antecedent to trust between alliance partners;

and enable alliance partners to be clear about the rules, routines and procedures they were expected to follow. Prior knowledge was shown to be such an important factor in alliance formation that all those firms interviewed who had trading relationships in the product areas where they wanted to form alliances (bar one) approached these firms as first choice of alliance partner.

Our study also showed the importance of other information sources for firms who wanted to form alliances such as third parties. This wider network was shown to be particularly important in making firms aware of potential alliance partners.

The selection of alliance partners was shown to be highly informal. Critically it was shown to be neither exhaustive or systematic. Most alliances were formed after contacting a limited number of potential partners and most firms developed alliances with partners of whom they had some prior knowledge. The key criteria in partner choice were technical skills, management competencies and the ability to produce sufficient volumes of product of appropriate quality. However these skills and competencies were judged in a highly subjective basis on the judgment of key people in the focal firm (usually a director), described in many interviews as 'gut feeling'.

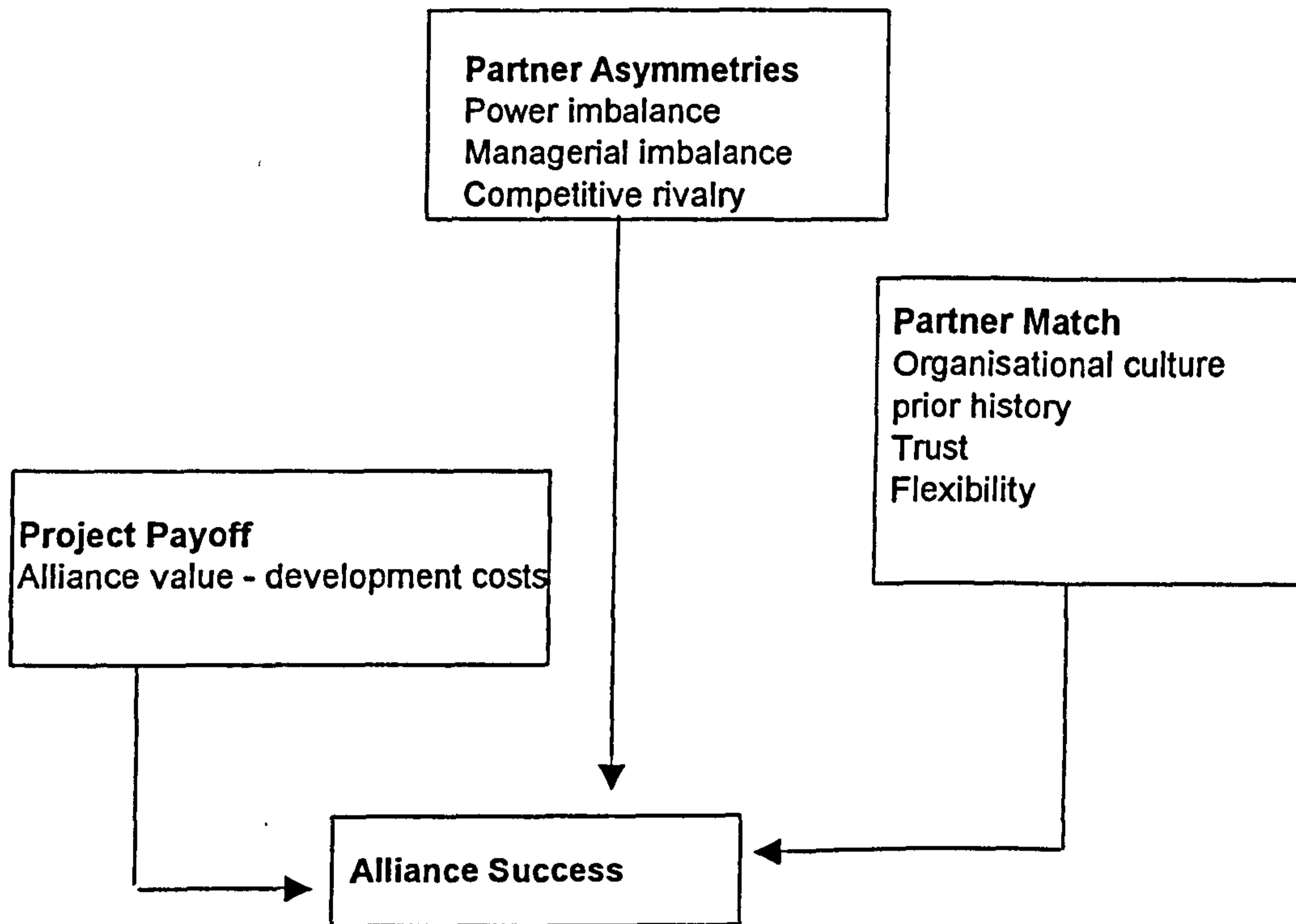
10.1.2 Alliance Success

Figure 10.2 is a reproduction of the conceptual framework developed in Chapter 3 (Figure 3.2) which was used as the basis of the investigation of alliance performance. Our analysis used this framework to examine the factors influencing alliance performance in the UK fresh produce industry through 4 specific propositions. These are reproduced below to aid the summary of our study's main findings.

Figure 10.2

Alliance Success Factors in the Fresh Produce Industry

Adapted from Bucklin and Sengupta (1993); Glaister and Buckley (1999)



Alliance success is defined qualitatively as where the alliance partners are satisfied with the performance of the alliance and the extent to which it has achieved its overall objectives.

Proposition 4: Alliance success can be measured through a perceptual measure based on the firm's evaluation of alliance performance.

This proposition puts forward the view that alliance performance can be measured using a perceptual measure of satisfaction with alliance performance (Beamish 1985; Bleeke and Ernst 1991; Bucklin and Sengupta 1993; Dussauge and Garrette 1995; Glaister and Buckley 1999; Harrigan 1985, 1988; Killing 1983; Parkhe 1993; Schaan 1983).

In our study we make a defence of the use of a perceptual measure of alliance success given the key characteristics of the fresh produce industry in the UK. Three specific factors were highlighted. First, the divergent and numerous motivating factors for alliance formation between the firms studied mitigated against the use of a single measure of success such as profitability or survival of the alliance. Second, most of the alliances studied were young and most had started tentatively with small volumes, increasing over time to meet market demand. In this context a finite time period on which to judge the alliance was inappropriate. Even those alliances that were trading significant volumes from inception did not have a specific time period agreed at inception on which to grade success. Third, most partner firms regarded their alliances as dynamic forms that needed to be flexible enough to change and adapt according to market conditions. The changing structure and objectives of the alliances meant that the measure of their success must also be adaptable.

Our results show that given the perceptual measure we have used in this study, nearly all the alliances were successful. The use of a perceptual measure enabled us to evaluate the alliances in terms of whether they had met the key objectives of formation by the focal firm. Most partnerships had no formal timescale on which to judge success and most were an evolving structure with an in-built flexibility to change according to the changing objectives of the partners. In this context most alliances were not judged

according to objective criteria and most of the interviewees thought that objective criteria would be an inappropriate means of assessing the partnership. There was no correlation between product volume growth and success. Although most firms thought that the alliance had had a positive impact on profitability or sales they pointed out how difficult it was to quantify this and accordingly few had tried. They also felt that financial measures were far too narrow a measure of alliance success.

Proposition 5: **Imbalances in power and in the managerial resources that each partner provides to the alliance are drawbacks to alliance operations and have an important role in limiting alliance success.**

The analysis of power in alliance relationships has been examined in two distinct ways. First, some researchers have looked at it in terms of control of the relationship (Beamish 1984; Killing 1982; 1983). The second perspective is of power in terms of market power defined according to financial resources and market presence (Bleeke and Ernst 1991; Bucklin and Sengupta 1993; Cook 1977; Harrigan 1988; Prahalad 1989). Here the focus is on the balance of power between alliance partners and the consequences of alliances between partners with similar or different levels of market power. Previous research has argued that if an alliance is out of balance the weaker party may try and limit its vulnerability to the detriment of the alliance and the stronger party may be loath to put forward effort (Bucklin and Sengupta 1993). The definitions of power used by researchers and the implications of power imbalances on the success of an alliance are discussed in detail in Chapter 3. In this study we focus on the second perspective of power, that is the relative market power of the alliance partners (Figure 10.2). The measurement of power used in previous empirical work and our study is discussed in Chapter 7.

The power balance between alliance partners was not determined by financial resources or market presence but by the balance of needs between the partners. Relative dependencies were a critical factor in alliance success. When these relative dependencies changed, previously successful alliances could falter. This happened when the resources provided by the alliance partners were no longer valuable, as defined by the resource-based view (Barney 1991; Peteraf 1993). Their value is based on their scarcity, imperfectly imitability or the lack of direct substitutes for them (Barney 1991; Peteraf 1993). The key resource needs that were central to alliance formation were product supply at certain points of the year and access to the UK market. Where the heterogeneous possession of these changed, the relative dependencies of the alliance partners changed. Specifically, problems were found in the alliances studied when the demarcations of the supply periods of alliance partners became blurred and also when the partner firm no longer needed the focal firm to provide the valuable resource of access to the UK market-place.

Actual and perceived commitment to the alliance by both partners influenced the partners' perception of alliance success and positive feelings towards the alliance in general. Especially critical was the importance of perceived commitment in engendering trust between alliance partners when the partner firm had had previous unsuccessful alliance experiences.

Thus the proposition is not supported. Our findings are that it is relative dependencies and commitment to the relationship that are critical factors in alliance success rather than a balance in power between alliance partners or a balance in the managerial resources brought to the relationship.

Proposition 6: The higher the project payoff from a strategic alliance the more likely it is to be successful

Project payoff is defined as the strategic value of the alliance net of development cost (Bucklin and Sengupta 1993). It is argued that the higher the project payoff from an alliance the more likely it is to be successful (Benson 1975; Bucklin and Sengupta 1993; Glaister and Buckley 1999; Schermerhorn 1975) (Figure 10.2).

All the alliances brought additional benefits to the partner firm over and above those sought at the time of alliance inception. The differences in the number and type of additional benefits cited by the firms interviewed were a function of the attitude towards the alliance by the firm and the functions undertaken by the alliances. In general, the more integrated the alliance was in the firm and the more open the alliance the more additional benefits the firms got from the alliance. The range of these benefits was also a function of the age of the alliances in that the full extent of alliance benefits had not been realized by some of the newer alliances.

Developmental costs of the alliance identified were costs of development of the product and the costs of marketing the product. Product development costs in general were significantly lower than if the UK firm was expanding abroad itself although they were often ill-defined. The scale of marketing costs depended to a large extent on the type of product and the country of origin of the partner firm. All focal firms quantified what levels of these costs they could handle to ensure the partnership remained profitable.

The developmental costs of the alliances were outweighed by the strategic value of the alliances to both parties. Most firms felt that the alliances had achieved a symbiosis of individual strengths and that there had been numerous additional benefits to the partnership. The high project payoff imbued a positive feeling about the alliances to the firms interviewed. *Thus this proposition is supported. The project payoff from the alliances seems to be high.* It is theorized that because of this the focal firms were

willing to commit to funding costs incurred in developing the alliance that were not necessarily identified ex-ante alliance formation, such as in training the partner firm in product development.

The high project payoff of most of the alliances was directly linked to the success of these alliances. The high project payoff imbued a positive feeling about the alliances to the firms interviewed.

Proposition 7: Alliance success is dependent on partner match. This is facilitated through similar organizational cultures, prior history, trust and flexibility.

Partner match refers to alliances in which the partners are similar in management style and company culture (Bucklin and Sengupta 1993). This is facilitated through similar organizational cultures (Barkema and Vermeulen 1997; Fedor and Werther 1995; Rule and Keown 1998; Shenkar and Zeira 1992); a long and stable history of prior business relations (Bucklin and Sengupta 1993; Glaister and Buckley 1999; Heide and John 1990; Parkhe 1993; Saxton 1997); mutual trust (Beamish and Banks 1987; Buckley and Casson 1988; HanYan and Gray 1994; Harrigan 1986; Inkpen and Beamish 1997; Madhok 1995; Monczka, Petersen, Handfield and Ragatz 1998; Hoffman and Schlosser 2001; Rule and Keown 1998; Zaheer, McEvily and Perrone 1997) and flexibility by alliance partners (Bleeke and Ernst 1991; Doz 1996; Dyer and Singh 1997).

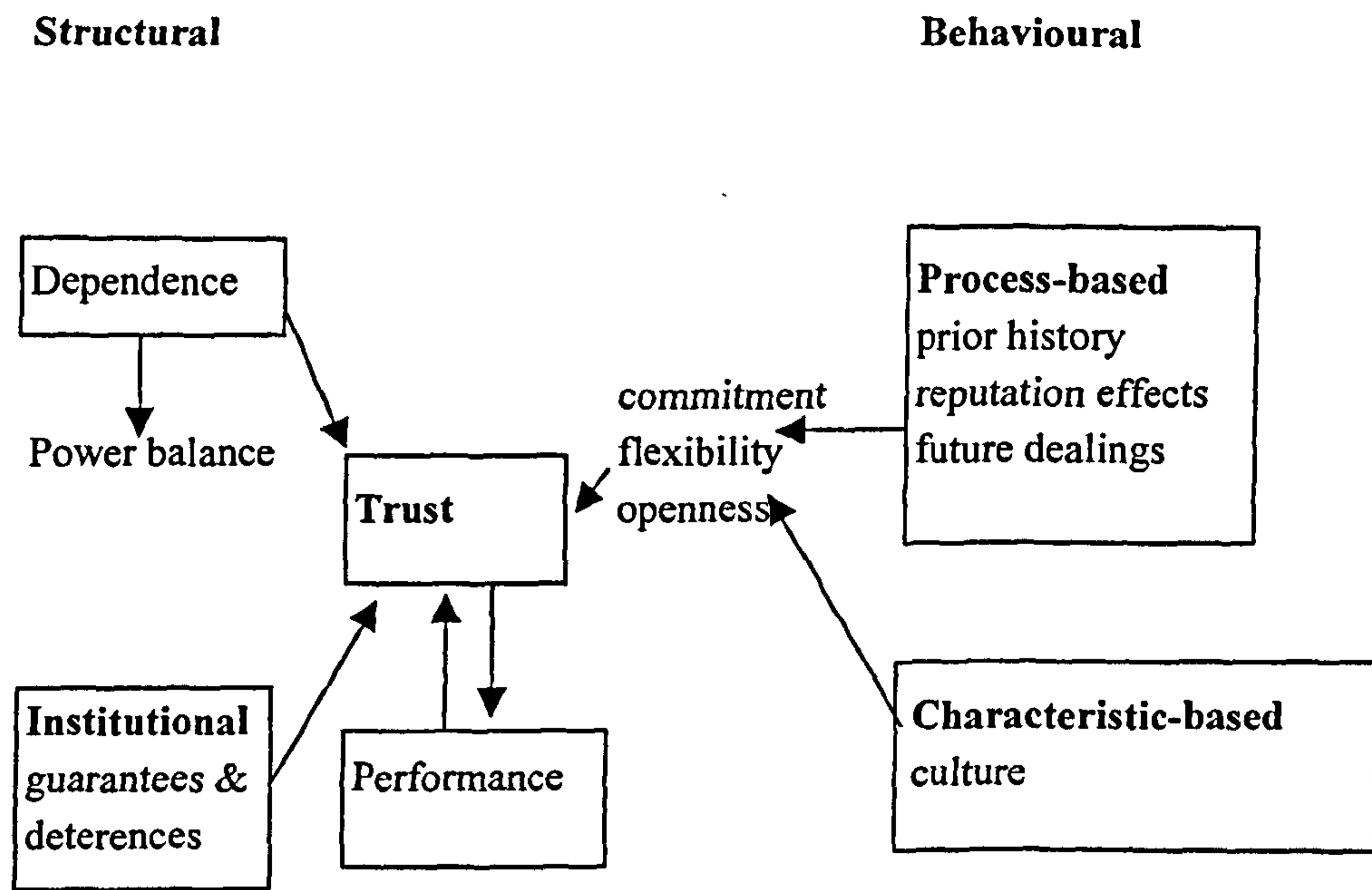
This proposition is supported. Alliance success is dependent on partner match. The support for the proposed influences on partner match was more mixed. There was support for the positive influence of similar organizational cultures on alliance success. Specifically, complementarity in goals and objectives, operating philosophies and corporate cultures was seen to be a significant factor in alliance success. All firms cited similar aims and aspirations as well as mutual understanding, respect and a willingness

to develop the partnership as key reasons for the partnership's success. The flexibility of the alliance structure was also a factor in the success of the alliances studied. Prior relationships were not seen to have a significant bearing on the success of the alliances studied, *with no difference found in our study in the degree of successful alliances between those who had prior relationships with their alliance partners and those who did not.*

Two interrelated issues emerging from our research is the importance of trust in the motivations and success of alliances, supporting work by others (Arino and de la Torre 1998; Beamish and Banks 1987; Buckley and Casson 1988; HanYan and Gray 1994; Harrigan 1986; Hoffman and Schlosser 2001; Inkpen and Beamish 1997; Madhok 1995; Mohr and Spekmen 1994; Monczka, Petersen, Handfield and Ragatz 1998; Parkhe 1993; 1998a; 1988b; Rule and Keown 1998; Yan 1998; Zaheer, McEvily and Perrone 1997) and also the identification in this research of clear antecedents to trust. Figure 10.3 illustrates the antecedents to trust identified in this research. This figure is derived from models developed by Parkhe (1998) and Aulakh, Kotabe and Sahay (1996). It is a development of Figure 3.1 in Chapter 3, with a distinction between structural and behavioural components of trust and the identification of dependence and its impact on the power balance in the alliance as a key antecedent to trust. The typology on which the framework is based is that developed by Parkhe (1998) and discussed in Chapter 3. The components of the framework and the antecedents to trust that have emerged in our research are discussed below.

Trust in inter-firm relations includes a set of expectations between the partners regarding each other's behaviour and each partner's fulfillment of its perceived obligations in the light of such anticipation (Madhok 1995; Thorelli 1986). Following others (Aulakh, Kotabe and Sahay 1996; Hosmer 1995; and Madhok 1995) we distinguish between structural and behavioural components of trust. The structural component refers to the form of trust fostered by mutual hostages and complementarity of resources contributed by the partners (Madhok 1995). The behavioural component of trust refers to the

Figure 10.3 Antecedents of Trust



Developed from Parkhe (1998) and Aulakh, Kotabe and Sahay (1996)

confidence aspect in exchange relationships, the “firm’s belief that another company will perform actions that will result in positive outcomes for the firm as well as not take unexpected actions that result in negative outcomes.”

We also differentiate between process-based, characteristic-based and institutional-based sources of trust following Parkhe (1998). This typology was discussed at length in Chapter 3 and summarised here. In process-based trust production, trust develops from the exchange process itself, based on past or expected future interactions. Characteristic-based trust production refers to the societal and corporate culture of partner firms (Parkhe 1991). Institutional-based trust production refers to the formal mechanisms put into the partnership by alliance partners to signal their trustworthiness.

Parkhe (1998) identifies a number of factors that will determine the importance of trust in a specific alliance. The first factor is the nature of the industry. The relatively small number of firms competing for market share in the UK fresh produce industry increases the importance of trust in this industry. In this industry companies are well aware of who their competitors are and who is supplying which customer. The informal network is strong and reputation effects are critical to future transactions with both current and potential customers and suppliers. Parkhe (1998) argues that these factors combine to make trust a highly important factor (see Chapter 3).

The second factor is the type of alliance. Parkhe (1998) argues that the lower the degree of interlocking interests between alliance partners, the lower the vulnerabilities and the less important trust will be. Parkhe (1998) defined interlocking interests according to the typology of alliances devised by Contractor and Lorange (1988) and reproduced in Chapter 2. Thus he argued that levels of trust were far higher in an equity joint venture, which has high inter-organisational dependence than a non-equity relationship. All the alliances were important to the UK firms as supply sources, enabling them to continue their supply relationships with their multiple retail customers. The degree of importance of the relationship to the firm’s operations and the level at which the alliance was

integrated into the firm did influence the importance of trust in the relationship. However, this was not necessarily dependent on the level of equity in the alliance. In fact the use of joint ventures was seen as more necessary to those firms who had had bad experiences of alliances and the injection of capital into the alliance was used as a formal antecedents to trust to create control through ownership.

The third factor is the sources of uncertainty. Parkhe (1998) argues that uncertainty is an inherent feature of alliances and external uncertainty cannot generally be controlled but that internal uncertainty can be minimized by openness and information sharing between partners. Openness and flexibility were key behavioural antecedents to trust that influenced the motivations and success of alliances. Openness and regular contact mitigated the need for formal antecedents to trust such as monitoring or contracts. Flexibility in the alliance was shown to be important given the need to change on a short-term basis according to supply and demand needs and also the willingness of alliance partners to change and develop over the more long-term. This finding supports Parkhe (1998) who argues that openness between partners creates trust by mitigating uncertainty. He argues that uncertainty is an inherent feature of alliances and external uncertainty cannot generally be controlled but that internal uncertainty can be minimized by openness and information sharing between partners.

Mutual dependence fostered by the heterogeneous possession of resources, that is central to the resource-based view, is a key structural antecedent to trust. It affects both the motivations to form an alliance and the success of an alliance. Dependence is shown to lead to commitment to the alliance by both parties, underlying the belief that partners are working towards the same goals and that both are doing their best for the whole relationship.

Our study found a strong feedback from performance to trust. Positive experience of the alliance and of the benefits of the alliance increased trust between alliance partners. Conversely, those firms who had had bad experiences of alliances were far less likely to

trust future alliance partners. This experience coloured their view of alliances in general, not just the specific alliances that had been unsuccessful. This meant that all future alliance partners were affected by previous bad experiences of alliances.

The institutional-based means of building trust cited by Parkhe (1998) such as guarantees or deterrents were not as important as process and characteristic based antecedents such as prior history, societal culture and corporate culture.

There were several positive benefits of trust identified in this study confirming previous empirical work (Axelrod 1986; Beamish and Banks 1987; Bleeke and Ernst 1991; Bradach and Eccles 1989; Dwyer, Schurr and Oh 1987; Heide 1994; Ouchi 1980; Parkhe 1993; Stichcombe 1986; Wilkins and Ouchi 1983). There was strong support for the argument that trust can be a deterrent to opportunistic behaviour (Axelrod 1986; Beamish and Banks 1987; Stichcombe 1986). The fresh produce industry is one with uncertain short-term supply and demand conditions which can change the relative values of short and long term gains. The relative rewards of a partnership deal that seems lucrative to both partners at one moment in time can change over a limited space of time and other opportunities for both partners can also emerge. However, what emerged from our study was the strong commitment of most alliance partners to the long term interests of the alliance over any potential short-term individual gains. This we argued was due in part to the trust that was embedded in the partnership. There were only three alliances out of the 32 studied where the alliance partners had behaved opportunistically and pursued short-term gains to the long-term detriment of the relationship. This behaviour led directly to a breakdown of trust in the relationship and affected the view of those focal firms involved on the ability of trust to act as a deterrent to future alliance relationships. In these instances the focal firms felt that the temptation for their partner firm's to behave opportunistically in this industry was too great.

In most, but not all cases, trust was also seen to be a substitute for hierarchical governance (Bradach and Eccles 1989; Dwyer, Schurr and Oh 1987; Heide 1994; Ouchi

1980). The mutuality of interests between partner firms led to trust between them so that formal authority structures based on ownership were not thought to be necessary by most alliance partners (Bradach and Eccles 1989; Dwyer, Schurr and Oh 1987). The presence of trust between alliance partners meant that they could use the alliance structure to accomplish individual goals for independent organizations through joint accomplishments, shared beliefs and mutual concern for long-term benefits (Heide 1994; Ouchi 1980). A number of firms did feel in the future that they would like to formalise their alliances through the development of joint ventures because of concerns over control of the operation. These included those who had had bad experiences of alliances but also those who felt they needed more formal control over the partnership through capital and that trust in itself was not a sufficient substitute for hierarchical governance.

A key point emerging from our study is that the alliances were not static structures, but rather were found to be evolving structures. As the alliances evolved the needs of both partners' from the alliances may change. The implications for this on firm strategy are discussed in the next section.

10.2 Implications for the Firm

This study highlighted the importance of strategic alliances to the overall operations of the firms studied. Firms judged individual strategic alliances not just on their own merits but also on their contribution to the strategic operations of the entire firm. Many firms had more than one strategic alliance. These were not isolated entities within the firm, but rather were parts of total firm operations that had impacts on each other. Some were complementary, such as ones that provided different sources of the same product for different periods of the year. Some were more competitive in nature, such as when a second alliance for the same product had been established because volume demands were not being sufficiently met by the first alliance for that product. Even when a firm

had a number of seemingly distinct alliances for different products, the operations of the alliances were judged not just in their ability to meet individual goals but also in their contribution to the total strategic operations of the firm.

This study highlighted the importance of the relationship between partners on the success of a strategic alliance. The importance of what are often termed 'soft factors' such as trust and partner compatibility on the process of formation and the success of alliances was highlighted. This study showed the critical importance of the establishment and management of good working relationships on an alliance's operations and success. Partner compatibility and personal chemistry were key factors in choice of partner and helped in establishing a basis of trust in the relationship. In the absence of formal controls such as contracts and the fact that the majority of alliances were non-equity, this trust was shown to be critical to the success of the alliances studied.

The more open and close the alliance relationship and the more integrated the alliance in the firms' business operations, the more benefits both partners were seen to gain from the alliance. Thus firms who saw the alliances as a key part of their supply network, where both parties were working towards the development of the business tended to have alliances where partners were involved in all areas of each others business such as new product development; where there were open books; and where no part of the business was out of bounds. These alliances all brought with them a number of additional benefits other than those that were the key drivers for alliance formation themselves.

This study also highlighted the importance of flexibility by the firm in their approach towards their alliance partner and also the alliance (Bleeke and Ernst 1991; Doz 1996; Dyer and Singh 1997). All the alliances, bar one, had no formal contract at their basis. The alliances were typically unstructured, based on mutual trust. What was highlighted was the evolutionary nature of most alliances. Most had evolved into more than what

was initially envisaged. A key finding is the fluidity of the alliances as strategic structures. Whilst most alliances had not changed in purpose or scope, they were all becoming more integrated within the business of the focal and partner firms. All of the alliances were still trading in the same products that they started with, although in all cases the volumes of product traded had grown. Seven of the alliances had also diversified into other products. In 3 cases these were niche varieties of the main product traded in 4 cases these were other product areas. Three alliances had also changed in structure. What emerged strongly was the willingness of alliance partners to be flexible in their response to the need for changes and the willingness of both the focal firm and the partner firm to be proactive in investigating new areas for alliance development.

This study highlighted the importance of the industry network and information provided by this network on partner selection (Bradach and Eccles 1989; Gulati 1995; Zajac and Olsen 1993; Eisenhardt and Schoonhoven 1996). It also showed how critical this network is as a basis in enhancing trust between potential partners. The social network that the alliance partners operated within influenced both their motivations to form alliances and the opportunities to form alliances. Prior history was found to be a highly significant factor influencing alliance formation. It was shown to lead to a greater understanding of the resources and capabilities of the partner (Gulati 1995; Kogut, Shan and Walker 1992); to reduce the risks associated with alliances (Eisenhardt and Schoonhoven 1996; Zajac and Olsen 1993); to instill a level of trust between alliance partners (Bradach and Eccles 1989; Gulati, Nohria and Zaheer 2000); and to heighten awareness of correct rules, routines and procedures (Arnaud and Khanna 2000; Gulati and Singh 1999; Gulati 1993; Westney 1988).

Third-party ties were also found to be an important information source, particularly in making focal firms aware of potential alliance partners (Van de Ven 1976). The importance of this aspect of the social network was underlined by the fact that most firms who used contact information from third parties did not look outside this initial information base when choosing partners.

The informal industry network was also shown to be strong, both between growers and also along the supply chain, where information about individual firms is relatively accessible. When a firm abuses a relationship, it is quickly discovered and the affects on the firm's reputation swift.

The social network was also an important factor in the process by which these alliances were formed. UK growers did not undertake deep or exhaustive analysis of potential partners. When they had found or knew of someone that was a potential alliance partner, they stopped searching. Most alliances were between firms with prior knowledge of each other. Those who developed an alliance with firms they had previously traded with did not look outside these relationships for a potential alliance partner.

This study showed the importance of embedded resources such as access to market and supply source. The heterogeneous possession of these resources by the firms in our study and the need to access these resources were the key drivers of alliance formation. Protection of these resources by the firms was shown to be the key to maintaining competitive advantage. Specifically, the key valuable resource owned by the focal firm was access to the UK market and thus the key to their competitive advantage was in maintaining protection of customer access. The key valuable resource owned by the partner firm was the ability to supply the required product at certain key seasonal periods and thus the key to their competitive advantage was the protection of this seasonal advantage.

This dependence of alliance partners on each other was shown to be a critical factor in alliance success. The relative resources and capabilities each partner brought to the alliance and needed by alliance partners was more important to alliance success than the relative market power or size of alliance partners.

Increasingly it is the case that firms supplying the UK multiple retailers have to form strategic alliances to secure their customer base. This is leading to acute polarisation in the fresh produce industry and resulting in a large percentage of the industry excluded from the supply chain. Each product area is now dominated by a few large companies who are the suppliers to the UK multiple retail customers.

The importance of quality and the precise specifications of multiple retail customers means that the need for alliances will be maintained. However there is currently a push from the UK multiple retail customers for equity relationships between alliance partners. This is due to a wish by these customers for increased control of the UK firms over the total alliance operations. However, our study showed that there is not a simple relationship between ownership and control or ownership and success. Many factors have been shown to play an important part in the operations and success of an individual alliance. In particular our study showed the importance of 'soft factors' on alliance operations such as trust and alliance partner compatibility. Many UK firms are not in a position to commit equity into an alliance relationship nor feel that it is necessary to establish a successful relationship. These firms need to convince their multiple retail customers that they can achieve control through strategic alliances and that these alliances can be as successful as equity relationships. Our study showed that strategic alliances are not necessarily a transitional structural phase that will inevitably develop into an equity relationship such as a joint venture, rather that they can be a stable structural form in themselves.

Globalisation of markets was shown to be a factor influencing alliance formation, supporting arguments by authors (Achrol 1991; Dunning 1995; Johansson 1995; Varadarajan and Cunningham 1995). All firms cited an increase in competition as a factor in alliance formation. Over the next decade competition is likely to increase as barriers to entry to EU markets begin to fall. This is likely to increase the need for collaborative relationships by UK producers. The increasing importance of specialist

consumer demand such as that for Fairtrade products or organic products is also likely to lead to further alliances as firms seek to broaden their product ranges and capabilities.

10.3 Contributions to Theory

The focus of this study is on a largely un-researched industry in the context of empirical work on strategic alliance formation and success. The focus of most previous empirical studies of strategic alliances has been from a manufacturing tradition with the consequence that the focus has been on the motives of the seller firm marketing out rather than the buyer firm with supply-side needs. This means that the literature has emphasised interpretations from a manufacturing tradition not all of which relate to the UK fresh produce industry. The UK fresh produce industry has several key features that differentiate it from other industries. The results of our study have been informed by these features and it has brought out factors affecting both motivations and alliance success that have not been highlighted by other studies.

The UK fresh produce industry is characterised by short-term supply inflexibility. Demand is also relatively unpredictable. There have also been significant changes in the structure of marketing channels in this industry over the last two decades which have impacted on the strategic behaviour of firms within these channels.

Short-term supply inflexibility, notably the fact that supply does not automatically respond to demand is a key feature of the fresh produce industry. To this author's knowledge there is no explicit account of a supply constraint as a motivating factor in previous empirical work in this area. This supply constraint was the key driver of alliance formation for the focal firms in our study.

The position of power in the supply chain is critical in our analysis. The fresh produce industry has a supply chain with power located downstream with the multiple retailers.

The power of these retailers in defining the supply chain and influencing the strategic behaviour of members of the supply chain is a key feature of this industry. Most of the research on strategic alliances has focused on power at the other end of the chain, with the manufacturers. This is a crucial difference. As discussed above, the power of the multiple retail customers over the strategic behaviour of members of the supply chain is a critical factor in the decision of the focal firms to form an alliance.

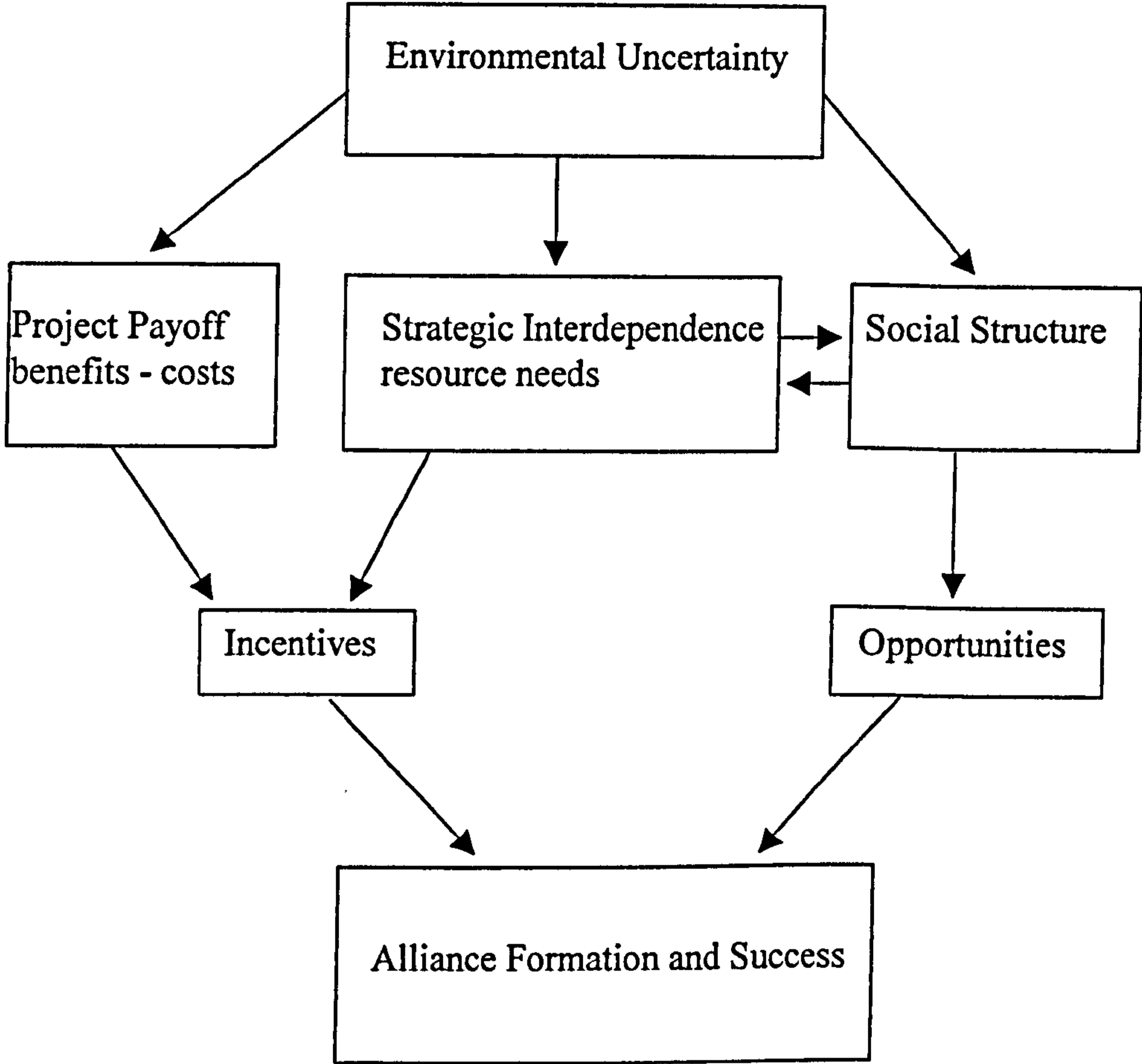
The findings of our study are illustrated in Figure 10.4. This figure is a development of the proposed frameworks for alliance formation and success put forward in Chapters 2 and 3 (Figures 2.8 and 3.2 respectively). Our study vindicates the use of a meta-theoretical framework in the exploration of strategic alliance development and success.

No one theory was found to be adequate in explaining a firm's motivation's for alliance formation or the performance of an alliance.

Transactions cost theory was found to present a narrow view of motivations and did not adequately reflect the decision-processes of the firm's interviewed. The transaction cost perspective's emphasis on cost minimisation ignores the value-creation aspect of a transaction (Olsen 1993). In our study, the potential benefits as well as the prospective costs were a critical factor in the firm's choice of its strategic operations. The need for and heterogeneous possession of valuable resources was shown to be the key determinant of alliance formation and success. Thus strategic interdependence was found to be the key motivating factor in strategic alliance formation and success. The notion of strategic interdependence created through the heterogeneous possession of valuable resources is at the heart of the resource-based perspective. Our research supports the resource-based perspective as a basis for examining strategic alliance formation and performance. We argue that the resource-based view encompasses and develops the transaction cost perspective in relation to strategic alliance formation and success. Specifically, it raises the level of analysis from a transaction to that of a firm; it

Figure 10.4

Alliance Formation and Success in the UK Fresh Produce Industry



introduces a dynamic and longitudinal perspective; and the resource-based view develops the focus from the transaction cost perspective of exploitation of firm-specific advantage to one of exploitation and development.

However, we argue that whilst the resource-based view provides a compelling explanation of the *incentives* for alliance formation it does not focus on the *opportunities* for forming an alliance. In common with the transaction cost perspective it still has the implicit assumption that the availability of opportunities to form an alliance isn't a constraint and that the supply of partners is infinitely elastic (Arora and Gambardella 1990; Hagedoorn and Schakenraad 1990).

Our study also highlighted the importance of the industry network within which an individual firm is embedded and the critical importance of network theory in addressing both the specific choice of alliance partner (as opposed to the need for a strategic alliance) and the process of alliance formation. These are aspects that have been largely ignored by both the transaction cost perspective and the resource based view.

Following Gulati (1995) we argue that one cannot examine strategic alliance formation without taking into account the social network within which most firms are embedded. Strategic interdependence only provides a partial explanation of strategic alliance formation ignoring how firms learn about new alliance opportunities and overcome fears associated with such partnerships (Gulati 1995). An important contribution is the verification that information is not freely available to all and all opportunities for alliances are not exogenously presented (Granovetter 1985). The specific influences of the social network examined were prior partner knowledge, the influence of third parties and the influence of the informal industry network. Prior knowledge was shown to lower the risk in alliance formation; provide information about a partner's resources and capabilities; be an important antecedent to trust between alliance partners; and enable

alliance partners to be clear about the rules, routines and procedures they were expected to follow.

Our study also showed the importance of other information sources for firms who wanted to form alliances such as third parties. This wider network was shown to be particularly important in making firms aware of potential alliance partners.

The use of network theory also allowed us to focus on the process of alliance formation - an area that has been largely ignored by previous researchers (exceptions are Cyert and March 1963; Doz 1996; Gulati 1995; Hamel 1991; Nelson and Winter 1982; Ring and Van de Ven 1994).

In our framework we incorporate the network perspective adding the important focus on the opportunities for firms to form alliances, with alliances seen in the context of the total social network, rather than as discrete independent events. Following Gulati (1995) we find that incorporating the resource-based view and the network perspective provides a fuller picture of alliance formation. In addition we find that these causative factors interact.

We argue, following Gulati (1999) that these two perspectives can be combined by conceptualising the concept of the social network that a firm exists in as a network resource. Gulati (1999) argues that network resources are distinct from the resources that reside within a firm's boundaries. The amount of such resources available to firms can influence their strategic behaviour by altering the opportunity set available to them.

A contribution of our research was the identification of clear antecedents to trust, an area where there has been little research, despite the extensive literature examining the importance of trust in interorganisational exchange relationships (Aulakh, Kotabe and Sahay 1995; Parkhe 1998). We discuss the antecedents to trust emerging from the differing theoretical perspectives used in this study. We use previous frameworks

(Parkhe 1998) to analyse the antecedents and outcomes of trust in the alliance relationships in our study. We find that trust is an important factor in the formation and success of strategic alliances in this industry, supporting work by others alliances (Arino and de la Torre 1998; Beamish and Banks 1987; Buckley and Casson 1988; HanYan and Gray 1994; Harrigan 1986; Hoffman and Schlosser 2001; Inkpen and Beamish 1997; Madhok 1995; Mohr and Spekmen 1994; Monczka, Petersen, Handfield and Ragatz 1998; Parkhe 1993; 1998a; 1988b; Rule and Keown 1998; Yan 1998; Zaheer, McEvily and Perrone 1997) and that it can be nurtured and influenced by different aspects of firm behaviour.

The specific scope and function of each alliance varied according to the particular objectives of the alliance. This research studied a range of alliances from ones that were little more than spot trading to one that was a joint venture. This research showed that an alliance is not a static entity rather it is a dynamic structure with the ability to change and develop as necessary. This is an area where the literature is quite deficient. Until the late 1980s, the equity joint venture was viewed virtually synonymously with the term alliance. More recently, and concurrent with the vast number of new alliance forms, researchers have been investigating a much broader set of national and international collaborative arrangements (Dussauge and Garrette 1995; Hagedoorn 1993). Some theorists have proposed several typologies of strategic alliances (Das and Teng 2000; Dussauge and Garrette 1995; Lorange and Roos 1990; Oliver 1990; Pisano and Teece 1989). However, most typologies of alliances have been based on the dichotomy of equity alliance versus non-equity alliance (Gulati 1995; Osborn and Baughn 1990; Tallman and Shenkar 1990). There has also been little account of the dynamics of an individual alliance.

10.4 Contributions to Methodology

This study was based on a qualitative research methodology. Our research was driven by general propositions that were explored and developed through the use of in-depth semi-structured interviews. These propositions were based on conceptual frameworks that were meta-theoretical in nature and were derived following a review of the relevant literature. Our interest was in the factors underlying firms' decision processes and strategic viewpoints and in taking a holistic view of the firm as a whole entity. Our interest was in areas of both commonality and differences between firms and finding reasons for these rather than in attempt to make generalisations about the whole industry.

The methodology used in this research is in contrast to the methodology used in most previous empirical research in strategic alliances, which is overwhelmingly quantitative in nature (see Chapter 6 for a detailed discussion of previous methodologies). The methodological contribution of our research is discussed below.

There were 3 inter-related criticisms of the constructs and measures used in previous empirical work in this area that have been made in this thesis. First, many of the constructs used in prior empirical work have been criticised here (Chapters 2 and 3) for being overly simplistic or not particularly good proxies for the variables they are intended for (Anderson and Coughlan 1987; Aulakh, Kotabe and Sahay 1996; Burgers, Hill and Kim 1993; Combs and Ketchen 1999; Mohr and Spekmen 1994; Reijnders and Verhallen 1996). Empirical research using the transaction cost perspective has been particularly hampered by the inability to agree on adequate measures of asset specificity (see Chapter 2). A number of authors have written about the need for better development of measures in empirical work in this area (Ahuja 2000; Anderson and Coughlan 1987; Bleeke and Ernst 1991; Buckley and Chapman 1997; Combs and Ketchen 1999; Dussauge and Garrette 1995; Glaister and Buckley 1998).

Second, a wide array of measures have been used to estimate the same variables with the consequence that the support for a variable as an influence on motivations or success is

totally dependent on the proxy used in empirical research. The difficulties in establishing agreed measures of variables for quantitative research is most apparent in the empirical research on alliance success factors. In common with other researchers we have argued that an alliance cannot be evaluated in isolation from the nature of the organisation's environment; the resource capabilities of the partnering firms and the motivations for the alliance formation in the first place (Anderson 1990; Bleeke and Ernst 1991; Bucklin and Sengupta 1993; Glaister and Buckley 1999).

Third, the same measures have been used in different empirical work to measure different variables. Thus relative firm size is used as a proxy for strategic interdependence (Burgers, Hill and Kim 1993) but is also used as a proxy for market power (Dussauge and Garrette 1995).

These criticisms have led a number of researchers to call for more qualitative approaches to this area to reach a deeper understanding of the subject (Buckley and Chapman 1997; Driscoll and Paliwoda 1997; Glaister and Buckley 1998; Parkhe 1993; Tsang 2000) with Tsang (2000) specifically arguing for "interviews with managers to help to evaluate the costs and benefits of joint venturing and also to gain insights into the operationalisation and measurement of the concepts". It is argued that a qualitative approach is more likely to capture the complexity of the situation and question the simplified analysis and measurement used in previous quantitative research (Buckley and Chapman 1997).

Most previous empirical research has been from one theoretical perspective. Yet, as noted above these perspectives often have overlapping constructs and perceived differences between theoretical perspectives are not always as clear as argued. In addition, a general criticism is that most empirical studies have tested the influence of particular isolated factors on alliance formation and success. However, the factors that have been shown to lead to the formation of alliances or successful alliances are not necessarily present in the same cases and some factors may even be mutually exclusive (Dussauge and Garrette 1995). The use of qualitative research with a multi-paradigm

approach has allowed us to explore the ideas, concepts and measures in-depth and crucially to gauge the overlap between the theoretical constructs. It has allowed us to explore the aspects of motivations, processes and success that have not been adequately addressed through prior methodology which has been almost totally quantitative in nature. Using propositions based on previous empirical research has enabled us to use that research as a framework on which to flesh out ideas and examine the interconnectedness of theoretical perspectives.

The use of quantitative techniques in most previous research in strategic alliances has resulted in broad generalisable findings and comparisons between different empirical studies, although, as noted, these comparisons have been hampered by disagreements over measures and constructs used. But it has been argued here (Chapters 2 and 3) that what is lacking from previous research in this area is not generalisability but rather detail to give weight to proposed frameworks. The use of qualitative techniques has added depth to strategic alliance research, exploring issues in-depth and helping to connect disparate ideas. The use of a qualitative research methodology in this study has helped to illuminate the many-layered explanations for alliance formation and success. What has emerged from our study is that the factors underlying the motivations for alliance formation and the success of alliances varied between those firms interviewed and that there were invariably a large number of inter-twined reasons behind a factor that could be explored through an in-depth interview in a way that would be impossible through a quantitative methodology where factors are pre-ordained. For example, in our study, the prior knowledge of an alliance partner emerged as a strong factor in the motivation to form an alliance with that partner. However, this prior knowledge took a number of forms, from prior trading relationships, to third-party contacts, to obtaining information about a potential partner through the industry network. The positive influence of this knowledge was attributed to many factors, and the importance of these factors differed between firms. Some firms felt that there was less risk involved in forming an alliance with a partner if there was prior knowledge of that partner; some, that prior knowledge would give them a better understanding of their partner's resources and capabilities;

some that it instilled a level of trust in the relationship; and some that their partner would have a greater awareness of the correct rules, routines and procedures. Even these factors are inter-related, with a belief that a relationship is less risky in part being influenced by a level of trust in an alliance partner.

The use of a qualitative research methodology has enabled us to build a clear picture of the motivations for alliance formation, the process of alliance formation and the success of alliances and critically the links and feedback between these various 'stages' to understand the processes involved in alliance formation and the development and success of the alliances. This is an area where very little empirical research has been conducted. The use of in-depth interviews has allowed us to gain an insight into these factors in a way that could not be achieved through a quantitative survey. We have been able to probe the decision process of alliance formation; to gauge the key factors behind partner choice and the inter-connection between these factors, to build up a picture of the process itself. We have then been able to link the process of selection back to the motivations to form an alliance in the first place. Thus we have found that whilst the process of selecting alliance partners is highly variable and that there are a wide range of criteria in the selection of one particular partner over another, the process of selection is linked to the motivations to form an alliance in the first place. In similar ways the success of alliances has been shown to be inextricably linked to the motivations to form an alliance in the first place; and alliance performance has been found to influence the views of alliance partners of future alliance activity. Thus we argue that our methodology has enabled us to get a fuller picture of the processes at work. This is highly important given the 'partial' explanatory nature of previous studies.

The flexibility of semi-structured interviews has meant that some factors that have emerged as highly significant and their relationship with other factors can be explored as the interview develops. A key factor that emerged in our research was the importance of trust in the motivations and success of alliances and also the identification in this research of clear antecedents to trust. We found that mutual dependence fostered by the

heterogeneous possession of resources, that is central to the resource-based view, is a key structural antecedent to trust. This reinforces the importance of relative dependence at the heart of the motivations behind strategic alliance formation and the success of alliances.

Thus, in conclusion, in common with a number of other researchers in this area, we see the need for more qualitative based approaches to research in this area (Buckley and Chapman 1997; Driscoll and Paliwoda 1997; Glaister and Buckley 1998; Parkhe 1993; Tsang 2000). Qualitative approaches are likely to be particularly useful in gaining insights into the operationalisation and measurement of the concepts used in this area. Quantitative research may have a part to play in replicating smaller qualitative studies to assess the extent to which the factors found are generalisable across an industry or between different industries and to assess the significance of factors that may be easier to identify in a large scale sample, such as differences in relative firm size.

10.5 Limitations

1. This study focuses on international strategic alliances in the fresh produce industry. Specifically, it examines 32 strategic alliances between fresh produce suppliers in the UK and fresh produce suppliers from overseas. The reasons for this focus have been outlined above and discussed in detail in other parts of this thesis. The conclusions of this research are therefore limited to this industry sector. The small sample used means that results should be interpreted in relation to the industry as a whole with care.
2. In this study we used a perceptual measure of success based on the satisfaction of the focal firm with the alliance and the extent to which the alliance had met its objectives. The use of this measure is in line with a

number of other empirical studies (Beamish 1985; Bleeke and Ernst 1991; Bucklin and Sengupta 1993; Dussauge and Garrette 1995; Glaister and Buckley 1999; Harrigan 1985, 1988; Killing 1983; Parkhe 1993; Schaan 1983) and was described and defended in Chapters 3 and 6. In particular, Dussauge and Garrette (1995) argue that the choice of a subjective performance measure is supported by research that has shown that objective and subjective measures of performance are positively correlated (Geringer and Herbert 1991). However, there are a number of viable criticisms that can be made of the use of a perceptual measure of performance. First, the use of this measure may provide a positive bias as managers are likely to be positive about an alliance that they have been involved in developing. This measure also only ascertains the viewpoint of one person in the focal firm who is involved in the alliance and viewpoints throughout the firm may differ. A related criticism is that the viewpoint of only the focal firm was attained. The viewpoints of alliance partners on the success of the alliance may differ dramatically. Sometimes performance is asymmetric, with one firm achieving its objectives while the other firm fails to do so (Hamel, Doz and Prahalad 1989; Hamel 1991; Khanna, Gulati and Nohria 1998). In an equity joint venture (EJV), there are a number of different viewpoints of the venture, including the parent firms and the EJV management, which means that there might be different views on which aspects of the performance to measure and how successful these measures indicate the performance to be (Glaister and Buckley 1998). Glaister and Buckley (1988) argue that in principle performance evaluation should incorporate multiple viewpoints. In empirical work, Schaan (1983) and Beamish and Banks (1987) both measured alliance performance by a managerial assessment where the alliance was only considered successful when both partners were satisfied.

3. Time and financial constraints meant that this study focused on motivations and success factors from only one side of the partnership,

those of the UK firm. The UK firms were asked their opinion of their partner's motives and operations, but their partners were not asked to validate these. It would be interesting to include the partner's point of view and to compare the partner's feelings towards the alliance with those of the focal firm.

4. Finally, it should be noted that for a number of firms in our study the evaluation of success was over a very short time horizon, with most alliances less than ten years old and 21 alliances only 5 years old or less.

10.6 Suggestions for Future Research

1. Our research highlighted the gains to be made from conducting qualitative research given the criticisms of previous quantitative studies. It allowed us to incorporate a number of theoretical perspectives. The use of a qualitative methodology added depth and colour to previous research and also led to a better understanding of processes. A number of factors that emerged as important in our research are particularly difficult to measure in a quantitative manner. Of particular note was the importance of the concept of trust in alliance formation and success. The use of a qualitative methodology allowed us to explore the influence of trust on strategic alliance relationships, supporting work by others (Arino and de la Torre 1998; Beamish and Banks 1987; Buckley and Casson 1988; HanYan and Gray 1994; Harrigan 1986; Hoffman and Schlosser 2001; Inkpen and Beamish 1997; Madhok 1995; Mohr and Spekmen 1994; Monczka, Petersen, Handfield and Ragatz 1998; Parkhe 1993; 1998a; 1988b; Rule and Keown 1998; Yan 1998; Zaheer,

McEvily and Perrone 1997) and also the identification of clear antecedents to trust.

2. There is a need for a longitudinal study of the sector following an alliance through from inception, to obtain a better picture of the processes involved in alliance formation and development. This is an area where research has been limited. This would be particularly interesting given the volatile nature of the industry and the relatively young age of a number of the alliances studied. Of particular interest would be an examination of the ex-ante antecedents of trust and how that trust is nurtured and developed.
3. This study focused on the demand side of the dyad, in contrast to most previous work in this area. In addition it focused on an industry with particular short-term supply and demand inflexibility. It would be interesting to use the methodology used in this study to undertake comparative studies of other sectors.
4. Work is needed in refining the measures and variables used in this research in the light of our findings. The measures of strategic interdependence used in previous empirical work in particular are open to particular criticism.
5. Work is also needed focusing on the resource-based view in particular and the specification of particular resources in terms of the typology used. Network factors could be incorporated as a network resource. This is particularly important in the light of differences in the importance of the type of resource needed by the partner and focal firm.

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APPENDIX 1

STRATEGIC ALLIANCE LITERATURE: RECENT MAJOR NON-SECTOR SPECIFIC STUDIES

Author(s)	Type of Strategic Alliance	Sample and Sector	Methodology	Aim of Research	Findings	Limitations
Bleeke and Ernst (1991)	Both horizontal and vertical	49 cross-border S.A.'s in the U.S., Europe and Japan. Various industries, mainly high-tech manufacturing (excl. agriculture)	Personal interviews and secondary data	"To better understand cross-border alliances and what it takes to make them work"	Cross border alliances are the best vehicle for expanding into new geographic regions or into new businesses. They work best when balanced and flexible with the ability to evolve.	Huge variety of structures, size, location and industry studied. Financial criteria for success. No account of any longer-term criteria.
Bucklin and Sengupta (1993)	Horizontal, co-operative marketing	98 U.S. Computer and semi-conductor firms	Postal survey Focal Firm only	"A study of on-going co-marketing alliances to aid our understanding of how to manage this new organisational form more effectively"	Relationships work best when balanced, projects are well selected and partners chosen carefully. Work best in turbulent environments.	Perceptual performance measures. Some problems with measurement of constructs
Dussauge and Garrette (1995)	Horizontal, competing firms	63 International alliances in	Historical study 1950-1990	"To link the success of cooperative	Technical quality combined with choice of an adequate organisation enhances performance	Subjective performance measures. Results only generalisable to

		aerospace industry		projects implemented by competing partner firms to the way in which collaboration is organised and managed".		'scale' alliances. No testing of sector-specific attributes and joint-venture formation.
Hamel, Doz and Prahalad (1989)	Horizontal and vertical	15 high technology firms in EU, U.S. and Japan	5 year study	"How companies use competitive collaboration to enhance their internal skills and technologies whilst they guard against transferring competitive advantage to ambitious players"	Measured success by shifts in competitive strength. See collaboration as a different form of competition. Works when the partner's strategic goals converge and their competitive goals diverge; when the size and market power of both partners is modest compared with industry leaders and when each partner believes it can learn from the other and at the same time limit access to proprietary skills.	Difficulty of interpretation of impact of alliance on business over and above other impacts not discussed. Small numbers of firms in subsets limits generalisability of results.
Reijnders and Verhallen (1996)	Vertical	451 small men's wear retailers in Netherlands	Limited interviews followed by postal survey	"To examine the economic effects participation in a strategic alliance has on small retailing firms".	Retailers belonging to alliances outperform those not in alliances. In addition, they have higher profits, higher levels of professionalism, are more aggressive and more open to outsourcing certain functions.	Performance results slightly mixed. Also likelihood of effect of pre-existing attributes affecting performance as well as membership of the alliance which are not accounted for.
Millington and Bayliss (1995)	Not specified but both horizontal and vertical	626 manufacturing plc's; follow up case study of 46 of the	Postal survey and personal interview	"To analyse the impact of transnational joint ventures between UK and EU based	Vertical JV's are undertaken by SME's and intermediate companies to penetrate national markets. Horizontal JV's are undertaken by large firms to pool resources and	

		100 joint ventures between UK and EU companies.		companies on the structure of competition in the EU.	achieve economies of scale.	
Gulati (1995)	Not specified	166 firms from 3 sectors: new materials, industrial automation and automotive products. U.S., Japan and E.U.	Longitudinal study, personal interview.	“Explores how social structure affects interfirm alliance formation patterns”.	Provides support for both social network and strategic interdependence factors as influences on alliance formation. Also shows the dynamics between these two schools of thought.	
Anderson and Coughlan (1987)	Vertical	36 U.S. firms in semiconductor industry	Personal interview	“To examine the choice between an integrated or independent distribution channel to serve a foreign market.”	Firms reinforce channel choices by adding new products through existing channels; are protective in distributing sophisticated products that require an investment in learning; integrate the distribution of differentiated products; use middlemen for the distribution of substitutable products; use middlemen when accessing non-Western markets.	Measures could be better developed. Authors note need for inclusion of other measures.
Stuart and McCutcheon (1995)	Vertical	230 U.S. Industrial Manufacturing Firms and 88 of their suppliers	Postal survey	“To examine potential sources of problems in establishing strategic supplier alliances”.	Success is dependent on firms being well-matched; ensuring information and technical assistance is available and by good communication. Both the selection procedure and the alliance process are critical in	Rather subjective measures meaning results were open to interpretation.

					ensuring success.	
Driscoll and Paliwoda (1997)	Examined a variety in international market entry options of which various horizontal and vertical alliances were included.	117 Canadian Manufacturing firms	Postal survey	"To examine the different dimensions of the mode of entry decision and the situational determinants which bear on mode choice".	Socio-cultural distance, tacit knowhow and product differentiation influence choice of modes of entry.	Authors argue for need for case studies to allow for more in-depth analysis of influences.
Habib and Burnett (1988)	Not disclosed	186 firms involved in joint ventures in the chemical and petrochemical industries 1968-1981	Postal survey	"To introduce and evaluate... the international joint venture".	Found conflict to be evident and pervasive in joint ventures. Flexibility and responsiveness are important in stemming conflict.	Limited generalisability. Need to compare several organisational structures to allow direct testing of hypothesis.

APPENDIX 2

STRATEGIC ALLIANCE LITERATURE: RECENT MAJOR SECTOR SPECIFIC STUDIES

Author(s)	Type of Alliance	Sample and Sector	Methodology	Aim of Research	Sector Characteristics	Level of product differentiation	Supply conditions	Demand conditions	Channel structure	Findings	Limitations
Burgers, Hill and Kim (1993)	Horizontal	23 largest global competitors, automotive industry	Secondary data	"To understand what motivates firms to enter into alliances with their competitors and given motivations, which other firms in an industry will ally itself with".	n.m.	Increase in product offerings	Excess production capacity Highly concentrated, top 8 > 70% global market share Increasing globalisation of industry - entry of new competitors	n.m.	n.m.	Support for view that alliances are a device both for reducing demand uncertainty and competitive uncertainty	Use of profit and market share data as proxies for size and performance.
Sauvee and Zuurbier (1998)		11 value chains for tomatoes and apples in the Netherlands	Personal interviews	"A comparison of retail companies and their supply chains.... And an analysis of the							

		, France and U.S.		main factors explaining and influencing the choice for a type of vertical coordination”.										
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Key
n.m. not mentioned

APPENDIX 3

ICM Protocols for Crop Production in the UK – A Summary

Environmental Awareness

The protocols state that all reasonable effort should be made to conserve the environment and avoid pollution. They encourage the recycling of materials and disposal of waste products in a responsible manner. All legislation relevant to integrated crop management and the conservation of the environment is to be observed. In particular, the Water Resources Act, the Clean Air Acts, the Environmental Protection Act and the Wildlife and Countryside Act (1981) should be observed as a minimum together with MAFF's "Environmental Matters" series of Codes of Good Agricultural Practice for the protection of water, air and soil.

Technical Updating

It is intended that the protocols will be reviewed regularly, at least annually, by farmers and growers (NFU), food technologists (retailers), scientists (HRI), the relevant fresh produce association, processors and agronomic consultants. The review process will consider both new developments and also all relevant new technology.

Pesticides

Approval for Use

The protocols do not provide prescriptive lists for pesticide usage, as arbitration on specific pesticide safety issues rests with the UK Government. However, it is accepted that some agrochemical products are more appropriate to ICM systems than others, and where relevant they are identified in the protocols. Environmental and safety preferences under the control of Substances Hazardous to 1988 (COSHH) regulations may also be highlighted.

The use of a pesticide in a non-approved manner is an offence under the Food and Environment Protection Act (FEPA)'s Control of Pesticides Regulations (COPR).

The Code of Practice for the Safe Use of Pesticides on Farms and Holdings gives guidance on meeting growers responsibilities under UK legislation. It covers operator training and certification, COSHH assessment, pesticides selection, choice of application method, precautions when working with pesticides, disposal of pesticide waste and containers and the keeping of records. Failure to follow the guidelines is not an offence in itself but the Code may be used in any legal proceedings for breaches of the Regulations.

Although it is a legal requirement to adhere to the label recommendations, it is legally acceptable to use a product in an off-label manner provided that use is approved either by extrapolation from another label-recommended crop or specific off-label approval. When producers use a product in an off-label manner, liability rests with them.

Pesticide Residues in Fresh Produce

The UK's Pesticides (Maximum Residue Levels in Crops, Food and Feeding Stuffs) Regulations 1994 specify new maximum levels of pesticide residues which may be left in crops, food and feeding stuffs in accordance with the new harmonized EU regulations (Council Directives 93/57/EEC and 93/58/EEC). The UK regulations enable MAFF to seize or dispose of any crop, food or feeding stuff containing a residue level in excess of any maximum residue level.

It should be noted that MRLs are not safety levels. They show the maximum concentration of pesticide legally permitted in or on food commodities and animal feeds after the use of a pesticide according to "good agricultural practice" (GAP). The existence of an MRL in a particular foodstuff does not indicate that the chemical has necessarily been approved for use on that crop in the UK.

Good agricultural practice is the achievement of the desired degree of control of pests and diseases at an economic cost with minimum hazard to operators and other people in the vicinity, consumers, beneficial organisms and the environment. A key feature of GAP is the "latest time of application or harvest interval". As long as

products are used according to the label instructions and following GAP, the maximum residue levels should not be exceeded.

Operational Controls

Training Requirements

ICMS cannot be developed effectively unless management and staff are effectively trained and fully aware of the potential risks to the crop including the major pests and diseases which can reduce quality and yield. Field staff involved with decision making need training in the recognition of pests, diseases, weeds and beneficial insects as routine monitoring is an essential element in the management of the crops.

Staff responsible for applying treatments to crops should be instructed and trained as necessary and in accordance with local requirements, to ensure correct, safe and accurate application is achieved.

In the UK, the NFU protocols state that all agrochemical advisors should hold a recognised certificate of confidence (i.e. one issued by BASIS (Registration) Ltd.). All spray operators must have had appropriate training and hold where relevant appropriate certificates of competence recognised by the Minister under FEPA. Finally, in light of the environmental pressures on the production industry and increasing technical requirements, producers should ensure that a certificate of competence is held by any distributor staff, consultant or independent advisor whose advice is sought regarding the use of fertilizers.

Monitoring

Crops must be monitored frequently and systematically, with records kept and maintained of levels of pests, diseases and biological agents.

All residue analysis undertaken must be conducted by reputable laboratories.

Audit

The quality control of the final produce and if appropriate the determination of residue levels, remains the responsibility of all participants in the production process. All records should be regularly inspected by the grower, or his agent, adhering to a documented self-audit.

An “audit-trail” should be in place to enable individual produce batches to be traced from the initial receipt of seeds, through propagation, production, harvesting, packing, storage and finally through to the consumer. This will also help provide the producer with a defence of ‘due dilligence’ under the Food Safety Act 1990.

It is envisaged that the NFU protocols will form the basis of the supply agreement between grower and retailer/packhouse.

APPENDIX 5

INTERVIEW TABLES

Table A5.1 Firm Indicators

Firm code	Geographical scope of own production	Product sourcing	Products	Turnover	Market share	Ownership type	Age	Ownership history	Growth	Scope
A	UK (Lincolnshire)	Spain, New Zealand, Tasmania, Netherlands	Onions, lettuce, brussell sprouts, cabbage, potatoes	£17m	Major producer	Co-op (59 growers)			Organic growth	Growing and marketing
B	UK (South Coast) and Portugal	UK, Spain, Netherlands, Portugal, Canaries	Tomatoes, peppers, herbs, cress	£20m	Largest tomato grower in UK	subsidiary			Organic growth, product diversification (both new and speciality products)	Propogation, growing, marketing
C	UK (Cambridgeshire) and Spain	UK, Spain	Lettuce, celery, onions, broccoli, beetroot		Major producer	Grower co-op and marketing company			Organic growth	Growing and marketing
D	UK (Kent)	UK, South Africa, South America, Northern Europe,	Apples, pears	£15m	15% top fruit acreage in UK	Grower co-op (45 growers), joint marketing venture (100 members), processing	49 years	Left marketing co-op in 1997. Formed marketing	Organic growth	Growing, marketing, processing

		Canada				business (1/3 rd)		joint venture		
E	UK (Yorkshire) and joint venture in Spain	UK, Spain, Netherlands	Cucumbers, tomatoes	£34m	Major producer	Limited company	20 years +		Organic growth, product diversification	Growing and marketing
G	UK	UK, Spain, Netherlands, New Zealand, Tasmania, Chile, France, Spain, Italy	Onions, brassicas, potatoes, thyme	£30m	Major producer	Ltd company (40 grower members)	20 years	developed from farmers co-op	Organic growth	Growing and marketing
H	UK (Yorkshire)	UK, Netherlands, Spain	Cucumbers and tomatoes	£5m	small	Private company (5 grower members)	5 years	developed from another company liquidation	mid cucumbers from ¼ acres to 7 acres	Growing and marketing
I	UK (Lincolnshire, Spain - administration office)	UK, Spain, South Africa, France	Tomatoes, cucumbers, celery, iceberg, speciality tomatoes, sweet peppers	£65m	major producer	Subsidiary	9 years	merger of 2 co-ops and 1 private company in 1991	Organic growth (from £20m in 1991), focus on core products, diversification into niche markets, spending £2m on processing site	Growing (for own market and parent), processing and marketing

J	UK (Yorkshire and Berkshire)	UK, Spain, Canaries, Holland	cucumbers, iceberg, peppers, tomatoes, aubergine, mushrooms, exotics	£28m	major producer	Ltd company (3 partners, 350 staff)	6 years	Buyout of company from receivers and re-launch. Moved site in 1994 and expanded to 2 other sites	Organic growth, product diversification, move into pre-packing	Growing, pre-packing
K	UK (Yorkshire)	UK, Spain	Brassicas and onions	£8-9m	small	Group of 4 private companies			Organic growth	Plant propagation, farming, packing, transport, marketing
L	UK (Lincolnshire)	UK, Spain, France	Brassicas, potatoes and onions	£22m	major producer	Private family-owned and run. Also have a co-op (14 members)	34 years	developed from produce and potato merchant supplying wholesale markets	Fast organic growth	Growing and marketing
M	UK (Lincolnshire, Connersby, Suffolk). 3 sites	UK and Spain	Salads, potatoes, daffodils, cereal, sugar-beet and peas.	£8m	small	Family owned and run	12 years+		organic growth and product diversification	Growing (for own market and contract), basic preparing, marketing.
N	UK	UK, South America, South Africa,	Flowers and bulbs	£23m+	major producer	Ltd company. 3 separate business units (customer)	10 years	Growers co-op until July 1999. De-	Fast organic growth	Plant propagation, production, marketing

		Kenya, Zimbabwe, Israel, Spain, Holland											
O	UK (Berwickshire)	UK, Tasmania, Portugal, Spain	Swedes and sprouts	£7-£10m	Largest swede producer in UK	Ltd company	27 years	Started as family business. 1992 ltd company. 1996 MBO one brother and 3i	Organic growth, product diversification (sprouts), move into prepared (7.5% turnover), looking at organics	Growing, processing, marketing			
P	UK (Perthshire) 2 sites	Scotland, Kent, Cornwall, Spain	Roots, salads, brassicas	£36m	major producer	Ltd company (70 growers)	22 years	100% contract growing since 1985. Prior to this grew a lot of own produce	Organic growth	Growing, processing, marketing			
R	UK (Airdrie and Cambridge) 2 sites	UK, Egypt, Israel, Spain, Jersey	Potatoes, onions, carrots, parsnips	£50m	major producer	Family-owned and run	49 years		Organic growth	Growing, packing, short-term storage, marketing			

Table A5.2 Marketing

Firm code	Products	Markets	Customer base	Number of retail customers	Marketing history
A	Onions, lettuce, brussell sprouts, cabbage, potatoes	Predominantly UK although sizeable exports	60% multiples, 40% wholesale and catering	?	Wholesale markets becoming less important - going to catering. Trade with multiples fairly constant.
B	Tomatoes, peppers, herbs, cress	Predominantly UK, some exports	Mainly UK multiples	3-4?	
C	Lettuce, celery, onions, broccoli, beetroot	87% UK, 13% Export	65-70% multiples, 3-4% export, 10% processors, 10% wholesalers/food service, 10% direct to Spain	3-4?	
D	Apples, pears	UK	Predominantly multiples (80% values, 55% volumes), the rest wholesale and some processing	4	Developing processing business so can by-pass wholesale markets
E	Cucumbers, tomatoes	Predominantly UK	Tomatoes - 90% multiples/processor, 10% wholesale, cucumbers - 65-70% multiples/processor	2	

Firm code	Products	Markets	Customer base	Number of retail customers	Marketing history
			sof, 30-35% wholesale		
G	Onions, brassicas, potatoes, thyme	90% UK, 10% exports	Predominantly multiples	3-4?	
H	Cucumbers and tomatoes	UK	Multiples	1	Dedicated supplier
I	Tomatoes, cucumbers, celery, iceberg, speciality tomatoes, sweet peppers	Predominantly UK	95% multiples, 4% processing, 1% wholesale	4?	
J	cucumbers, iceberg, peppers, tomatoes, aubergines, mushrooms, exotics	UK	60% retail, 40% catering	2	Expanded from one retail customer into catering
K	Brassicas and onions	Mainly UK, some exports	Multiples (80%), CRS, processing, exports	1	
L	Brassicas, potatoes and onions	Mainly UK, limited exports	80-85% multiples, co-op, wholesale and processors	2	Been involved with multiples for 15-20 years
M	Salads,	UK	Processing and	3	Processing and catering

Firm code	Products	Markets	Customer base	Number of retail customers	Marketing history
	potatoes, daffodils, cereal, sugar-beet and peas.		catering (60%) and retail		are growing
N	Flowers and bulbs	UK	Multiples, smaller retailers	2	
O	Swedes and sprouts	Mainly UK, minimal exports	Multiples, processing, prepared	4	Prepared is increasing
P	Roots, salads, brassicas	UK	Multiples	6	Grew from supplier of one multiple to all 6. Development of the prepared business has increased volumes.
R	Potatoes, onions, carrots, parsnips	UK	Multiples (80%), processors (20%)	2	Been with multiples for some time

Table A5.3 Partner Firm Indicators

Alliance Code	Partner country of production	Products traded	Time of year	Turnover	Market share	Ownership type	Age of alliance	Business growth	Scope
A1	Spain	Lettuce	Winter	£10m	40-50% in production area	Family farm-holding	7-8 years	from nothing	Grower
A2	New Zealand	Onions	June-Aug		Major producer	family-firm	8-9 years	10 fold from 100 tonnes	Grower
A3	Tasmania	Onions	June-Aug		70-80%	Grower who became part of exporting company	8 years	from nothing to market capacity	Grower
B1	Spain	Tomatoes	Nov-May		One of largest tomato growers in southern Spain	Family-firm	20 years	From almost nothing to 2 1/2 million boxes	Grower
C1	Spain	Broccoli	Winter		Small firm	Family-firm	5 years	From almost nothing to 1,500 tonnes	Grower
D1	South Africa, South America, Northern Europe, Canada	Apples and pears	Various	Various	Various	Various	Various	Various	Grower
E1	Spain	Cucumbers and peppers	Winter		One of the bigger producers in Almeria	Family-firm	10 years +	Developed from importing	Grower

Alliance Code	Partner country of production	Products traded	Time of year	Turnover	Market share	Ownership type	Age of alliance	Business growth	Scope
G1	Tasmania	Onions	June-Aug		Major producer		15-20 years	Significant volumes from early on	Grower
G2	New Zealand	Onions	June-Aug		Major producer		15-20 years	Significant volumes from early on	Grower
G3	Spain	Brassicas	mid Dec-end March		Small producer	Family-firm	2 years	100-150 hectares	Grower
H1	Spain	Midi-cucumbers, tomatoes	Winter		Small producer	Family-firm	1 year	Significant volumes from early on	Grower
I1	Spain	Peppers, tomatoes, cucumbers aubergines	Winter		Large firm	Co-op (90 members)	3 years	From 2% to 40% of Acrenar's turnover	Growing and marketing
I2	Spain	Little gem, lollo rosso, celery, cherry tomatoes	Winter	£35m	Large firm	Ltd. Company (3 partners)	2 years	From top-up trading relationship to large volumes	Growing and marketing
I3	Italy	Raddichio	Winter		Small firm	Family-firm		From trading to exclusive production partnership	Growing
I4	South Africa	Flavoured tomatoes	Winter		2 Large firms	Family-firm	5 years	From trading to exclusive production partnership	Growing

Alliance Code	Partner country of production	Products traded	Time of year	Turnover	Market share	Ownership type	Age of alliance	Business growth	Scope
J1	Spain	Peppers, cucumbers, aubergines, tomatoes	October to April		Small	Co-op (37 growers)	5 years	from 50 to 200 lorry loads/season. HS buy 60% of business. At capacity.	Grower
J2	Spain	Cucumbers, peppers, tomatoes	Winter		Large	Co-op (350 growers)	2 years	Initially small volumes, slowly building up	Grower
J3	Spain	Iceberg, celery, celery hearts	Winter		Large	Co-op	3 years	Initially small volumes, Now 150 loads a year with ongoing 20-30% volume increase	Grower
J4	Tenerife	Speciality tomatoes	Winter		Small	Single grower (70 hectares)			Grower
K1	Spain	Brassicas	Nov - end March/mid June				Starting	Trialling with small volumes	Grower
L1	Spain	Broccoli, artichokes, courgettes	Nov-end May		Large producer		3 years	From small volumes to 50% of customers demands	Grower

Alliance Code	Partner country of production	Products traded	Time of year	Turnover	Market share	Ownership type	Age of alliance	Business growth	Scope
L2	Spain	Cabbage	end April-beg. June		Small producer	Family firm (father & son)	3 years	From small volumes to current demand	Grower
L3	France	Cauliflower	Nov-May		Large	Limited company	10 years	From small to large volumes	Exporter
M1	Spain	Iceberg	Winter		Small	Limited company (4 growers)	4 years	Were pursuing more formal partnership but ending at end of this season	Grower
M2	Spain	Iceberg	Winter		Small	Joint Venture Limited Company (Piccavers & Spanish intermediary shareholders)	1 year	Currently concentrating on iceberg but willing to look at other products and markets	Grower
N1	Columbia	Spray carnations	Year-round, volumes increase towards year-end		Small	Family firm	2 years	From small volumes up to 200 boxes a week	Grower
O1	Tasmania	Swedes	April-June	Medium			5-6 years	5 containers to 500 tonnes. In	Grower

Alliance Code	Partner country of production	Products traded	Time of year	Turnover	Market share	Ownership type	Age of alliance	Business growth	Scope
								process of de-listing	
O2	Spain	Swedes	April-June	Small		Family-firm	2 years	100 acres +	Grower
O3	Portugal	Swedes	April-June	Small		Family-firm	2 years	60 acres +	Grower
P1	Spain	Broccoli	October-November	Agesco - £2m	Large	Juan Marine - Co-op	2 years	35% volume growth	
R1	Spain	New potatoes	10 weeks (April-May and mid-Dec)			Co-op (30 farmers)	3 years	800 tonnes-3,000 tonnes	Grower
R2	Jersey	Jersey Royals (potatoes)	Mid April-Mid June		60-70% Island's production	P.O. (large number of growers)	10 years	Volume growth and change from loose to packaged product	Growing and Marketing

Table A5.4 Motivation for Alliance Formation within Firm Strategy

Company Code	Business Objectives	Motivation for Strategic Alliance(s)	Motivation of Partner for Strategic Alliance(s)
A	Consolidation of existing relationships through strategic positioning. Production is key driver - finding additional crops that fit profile. Focus on UK multiples. Catering replacing wholesale as outlet.	12 month supply for multiples 3 rd alliance is second source of production at key point in year to spread risk and for market segmentation	Access to UK market
B	Growth in production of core products and product diversification. Focus on UK multiples.	Spread overheads and labour costs 12 month supply for multiples	Access to UK market
C	Growth. To be centre of excellence for core products. Focus on UK multiples.	12 month supply for multiples	Access to UK market
D	Product differentiation. Development of series of products, technologies and varieties. Business growth through value maximisation. Need to become global in structure. Focus on UK multiples.	12 month supply for multiples	Access to UK market
E	Growth through expansion of product range. Focus on UK multiples.	12 month supply for multiples Spread overheads and labour costs	Access to UK market
G	Growth in production of core products, increasing focus on prepared products. Focus on UK multiples.	12 month supply for multiples Spread overheads and labour costs 2 nd alliance is to spread risk (supplier dependency and geographical location)	Access to UK market
H	Growth through development of niche products. Looking at added-value. Focus on UK multiples.	12 month supply for multiples	Access to UK market
I	Growth through focus on core product range. Complimented by niche marketing. Focus on UK multiples.	12 month supply for multiples and own processing	Access to UK market
J	Growth through expansion from production into pre-packing and distribution. Concentrating on prepared products. Focus on UK multiples and large caterers.	12 month supply for multiples and caterers	Access to UK market
K	Growth through focus on core product range. Consolidation of supplier base. Expansion of retail customer base. Focus on UK multiples.	12 month supply for multiples Spread overheads and labour costs	Access to UK market
L	Business growth in product volumes and product areas. Looking at processed product. Focus on UK multiples.	12 month supply for multiples Spread overheads and labour costs	Access to UK market
M	Business growth in product volumes. Increasing speciality	12 month supply for processors, caterers and	Access to UK market

Company Code	Business Objectives	Motivation for Strategic Alliance(s)	Motivation of Partner for Strategic Alliance(s)
	for pre-packs. Focus on processing, catering and UK multiples.	multiples.	Stability of returns Access to UK market
N	Looking to grow the business and achieve scale through acquisition.	12 month supply for multiples Manipulation of supply base	Access to UK market
O	Consolidation of position. Focus on core products. Prepared product is small but growing. Looking at organics. Focus on UK multiples and processing.	12 month supply for multiples and processors.	Access to UK market
P	Business growth in product volumes and increase in prepared business. Strength through scale. Focus on UK multiples	12 month supply for UK multiples.	Access to UK market
R	Consolidation of position. Strength through scale and structure of firm. Focus on UK multiples.	12 month supply for multiples.	Access to UK market

Table A5.5 The Alliance

Alliance Code	Age of alliance	Contractual	Equity Investment	Specific Terms and Conditions	Written Documentation	Standard Operating Procedures	Contact	Visits	Categorisation
A1	7-8 years	No	No	Informal understanding g. Exclusivity of UK supplies.	No. Relationship based on trust	Yes. Produce to agreed standards.	Daily	Reciprocal visits 3-4 times year	Informal but close partnership. Involvement in all areas of business.
A2	8-9 years	No	No	Informal understanding g. Exclusivity of UK supplies.	No. Relationship based on trust	Yes. Produce to agreed standards.	Daily	partners visit 4 times year, BG visit once a year	Informal but close partnership. Involvement in all areas of business.
A3	8 years	No	No	Informal understanding g. Exclusivity of UK supplies.	No	Yes. Produce to agreed standards.	Daily	partners visit 4 times year, BG visit once a year	Informal but close partnership. Involvement in all areas of business.
B1	20 years	No	No	Informal understanding g. Exclusivity of UK supplies.	No. Trust implicit in everything done	Yes. Produce to agreed standards.	Regular	Twice yearly business review	Unstructured - based on mutual trust. Involvement in all areas of business. Relationship has evolved over time.
C1	5 years	No	No	Informal understanding g. Exclusivity of UK	No. Relationship based on trust	Yes. Produce to agreed standards.	Regular		Fairly informal. Based on trust. Relationship has evolved

Alliance Code	Age of alliance	Contractual	Equity Investment	Specific Terms and Conditions	Written Documentation	Standard Operating Procedures	Contact	Visits	Categorisation
D1	Various	No	No - but would like in future	Range from informal to fairly formal supplies.	Relationship based on trust	Yes	Daily	When necessary	Over time. From informal to formal
E1	10 years +	No	No. But setting up JV - independent capital involvement . Initially £1m.	Informal. Exclusivity of UK supplies.	Relationship based on trust	Yes. Produce to agreed standards. Full-time qc person from HG working in Spain.	Daily	Reciprocal visits on at least an annual basis	Currently very informal but strong. If joint venture goes ahead it will have to be contractual.
G1	15-20 years	No	No	Informal. Exclusivity of UK supplies.	No. Relationship based on trust	Yes. Produce to agreed standards. Elgro has inputted systems (technical, logistics, harvesting) which they monitor.	Daily	Visit with multiples once a year and more if needed	Fairly stable and committed. Inclination to trade but no formal commitment.
G2	15-20 years	No	No	Informal. Exclusivity of UK supplies.	No. Relationship based on trust	Yes. Produce to agreed standards. Elgro has inputted systems (technical, logistics,	Daily	Visit with multiples once a year and more if needed	Fairly stable and committed. Inclination to trade but no formal commitment.

Alliance Code	Age of alliance	Contractual	Equity Investment	Specific Terms and Conditions	Written Documentation	Standard Operating Procedures	Contact	Visits	Categorisation
						harvesting) which they monitor.			
G3	2 years	No	Elgro providing equipment and expertise up front which is then discounted.	Producer tied into Elgro for period of time at own risk. Exclusivity of UK supplies.	Relationship based on trust	Got company involved in growing product. Elgro has inputted systems (technical, logistics, harvesting) which they monitor.	Daily	Have had 3 technical visits with the multiples	Not a joint venture, but parties tied in over time period.
H1	1 year	Yes (5 year, 2 year get-out clause)	£52,000 + machinery	Informal understanding of UK suppliers. Partner verifies prices received using benchmark firm.	Relationship based on trust	Yes. Produce to agreed standards.	Daily	Currently more visits than desired, but relationship p young.	Partners growing exclusively for them. Equity invested but owned by SW. Very open relationship.
I1	3 years	No	£600,000-£1m pa in soft loans	Identification of key projects that are mutually beneficial. Exclusivity of UK supplies.	Loans are on a formal basis but relationship based on trust. Open book accounting.	Produce to agreed standards. Technical people on site. Development	Daily at all levels. If close can spot if things are	Reciprocal visits and working in both firms	Very much a team. Very open. EVS are non-exec directors of partner firm. Likely to

Alliance Code	Age of alliance	Contractual	Equity Investment	Specific Terms and Conditions	Written Documentation	Standard Operating Procedures	Contact	Visits	Categorisation
12	2 years	No	Looking at JV	Identification of key projects that are mutually beneficial. Exclusivity of UK supplies.	Relationship based on trust. Open book accounting.	Produce to agreed standards. Technical people on site.	Daily at all levels. If close can spot if things are going wrong and react before it becomes insurmountable.		EVS give critical mass in return for priority. Likely to become more formal. As cash injected need more safeguards i.e. minority shareholdings.
13		No	EVS provided money for structures and controls	Exclusivity of UK supplies	Informal discussion. Open book accounting.	Produce to agreed standards.	Daily at all levels. If close can spot if things are going	As and when needed.	Informal. Based on trust. Involved in all areas of business. Relationship has evolved over time.

Alliance Code	Age of alliance	Contractual	Equity Investment	Specific Terms and Conditions	Written Documentation	Standard Operating Procedures	Contact	Visits	Categorisation
							wrong and react before it becomes insurmountable.		Likely to get more formal.
14	5 years	No	EVS provided money for structures and controls	Exclusivity of UK supplies	Informal discussion. Open book accounting.	Produce to agreed standards.	Daily at all levels. If close can spot if things are going wrong and react before it becomes insurmountable.	As and when needed	Informal. Based on trust. Involved in all areas of business. Relationship has evolved over time. Likely to get more formal.
J1	5 years	No. Discussed but HS rejected.	No. Full-time Spanish technician working on their behalf - £30,000 pa.	Exclusivity of UK supplies	No. Based on trust.	Produce to agreed standards.	Daily	Multiple visits 2-3 times a year (paid for by HS).	Currently informal but strong. Looking at co-operative ventures where HS provide the technical support and partners build

Alliance Code	Age of alliance	Contractual	Equity Investment	Specific Terms and Conditions	Written Documentation	Standard Operating Procedures	Contact	Visits	Categorisation
J2	2 years	No	No. Full-time Spanish technician working on their behalf.	Exclusivity of UK supplies	No. Based on trust	Produce to agreed standards. Partner has invested in new facilities.	Daily	Multiple visit 2-3 times a year (paid for by HS). Partner's whole committee have visited UK to look at production and quality standards	new facilities to work on full-time basis. Currently informal but strong. Partners intend to build new nursery to supply sweet peppers year round.
J3	3 years	No	No. Full-time Spanish technician working on their behalf.	Major UK customer	No. Based on trust	Produce to agreed standards. Partner has invested in new facilities.	Daily	Multiple visit 2-3 times a year (paid for by HS)	Currently informal but strong. Looking at co-operative ventures where HS provide the technical support and partners build new facilities to work on full-time basis.
J4	Starting	No	No	Trialling new variety. Exclusivity of UK supplies	No	Produce to agreed standards.	Daily		Informal. Based on trust

Alliance Code	Age of alliance	Contractual	Equity Investment	Specific Terms and Conditions	Written Documentation	Standard Operating Procedures	Contact	Visits	Categorisation
K1	Starting	No	No	Trialling new variety. Exclusivity of UK supplies.	No	Based on trust. Produce to agreed standards.	Daily	Informal monitoring	Informal. Based on trust
L1	3 years	No	No	Exclusivity of UK supplies	No	Based on trust. Produce to agreed standards.	Daily	Multiple visits 3-4 times a year. Annual business review.	Informal. Understanding to trade. Open and up-front.
L2	3 years	No	No	Exclusivity of UK supplies	No	Based on trust. Produce to agreed standards.	Daily	Multiple visits 3-4 times a year. Annual business review.	Informal. Understanding to trade. Open and up-front.
L3	10 years	No	No	Buying on weekly price	No	Little product input. Exporter knows what Clement's wants. Based on trust	Daily	Visit individual growers	Informal. Marketing focused.
M1	4 years	No	No	Exclusivity of UK supplies	No	Based on trust. Produce to agreed standards.	Daily	When necessary	Partnership ending. Partners had approached UK retailers about direct supplies.

Alliance Code	Age of alliance	Contractual	Equity Investment	Specific Terms and Conditions	Written Documentation	Standard Operating Procedures	Contact	Visits	Categorisation
									Trust broken.
M2	1 year	No	Working capital. QC person from Piccavers employed in JV full-time	Yes, formalised agreement but no timescale. Total business transparency	Yes	Based on trust. Produce to agreed standards.	Daily	Visits to Spain monthly	Joint Venture. Trust achieved through control.
N1	2 years	No	No	Fixed year round price and weekly volumes	Yes	Based on trust. Produce to agreed standards	Daily	When necessary	Informal. Good relationship.
O1	5-6 years	No	No. Technical input	Exclusivity of UK supplies	No	Produce to agreed standards	Daily	Annually	Informal. Easy to manage. Both sides try to make things work.
O2	2 years	No	Give producer money to grow product and re-coup when buy back. Help with harvesting. Discussing JV. Invested money in	Exclusivity of UK supplies	No	Based on trust. Produce to agreed standards.	Daily	As necessary	

Alliance Code	Age of alliance	Contractual	Equity Investment	Specific Terms and Conditions	Written Documentation	Standard Operating Procedures	Contact	Visits	Categorisation
			irrigation.						
O3	2 years	No	Pay 50% towards growing and re-coup when buy back.	Exclusivity of UK supplies	No	Based on trust. Produce to agreed standards.	Daily	As necessary	
P1	2 years	No	No. Kettle supply plants and seeds. Have had team of agronomists visiting and employed a field technician to be on site. Spanish student employed at start of relationship. May lend harvesting equipment.	Exclusivity of UK supplies. Prices agreed weekly.	No.	Based on trust. Produce to agreed standards.	Daily	1-2 times a year (multiple marketing and technical team). Partner visits to UK operation. Annual business review.	Informal, but close partnership. Involvement in all areas of business. UK firm coaching and coaxing partner.
R1	3 years	No	No. Supply seeds and agronomy input.	Shared understandin g. Prices agreed	No	Strong degree of trust. Produce to	Daily	At least annually	Informal but close partnership. Involvement in

Alliance Code	Age of alliance	Contractual	Equity Investment	Specific Terms and Conditions	Written Documentation	Standard Operating Procedures	Contact	Visits	Categorisation
				weekly. No open book. Exclusivity of UK supplies.		agreed standards.			all areas of business.
R2	10 years	No		Prices agreed weekly between multiples and JPMO. Bartletts add intermediary cost.	No	Produce to agreed standards.	Daily	6 years ago	Business to business. The relationship with JPMO is the multiples

Table A5.6 Partner Choice

Alliance code	Initiator of Alliance	Customer/ Third Party Guidance	Means of Initiation	Partner Selection	Knowledge of potential partner	Formality of Selection	Selection Criteria	Similar goals and objectives	Similar operating philosophies	Similar management styles
A1	Firm	Vetted once choice made	by Firm	2 visits to 4 possible partners.	Informal industry information.	Informal	Technical skills, management competencies	Yes	Yes	Yes
A2	Partner	Vetted once choice made	Partner visited BG	BG visited partners site	Cold calling	Informal	Technical skills, management competencies, countries infrastructure	Yes	Yes	Yes. Could work in eachothers businesses
A3	Firm	Vetted once choice made	by Firm	Went to explore investment opportunities and visited every grower in region	Some prior knowledge	Informal	Framework of standards to build on	Yes	Yes	Yes
B1	Firm	Vetted once choice made	by Firm	Visited partner	Informal networks	Informal	Technical skills, management competencies, personal chemistry between parties	Yes	Yes	Yes
C1	Firm	Vetted once choice made	by Firm	Visited Spain 'vaguely' looking for a supplier.	Informal network and cold calling	Informal	Keen to meet requirements, expertise, climatic and locational advantages	Yes	Yes	Yes
D1	Firm	Vetted once choice made	by Firm	Visit site	Industry network	Informal	Attitude and technical excellence	Yes	Yes	Yes
E1	Exporting	Vetted once	by Firm	Evolved	Prior trading	Informal	Mutual	Yes	Yes	Yes

Alliance code	Initiator of Alliance	Customer/ Third Party Guidance	Means of Initiation	Partner Selection	Knowledge of potential partner	Formality of Selection	Selection Criteria	Similar goals and objectives	Similar operating philosophies	Similar management styles
E2	Multiple	Vetted once choice made	by Firm	Multiple chose			understanding and respect, keen to meet qc and technical needs, whole firm interfaces well			
G1	Firm	Vetted after first approaches made. Three-way relationship.	by firm	Developed from wholesale trading relationships . Followed up by company visits	Prior trading relationship	Informal	Expert in their own field, major producers, price	Yes	?	?
G2	Firm	Vetted after first approaches made. Three-way relationship.	by firm	Developed from wholesale trading relationships . Followed up by company visits	Prior trading relationship	Informal	Expert in their own field, major producers, price	Yes	?	?
G3	Firm	Became involved after relationship commenced	Through agent	Visited site	Through agent	Informal	Location, technical ability, local knowledge, price	Yes	?	?
H1	Exporting agent	No prior auditing. Did not visit until mid	by Agent	Visited site	Through agent	Informal	Technical expertise, no other involvement in	Yes	Yes	Yes

Alliance code	Initiator of Alliance	Customer/ Third Party Guidance	Means of Initiation	Partner Selection	Knowledge of potential partner	Formality of Selection	Selection Criteria	Similar goals and objectives	Similar operating philosophies	Similar management styles
11	Firm and Parent firm	? season (on other supplier visits)	by Firm and Parent firm	Visited their 12 suppliers in that area	Prior trading relationships	Formal analysis of who did the best job and who had the most potential	Technical capabilities, most efficient, office mentality. (Money can sort everything else out).	Yes	Yes	Yes - a meeting of minds.
12	Firm		by Firm	Visited site, offered increased volumes	Prior trading relationships	Informal	Technical capabilities, size	Yes	Yes	Yes
13	Firm		by Firm	Visited site, offered exclusive business	Prior trading relationships	Informal	Technical capabilities	Yes	Yes	Yes
14	Multiple		Firm through multiple	Visited site	Prior trading relationships	Informal	Technical capabilities	Yes	Yes	Yes
J1	Firm	Audited once choice made	Firm	Visited three existing suppliers	Prior trading relationships	Informal	Willingness to develop technical capabilities with HS's input and facilities with own capital	Yes	Yes	Yes
J2	Firm	Audited once choice made	Firm	Visited site and invited back to the UK to see production techniques	Prior trading relationship (when previous company)	Informal	Very forward thinking, willingness to develop technical capabilities	Yes	Yes	Yes

Alliance code	Initiator of Alliance	Customer/ Third Party Guidance	Means of Initiation	Partner Selection	Knowledge of potential partner	Formality of Selection	Selection Criteria	Similar goals and objectives	Similar operating philosophies	Similar management styles
J3	Partner	Audited once choice made	Partner had previously approached them and HS re-contacted	Visited site	Partner approached them	Informal	Technical skills, capacity, ability to invest, willingness to fix price (3 year)	Yes	Yes	Yes
J4	Firm	Audited once choice made	Firm	Visited site	Industry network	Informal	Technical skills, willingness to invest	Yes	Yes	Yes
K1	Firm	Vetted once choice made	by Firm	Visiting 2 growers in May	Through seed company contacts and cold calling	Informal	Technical specifications, traceability, minimum scale. Cost benefit analysis and personal factors subsequent to this.	Yes	Yes	Yes
L1	Multiple asked them to find Spanish grower	Audited once choice made	by Firm	Visited number of companies and chose two	Industry network	Informal - gut feeling	Technical specifications, management capabilities, set-up, exclusivity of supply, personal chemistry	Yes	Yes	Yes
L2	Multiple asked	Audited once choice	by Firm	Visited number of	Known for 2 years	Informal - gut feeling	Technical specifications,	Yes	Yes	Yes

Alliance code	Initiator of Alliance	Customer/ Third Party Guidance	Means of Initiation	Partner Selection	Knowledge of potential partner	Formality of Selection	Selection Criteria	Similar goals and objectives	Similar operating philosophies	Similar management styles
	them to find Spanish grower	made		companies and chose two			management capabilities, set-up, exclusivity of supply, personal chemistry			
L3	Firm	Audited once choice made	Firm	Developed from trading relationship	Prior trading relationship	Informal	Most reliable supplier	Yes	?	?
M1	Firm	Audited once choice made	Through another UK firm (intermediary for another part of their business)	Visited 2 growers	Industry network	Informal	Exclusivity of supplies, private grower group, technical ability	No	?	?
M2	Firm and importer	Audited once choice made	Through importer	Set up company - contacts through importer	Prior trading relationship	Informal	Symbiosis of skills, local knowledge, same mentality	Yes	Yes	Yes
N1	Focal firm	Audited once choice made	by Firm	Cold called number of producers	Cold calling	Informal	Strict regulations on chemical usage, strong ethical policy, clean, nice people, both wanted to deal	Yes	?	?
O1	Wholesale customer	Audited once choice made	by Firm	Firm cold called and then visited site	Through wholesale customer	Informal	Quality. Price was secondary.	Yes	Yes	Yes
O2	Firm	Audited once choice	by Firm	Visited site	Prior trading relationship	Informal	Already had trading	?	?	?

Alliance code	Initiator of Alliance	Customer/ Third Party Guidance	Means of Initiation	Partner Selection	Knowledge of potential partner	Formality of Selection	Selection Criteria	Similar goals and objectives	Similar operating philosophies	Similar management styles
		made					relationship			
O3	Firm	Audited once choice made	by Firm	Visited site	Through multiple customer	Informal	Multiple choice	?	?	?
P1	Intermediary	Audited once choice made	by Firm - put deal on table	Visited site	Industry network	Informal	Met criteria in terms of - delivery requirements, volumes, quality, personnel, growing ability.	Yes	Yes	Yes
R1	Firm	Audited once selection made	by Firm	Visited site	Prior trading relationship	Informal	Technical skills, number of grower members. Financial aspects are secondary.	Yes	Yes	Yes
R2	Multiple		Multiple insisted on relationship	Multiple chose	Long-standing relationship with multiple customer	Informal	Largest producer, long-standing relationship between partner and multiple customer	?	?	?

Table A5.7 Social Structure

Alliance Code	Age of Alliance	Previous Alliance(s) with Partner	Previous Trading Relationship with Partner	Other Previous Involvement with Partner	No. of 3 rd Party Ties	Type of 3 rd Party Ties	Total No. of International Grower Alliances
A1	7-8 years	No	No	No	0	N/a	3 key
A2	8-9 years	No	No	No	0	N/a	3 key
A3	8 years	No	No	No	0	N/a	3 key
B1	20 years	No	No	No	0	N/a	1?
C1	5 years	No	Yes	No	0	N/a	15
D1	Various	No	Some	No	?	?	?
E1	10 years +	No	Yes	No	1	Export agent	2
E2	5 years	No	Yes (when different company)	Personal contact between firms	1	Export agent	2
G1	15-20 years	No	No	No	1	Wholesale customers	Numerous
G2	15-20 years	No	No	No	1	Wholesale customers	Numerous
G3	2 years	No	No	No	1	Agent	Numerous
H1	1 year	No	No	No	1	Agent who was family friend	1
I1	3 years	No	Yes	No	0	n/a	Numerous
I2	2 years	No	Yes	No	0	n/a	Numerous
I3		No	Yes	No	0	n/a	Numerous
I4	3-4 years	No	Yes	No	1	Subsidiary	Numerous
J1		No	Yes	No	0	n/a	4
J2		No	Yes	Personal contact between firms	0	n/a	4
J3	2 years	No	No	No	0	n/a	4
J4	1 year	No	No	No	0	n/a	4
K1	Setting up	No	No	No	1	seed companies	1
L1	3 years	No	No	No	0	n/a	3
L2	3 years	No	Yes	No	0	n/a	3
L3		No	Yes	No	0	n/a	3
M1	4 years	No	No	No	1	UK grower/marketing	2

Alliance Code	Age of Alliance	Previous Alliance(s) with Partner	Previous Trading Relationship with Partner	Other Previous Involvement with Partner	No. of 3 rd Party Ties	Type of 3 rd Party Ties	Total No. of International Grower Alliances
						firm - customer of focal firm	
M2		No	No	No	1	Importer	2
N1	2 years	No	No	No	0	n/a	Numerous
O1	5-6 years	No	No	No	1	Wholesale customer	3
O2		No	Yes	No	0	N/a	3
O3		No	No	No	1	Multiple customer	3
P1	2 years	No	No	No	2	Growers' association, importer	1
R1	3 years	No	Yes - but in other products	No	0	N/a	3
R2	10 years	No	No	No	1	multiple customer	3

Table A5.8 Costings

Alliance code	Hiring of Specialised Personnel	Training of Current Staff	Capital Investment	Other Costs	Ease of Monitoring	Form of Monitoring for Crop Production in the UK	Costing of Alliance	Costs Relative to Other Projects within the Firm
A1	No	Language	No	No	Trust them to perform.	Daily contact, regular meetings.	All variable costs quantified. True overhead costs difficult to quantify, but small.	Relative costs not evaluated.
A2	No	Technical skills of partners	No	No	Trust them to perform.	Daily contact, regular meetings.	All variable costs quantified. True overhead costs difficult to quantify, but small.	Relative costs not evaluated.
A3	No	No	No	No	Trust them to perform.	Daily contact, regular meetings.	All variable costs quantified. True overhead costs difficult to quantify, but small.	Relative costs not evaluated.
B1	No	Language	No	Some technical input. Visits.	Trust them to perform.	Regular contact. Formal business review twice annually	All costs quantified.	Costs much lower than expanding abroad.
C1	No	Some technical training.	No	No	Trust them to perform.	Regular contact	All costs quantified.	Costs much lower than expanding abroad.
D1	No	No	No	Technical innovation	Trust	Daily contact	Costs quantified	
E1	Technical and QC employee based at	No	No - but setting up JV. Initial investment £1m.	Some technical input. Visits.	Trust them to perform. Will become more formalised	Daily contact and reciprocal visits.	Costs quantified. Benefits of JV uncertain.	Relative costs quantified. Costs of JV much lower risk

Alliance code	Hiring of Specialised Personnel	Training of Current Staff	Capital Investment	Other Costs	Ease of Monitoring	Form of Monitoring for Crop Production in the UK	Costing of Alliance	Costs Relative to Other Projects within the Firm
	partner firm				once a JV			than expanding abroad.
G1	No	No	No	Some technical input. Visits.	Trust them to perform. But do monitor.	Daily contact. Visit at least annually.	Costs quantified.	Looking to improve supplier base constantly. Relative costs quantified.
G2	No	No	No	Some technical input. Visits.	Trust them to perform. But do monitor.	Daily contact. Visit at least annually.	Costs quantified.	Looking to improve supplier base constantly. Relative costs quantified.
G3	Technical staff	No	Packhouse, equipment	Some technical input. Visits.	Inputted systems which are monitored.	Daily contact and visits.	Costs quantified.	Looking to improve supplier base constantly. Relative costs quantified.
H1	No	Yes	£52,000 + machinery	Some technical input. Visits.	Trust. Partner's verify prices received.	Daily contact and visits.	Costs weighed up against earnings.	
I1	Yes		£600,000-£1m pa in soft loans	Technical input. Visits.	Trust.	Daily, at all levels.	Costs quantified.	Have a value chain analysis looking at relative costs and benefits of all projects.
I2	No	No	No - looking at JV	No	Trust	Daily at all levels.	Costs quantified.	Have a value chain analysis

Alliance code	Hiring of Specialised Personnel	Training of Current Staff	Capital Investment	Other Costs	Ease of Monitoring	Form of Monitoring for Crop Production in the UK	Costing of Alliance	Costs Relative to Other Projects within the Firm
J1	One full-time Spanish - technical support. Shared between the 3 projects	No	No	No	Trust	Daily contact	Costs quantified	
J2	One full-time Spanish - technical support. Shared between the 3 projects	No	No	No	Trust	Daily contact	Costs quantified	
J3	One full-time	No	No	No	Trust	Daily contact	Costs quantified	
I4	No	No	EVS provided money for structures	No	Trust	Daily at all levels.	Costs quantified.	Have a value chain analysis looking at relative costs and benefits of all projects.
I3	No	No	No	No	Trust	Daily at all levels.	Costs quantified.	Have a value chain analysis looking at relative costs and benefits of all projects.
								looking at relative costs and benefits of all projects.

Alliance code	Hiring of Specialised Personnel	Training of Current Staff	Capital Investment	Other Costs	Ease of Monitoring	Form of Monitoring for Crop Production in the UK	Costing of Alliance	Costs Relative to Other Projects within the Firm
	Spanish - technical support. Shared between the 3 projects							
J4	No	No	No	No	Trust	Daily contact	Costs quantified	
K1	Happy to second personnel	No	No cash up front	Happy to provide technical expertise, seed etc.	Trust	Daily contact	Cost benefit analysis undertaken. Costs quantified on the back of this.	
L1	No	No	No	No	Trust	Daily contact	Costs quantified	
L2	No	No	No	No	Trust	Daily contact	Costs quantified	
L3	No	No	No	No	Trust	Daily contact	Costs quantified	
M1	No	No	No	No	Trust - but broken and relationship ending	Daily	Costs quantified	
M2	JV - hired personnel including management †	QC person from focal firm joined JV	Working capital	Visits	Control and trust derived from financial stake	Formal agreement signed by both parties. Total business transparency. Accounts viewed monthly.	Costs quantified	
N1	No	Technical manager of focal firm trained people at	No	No	Good - systems in place	Shelf-life test all products. Visit site, daily contact	Costs quantified	

Alliance code	Hiring of Specialised Personnel	Training of Current Staff	Capital Investment	Other Costs	Ease of Monitoring	Form of Monitoring for Crop Production in the UK	Costing of Alliance	Costs Relative to Other Projects within the Firm
O1	No	No partner firm	No	Technical input	Trust - don't take product if sub-standard	Daily	Costs quantified	
O2	No	No	Give producer money to grow product. Invested money in irrigation. Discussing JV.	Help with harvesting.	Trust - don't take product if sub-standard	Daily	Costs quantified	
O3	No	No	Pay 50% towards growing	No	Trust - don't take product if sub-standard	Daily		
P1	Field technician on site	Some training of staff from partner firm	Loaning of harvesting equipment	Agronomists visits	Trust	Daily contact and formal meetings	Business expected to cover costs and make some contribution to overheads.	
R1	No	Languages	Supply of seed.	Agronomy input.	Trust	Daily contact and formal meetings	Costs quantified	
R2	No	No	No	No	Trust	Quality determined on receipt. Only visit if problem	Take intermediary cut. Costs quantified	

Table A5.9 Outcomes

Alliance code	Achieved Objective	How	Time period	Impact on profitability/sales	How quantified
A1	Yes	Provides high quality product when focal firm can't	None. Relationship started tentatively and evolved.	Made firm more efficient. Not necessarily bottom-line profitable. Able to employ long-term.	
A2	Yes	Provides high quality product when focal firm can't	None. Relationship started tentatively and evolved.	Challenge to be cost efficient given storage and transit times	Difficult. Use 2 sources for risk spread and market segmentation
A3	Yes	Provides a second source of product when focal firm can't	None	Challenge to be cost efficient given storage and transit times	Difficult. Use 2 sources for risk spread and market segmentation
B1	Yes	Focal firm sells 40% of partner firm's production.	None. The relationship was started on spec. and evolved.		
C1	Yes	Partner is a key supplier. Very amicable relationship.	None. The relationship was started on spec. and evolved.	Having supplies out-of-season adds value to total process. Made firm more reliable for customers. Business probably grown faster in total	Assessment of how project works within total business at various levels. Try to analyse where money is generated from.
D1	Yes	Developed specialised product niches where there are markets creating stable market conditions	Value maximisation		
E1	Yes	Provides high quality product when focal firm can't	None. Relationship started tentatively and evolved.	Made firm more efficient.	
G1	Yes	Provides high quality product when focal firm	None. Relationship developed from	Made firm more efficient	

		can't. Spreads risk.	trading.			
G2	Yes	Provides high quality product when focal firm can't. Spreads risk.	None. Relationship developed from trading.	Made firm more efficient		
G3	Yes	Provides consistent high quality product when other sources can't	None. Although early days, seen as successful.	Has made supplies more predictable		
H1	Trialling	In infancy, but good core product coming through. Trialling of other products more mixed.	No finite time period - ongoing process	Has made them more efficient and helped them get a foot in the door of the multiples.		
I1	Yes	Provides high quality product when focal firm can't	None - ongoing			Value-chain analysis
I2	Yes	Provides high quality difficult to do product	None - ongoing			Value-chain analysis
I3	Yes	Has reduced supply risk on high value product	None - ongoing			Value-chain analysis
I4	Yes	Developed a speciality product	None - ongoing			Value-chain analysis
J1	Yes	Volumes increased to extent that at capacity, but still the major supplier of cucumbers and peppers	No finite time period - ongoing	? Had to forge closer relationships to keep multiple customers		
J2	Yes	Developing, provides a base for cucumbers, peppers and tomatoes. Specifications. Trying to expand productivity to 12 months	No finite time period - ongoing	? Had to forge closer relationships to keep multiple customers		

J3	Yes	All the leafy veg side of their business	No finite time period - ongoing	? Had to forge closer relationships to keep multiple customers	
J4	Trialling		Will assess product in 2 months time and take from there	? Had to forge closer relationships to keep multiple customers	
K1	n/a	n/a	n/a	n/a	n/a
L1	Yes	Partner provides 50% of main product for retail customer and has developed others	None - relationship has evolved	? n/a	? n/a
L2	Yes	Provides high quality product when focal firm can't	None	? n/a	? n/a
L3	Yes	Provides high quality product when focal firm can't	None	? n/a	? n/a
M1	Yes(?)	Extremely high quality produced but relationship now ending because partner was approaching retail customer directly	Initially had 3-4 years after which relationship would become more formal if working	? n/a	? n/a
M2	Just starting		No formal timescale - take it as it goes	n/a	n/a
N1	Yes	Provides reliable supplies at known prices	None	? n/a	? n/a
O1	Not really	Have never had adequate supplies	5-6 years	? n/a	? n/a
O2	Not yet	Quality highly variable	? n/a	? n/a	? n/a
O3	Not yet	Quality highly variable	? n/a	? n/a	? n/a

P1	Yes	Provides high quality product when focal firm can't	None	Probably not cost effective. Not expected to make a full contribution, rather to make some to overheads	?
R1	Yes	Provides high quality produce when focal firm can't - increased the confidence of their customers	None	?	?
R2	Yes	Provides high quality produce when focal firm can't - increased the confidence of their customers	None	Relationship at insistence of customer	?

Table A5.10 Additional Benefits

Alliance code	Enhanced product value	Expanded product range	Stimulated sales	Aided npd	Access new UK markets	Access new markets overseas	Expanded firm's range of expertise	Access to resources	Access to specialist skills	Technical innovation	Access to market information	Contacts	Helped to keep current customers	Lowered production costs	Lowered marketing costs
A1		yes	yes	yes	yes	yes	yes	yes	yes	yes	yes		yes	yes	yes
A2			yes	yes		yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
A3			yes	yes			yes	yes	yes	yes	yes	yes	yes	yes	yes
B1		yes	yes	yes			yes	yes	yes	yes	yes		yes	yes	
C1			yes				yes	yes	yes	yes	yes	yes	yes	yes	
D1															
E1		yes	yes		yes		yes	yes	yes				yes	yes	
F1															
G1					yes							yes	yes	yes	
G2						yes						yes	yes	yes	
G3			yes			yes		yes	yes	yes	yes	yes	yes	yes	
H1		yes	yes	yes	yes	yes		yes					yes	yes	
I1			yes	yes			yes	yes	yes	yes	yes		yes	yes	yes
I2		yes	yes	yes			yes	yes		yes	yes		yes	yes	yes
I3			yes	yes				yes		yes			yes		
I4			yes	yes				yes			yes		yes	yes	yes
J1		yes	yes	yes		(yes)		yes					yes	yes	
J2			yes	yes		(yes)		yes		yes			yes	yes	

Alliance code	Enhanced product value	Expanded product range	Stimulated sales	Aided npd	Access new UK markets	Access new markets overseas	Expanded range of expertise	Access to resources	Access to specialist skills	Technical innovation	Access to market information	Contacts	Helped to keep current customers	Lowered production costs	Lowered marketing costs
J3		yes	yes			(yes)							yes	yes	
J4		yes		yes						yes			yes		
K1		yes							yes				yes	yes	
L1		yes	yes					yes	yes	yes			yes	yes	yes
L2			yes					yes						yes	
L3			yes										yes		yes
M1			yes										yes	yes	
M2		(yes)	(yes)			(yes)	yes	yes	yes				yes	yes	
N1			yes						yes				yes		
O1			yes					yes		yes			(yes)	yes	
O2			yes					yes					yes	yes	
O3			yes					yes					yes	yes	
P1		yes	yes	yes				yes					yes	yes	yes
Q1															
R1			yes	yes				yes					yes	yes	yes
R2	yes		yes										yes	yes	yes

Table A5.11 Alliance Development

Alliance code	Change in purpose/scope ?	If yes, how?	Change in structure ?	If yes, how?	Successful	Reasons for success	Shortcomings
A1	No	Just volume growth	No		Yes		Challenge to manage as gets bigger. Increasing risk of single source. Will have to assess another source within 5 years.
A2	No	Just volume growth	No		Yes		None
A3	No	Just volume growth	No		Yes		None
B1	Yes	Relationship has developed from standard to include speciality product	No		Yes	Both parties believe the other is doing their best for the good of the whole relationship	Scope for conflict over ever lengthening seasons
C1	No	Just volume growth	No		Yes	Both parties believe the other is doing their best for the good of the whole relationship	Scope for conflict over season lengths and if volume supplies/demands diverged.
D1	No	Development of niche products	No	Would like equity arrangements	Yes	Both need each other, same goals	Difficult to control confidentiality. Equity would make the relationship more formal and utilise growers' knowledge better.
E1	Yes	Volumes have grown, but also moving into other product areas	Yes	Setting up a JV	Yes	Both working towards the same goals and both need each other. Scaling up is vital.	That said focal firm feels that there is now a need to be growing abroad due to technical and managerial input needed.
G1	No	Volume growth	No		Yes	Both need each other	
G2	No	Volume growth	No		Yes	Both need each other	
G3	No	Volume growth	No		Yes	Competitive advantage in predictable climate and crop	
H1	No	Although trialling other niche products	No		(Yes)	Both have similar aims and aspirations. Both young companies looking for a long future	Production window - If winter business develops, will need to find a second source for when partner

Alliance code	Change in purpose/scope ?	If yes, how?	Change in structure ?	If yes, how?	Successful	Reasons for success	Shortcomings
I1	No	Just volume growth	No		Yes	Sustainable. Both parties depend on each other. Both parties happy with relationship. Focal firm has scale and clout to absorb risk.	firm can't produce Some conflict with own UK growers over shoulders of the season.
I2	No	Just volume growth	Yes	Looking at JV	Yes	Focal firm giving partner firm values because they are giving them critical mass	Some conflict with own UK growers over shoulders of the season.
I3	No	Just volume growth	No		Yes	Balance of needs and same mentality and outlook on the business	
I4	No	Just volume growth	No		Yes	Both sides bringing different things to the table.	
J1	No	Just volume growth	No		Yes	High quality - has control over growers. Balance of needs leads to trust.	
J2	Yes	Trying to develop 12 month productivity	No		Yes	Partner is very forward looking company - invested in the alliance heavily. Balance of needs leads to trust.	
J3	No	Just grown	No		Yes	Partner invested heavily in partnership. Balance of needs leads to trust.	
J4	No	Initial trailing stage	No		?		
K1	n/a	n/a	n/a	n/a	n/a	n/a	n/a
L1	Yes (?)	Volumes of main product increased and also started trade in other products. Sees this as ongoing	No		Yes	Both sides reliant on each other. Both sides open and up front	
L2	No		No		Yes	Both sides reliant on	

Alliance code	Change in purpose/scope ?	If yes, how?	Change in structure ?	If yes, how?	Successful	Reasons for success	Shortcomings
L3	No	Volumes grown	No		Yes	Partner firm knows what focal firm wants and delivers each other	
M1	No		No	Wanted to become more formal, but relationship has ended	No	Failed because partner approached multiple customer directly - breach of trust	Believes that if one party does not have control (through some equity investment) the partnership will fall apart because of short-term opportunism
M2	No	Just starting	No	Just starting	n/a	n/a	n/a
N1	No	Just volume growth	No		Yes	Both sides need each other. Makes both sides business more stable - controlling supply. Continuous monitoring by focal firm.	
O1	Yes	Relationship ending	Yes	Relationship ending	Relationship has been successful but their multiple customers want them to change supply sources	Was an easy relationship to manage - both sides have easy going personalities, do a good job and need each other.	There have been problems with supply from both sides - overestimation of production from both sides
O2	No	Just trying to develop consistent quality	Maybe	Discussing joint venture	Yes(?)	Trust is a large part of the relationship. Both sides need each other and committed to relationship.	Quality still highly variable
O3	No	Just trying to develop consistent quality	No		Yes(?)	Trust is a large part of the relationship. Both sides need each other and committed to relationship.	Quality still highly variable
P1	No(?)	Mainly volume growth although also increased volumes for	No		Yes	Trust and daily communications. Both sides very open and problems dealt with	Need development of harvesting technology, but partners on board.

Alliance code	Change in purpose/scope?	If yes, how?	Change in structure?	If yes, how?	Successful	Reasons for success	Shortcomings
R1	No	Just volume growth prepared lines	No		Yes	immediatly Strong degree of trust between both parties, financial benefit to both parties	
R2	No	Evolved into more pre-pack business	No		Yes	Relationship is primarily between the multiples and partner firm	

Table A5.12 External Influences

Firm Code	Technological Changes	Impact	Reaction	Globalisation of Industry	Impact	Reaction	Relationship with (Retail) Customers	Involvement in Business	Affect on Business	Other Influences
A	Increasing demand new products, business becoming more mechanised	Npd and technological knowledge increasing	Collaboration on technology. Npd mostly in-house	Increase in competition, enormous rationalisation . Volatile market	Had to become more cost effective. Customer driven. Constantly innovating	Strategic positioning	Imbalance of power. Buyers want constant flow new products. Pro-British if fits specifications.	Discuss needs together, then firm takes lead in product sourcing.		Lack of Government support of industry.
B	Increasing demand new products, increased mechanisation of business	Npd and technological knowledge increasing	Collaboration on technological developments and npd with partner	Competitive pressures not a new phenomenon		Strategic positioning of product, developments of new products, expansion of product range	Relationship become more human - needs from suppliers increased. More educated	High. Development of business plans.	More human and adult relationship - co-operation rather than 'big stick'.	Need for training in industry
C	Demands for new and consistent products led to quantitative leap in information and IT needs	Npd and technological knowledge increasing	Collaboration on technology, IT, varietal trialling	Competitive pressures increasing - prices dropping and costs increasing. Competitive advantages evening out.	Had to become more efficient and focused	Strategic positioning of product	Changed due to reduction in number of suppliers - more focus on improving the business and developing the market. But multiples still only really interested in margins. High pressure on buyers.	Discuss needs together but firm takes lead in product sourcing. Multiples focus moved from auditing to product development.	Relationship better as focus moved from short to long-term. But can all just come down to margins. Different strategic positions from different people within organisation.	Promotion very splintered - no coherent strategy.
D	Demands for new and consistent products.	Technological I needs increasing exponentially.	R&d in house	Growth and development of global supply chains,	Consolidation of supply bases - scale is	Strategic positioning - take share by innovation.	Good. Totally Retail focused	Partly involved in finding suitable suppliers.	Good - develop products together.	UK promotion wrong - must be at p.o.s.

Firm Code	Technological Changes	Impact	Reaction	Globalisation of Industry	Impact	Reaction	Relationship with (Retail) Customers	Involvement in Business	Affect on Business	Other Influences
E	Increasing needs for new machinery and equipment - i.e. product labelling	Increased overheads on technical side of business. Need for minimum scale.	Collaboration on technology	Improvement in transport, controlled atmosphere storage - product can come from anywhere - competition	everything.	Scaling-up through JV and collaboration	OK - two major customers pushing for dedicated business - having to split business into two	Discuss needs together, then firm takes lead in product sourcing. Customer pushed for JV		
G	Increasing importance of npd and technological developments	Npd and technological needs increasing	Constantly looking for better yields and better utilisation of whole crop. Collaboration on npd	Globalisation increasingly important - multiples part of globalisation process. Network has developed enormously.	Market more transparent	Proactive in business development - always looking for new opportunities	Very competitive. Multiples play one supplier against another to get best deals. Multiples changing marketing strategies all the time - function of internal competition.	Major influence in focusing firm but firm takes lead in product sourcing	Becoming more pressurised	Lack of funding for r&d real problem. Individual growers don't have the resources
H	Demands for new and consistent	Npd and technological knowledge	Collaboration with seed company and	Margins reduced - lot of UK growers	Very difficult to invest in business	Strategic market positioning -	Multiples looking for dedicated	Discuss needs together, then firm takes lead	Push for dedicated plants has	

Firm Code	Technological Changes	Impact	Reaction	Globalisation of Industry	Impact	Reaction	Relationship with (Retail) Customers	Involvement in Business	Affect on Business	Other Influences
I	Technology is the critical driver	Npd and technology needs increasing	Lot of money invested in r&d. Technology diffused by taking own labour to partners. All npd in-house to maintain rights.	Competitive pressures increasing	Efficiency through scale. Spain will dominate UK market within 5 years.	Strategic positioning. 'Speculate to accumulate'. Think global.	Good	Firm take on research, segmentation and category management for multiple and develop with grower.	Firm involved in all areas of business - right through to in-store	
J	Technical needs are one of the key drivers.	Current technical edge of UK growers will disappear	Always try to keep ahead of the competition. Invest in technology.	Over-supply of market and frequent collapse in prices. Market very volatile. Cost of air freight some barrier to non-EU produce.		Concentrating on prepared market and investing heavily.	Commitment to UK product up to a point but increase in competition between multiples has put pressure on prices.	Discuss needs together, then firm takes lead in product sourcing.	Try and stay one step ahead of customer needs.	
K	Technological needs increasing			Increase in competition.	Divide and rule.		Multiples have taken seasonality out of fp. Push for dedicated suppliers.	Discuss needs together, then firm takes lead in product sourcing.	Becoming increasingly pressurised. Consolidating own supply base.	Push towards minimal spray crops at odds with multiples demand for homogenous products with

Firm Code	Technological Changes	Impact	Reaction	Globalisation of Industry	Impact	Reaction	Relationship with (Retail) Customers	Involvement in Business	Affect on Business	Other Influences
L	Technological needs increasing.		Try to be at the forefront of technology.	Industry highly competitive.	Industry likely to move more into semi-prepared. Increase in concentration. Two-tier supply-base.	Must be open-minded and more successful than competitors. Focus on volume growth and some product diversification.	OK - trying to consolidate position in face of continuing rationalisation	Discuss needs together, then firm takes lead in product sourcing.	Pressure to be the best.	high yields.
M	Technological needs increasing. Growth curve in processing industry in particular been very steep.		Collaboration on technology	Increase in competition.	Industry becoming more divisive. Quality of life deteriorating		Fairly adversarial. Relationship with processors very positive.	Discuss needs together, then firm takes lead in product sourcing.		New labour legislation will impact on costs and ability to deliver. GM debate put industry back 5-10 years. Impossible to have a rationale debate.
N	Increasing demand new products	Npd and technological knowledge increasing		Increase in competition	Likely to see more rationalisation.	Have had strong organic growth, now want to purchase to achieve scale	OK - have 2 dedicated multiple sites.	Give them contract and audit once partner choice made	Have had to constantly innovate to retain customers	
O	Demands for technological controls changed dramatically.	Have to record everything and test every field for chemicals.		Increase in competition.			Adversarial. Multiples abuse the relationship. Multiples have short-term outlook.	High. Dictate where relationships should be formed and then vet potential	Pressurised. Prices received not viable in long-term.	

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P	Some - most products dealt with are pretty basic.	Npd in value-added.	Npd driven by multiples. Developing mechanics of packing in Spain.	Industry become highly competitive, drive to reduce costs	UK industry in a state - many producers with high levels of gearing falling by wayside	Be proactive - develop while still have market share	OK -	Discuss needs together, then firm takes lead in product sourcing.		If drive to reduce costs continues, specifications will change, waste will not be permissible and multiples will become leaner.
R	Packing technology not changed. Grading machines may come in.	No real impact	Collaboration on npd in new varietal trialling	Competition grown significantly in last 10 years.	Massive overcapacity in UK industry	Concentrate on core business	Pretty good, relatively amicable.	Variable according to overseas supplier.	Try to be best supplier - constantly developing business	