

University of Warwick institutional repository: <http://go.warwick.ac.uk/wrap>

A Thesis Submitted for the Degree of PhD at the University of Warwick

<http://go.warwick.ac.uk/wrap/3682>

This thesis is made available online and is protected by original copyright.

Please scroll down to view the document itself.

Please refer to the repository record for this item for information to help you to cite it. Our policy information is available from the repository home page.

**DETERMINANTS OF VERTICAL INTEGRATION AND CONTROL
IN DISTRIBUTION CHANNELS**

Ana Julia Jatar Alonso

ABSTRACT

Current theories of marketing channel structure have stressed product and industry characteristics. We develop a theoretical framework which emphasizes the importance of the markets for each of the functions required by the distribution channel. This framework was used in an extensive and in depth case study for 23 companies in 6 industries in Venezuela. Imperfections in the market for loans, lack of specialized markets for certain channel functions, spatial monopolies enjoyed by retailers and agency problems were identified as crucial elements affecting vertical integration and control in distribution channels.

ACKNOWLEDGEMENTS

There are numerous people to whom I am grateful for their help and support along this process.

My supervisor Robin Wensely who guided my work with interest and dedication, patiently read all my drafts and wisely maintained the difficult equilibrium between influencing my way of thinking and respecting my ideas. I have also learnt from him that in a successful relationship between supervisor and student, informality and warmth are compatible with strictness and rigour.

I would like to express my immense gratitude to my husband and intellectual partner, Ricardo. In him, I always found attention, receptivity and food for thought, especially in circumstances when the task seemed unbearably heavy and lonely. His criticism, wit and love have been crucial for the completion of this work.

I am grateful to many people at the Instituto de Estudios Superiores de Administracion (IESA) in Caracas. To Janet Kelly who commented on various of my chapters and always showed her support by freeing me from other responsibilities different from this research. To Ramón Piñango and Moisés Naím, who always gave me encouragement and reminded me of the significance of this work above other responsibilities which only seemed as important at the time. To my students from the class of 1990, who inspired me with interesting discussions in a seminar dedicated to this subject.

Financial support was provided by British Council, IESA and CEPET. To all of them I am very grateful. I would like to give special thanks to Stephen Garner-Winship, the British Council officer in Venezuela in 1989, when I received my scholarship. He showed interest and preoccupation beyond his duty to make the necessary arrangements so that this project could get started.

I am in debt with many faculty members from the Warwick Business School and the Economics Department, and especially with Peter McKiernan and John Cable. Also, colleagues at IESA contributed with insights in many occasions.

I would like to express my great appreciation for Chris Strickland who with dedication and patience proof-read all the chapters while making important and insightful comments. He was also there in the many occasions I needed him. His excellent sense of humour also helped to make the task a lot more enjoyable. Henrique Luiz Correa was always helpful when it seemed most important.

My parents who always showed encouragement, support and pride. They taught me that with strength, optimism and discipline most goals in life are achievable. These three elements have been invaluable resources to keep up with the demanding pace of work during the past three years.

TABLE OF CONTENTS

INTRODUCTION.....	1
CHAPTER 1 THE LITERATURE REVIEW	
Introduction	6
1.1. Summary and Conclusions	8
1.2. Vertical Integration and Vertical Control: Theoretical Approaches	10
1.2.1. Vertical Integration, efficiency and input costs reduction. The neo-classical view	10
1.2.2. The Functional Approach.....	15
1.2.3 The Transaction Cost Approach.....	18
1.2.4. Agency Theory	28
1.2.5. The Structure-Conduct-Performance View	29
1.2.6. Marketing theory	32
1.3 Distribution Channels. When is Forward integration more likely?: A Summary	39
1.3.1. According to the neo-classical Theory	39
1.3.2. According to the Functional Theory.....	39
1.3.3. According to the Transaction Cost approach.....	40
1.3.4. According to the Structure-Conduct-Performance Paradigm	40
1.3.5. According to Marketing Theory.....	41
CHAPTER 2 THE METHODOLOGY	
Introduction	42
2.1. Types of Research Methods.....	42
2.1.1. Experimental Research	43
2.1.2. Survey Research	44
2.1.3. Case Study.....	44
2.1.4. Action Research.....	45
2.2. The Research Design: Building Theory	45
2.2.1. Identification of the Research Problem and Research Questions. Steps (1) and (2)	46
2.2.2. The Literature Review. Step (3).....	48
2.2.3. Methodological Choice. Step (4).....	49
2.2.4. Study Propositions. Step (5).....	53
2.2.5. The Selection of the Companies.....	55
2.2.6. Converting Study Propositions into a Semi- Structured Questionnaire. Step (7)	57
2.2.7. Interviews and Transcriptions. Steps (8) and (9)	57
2.2.8. Within Case Analysis. Step (10)	58
2.2.9. The Theoretical Framework. Step (11).....	58
2.2.10. Cross Case Analysis. Step (12).....	59
2.3. Appendix: The Semi-Structured Questionnaire.....	61

CHAPTER 3 THEORETICAL FRAMEWORK

Introduction	63
3.1. Lack of Competitive Markets for Channel Functions.....	64
3.1.1. Absolute Absence of Specialized Markets for Channel Functions.....	64
3.1.2. Monopolistic Power Enjoyed by Existing Suppliers of Channel Functions.....	67
3.1.3. Retailers' Markets and Spatial Monopolies.....	68
3.1.4. Bilateral Monopoly.....	70
3.1.5. Financial Market Imperfections: Financing as the Forgotten Function in Distribution	71
3.2. Development of Barriers to Entry: Deterring Competition.....	76
3.3. Avoiding Post-Contractual Opportunistic Behaviour.....	77
3.3.1. Appropriable Specialized Quasi-rents.....	78
3.3.2. Contract Reinterpretation	79
3.4. Agency Problems.....	79
3.4.1. Externalities.....	81
3.4.2. Moral Hazard.....	82
3.5. Governance Costs.....	83
3.5.1. Administrative and Informational Costs.....	83
3.5.2. Distribution Networks with Scattered, Low Capital, Family Owned Retail Shops.....	84
3.6. Losses in Economies of Scope and Scale.....	86
3.7. Final comments.....	86

INTRODUCTION TO THE CASES.....	88
--------------------------------	----

CHAPTER 4 CASE 1. THE DISTRIBUTION OF DAIRY PRODUCTS AND FRUIT JUICES: Facing Moral Hazard Problems and Retailer's Markets

Introduction	89
4.1. The Description.....	91
4.1.1. The Industries:.....	91
4.1.2. The Companies Interviewed.....	92
4.1.3. Channel Structure	94
4.1.4. Channel Functions: Who Performs What?.....	97
4.2. The Analysis	100
4.2.1. Existing Approaches:.....	100
4.2.2. A Proposed Approach: The Hot Line	104
4.2.3. A Proposed Approach: The Cold Line	110
4.2.4. Final Comments.....	117

CHAPTER 5 CASE 2. THE APPAREL INDUSTRY: Financial Market Imperfections and Vertical Integration into Retailing

Introduction	118
5.1. The Description.....	119
5.1.1. The Industry	119

5.1.2. The Companies Interviewed.....	121
5.1.3. Channel Structure	123
5.1.4. Channel Functions: Who Performs What?.....	127
5.2. The Analysis	129
5.2.1. Existing Approaches	129
5.2.2. Proposed Approach.....	132
5.2.3. Final Comments.....	137

CHAPTER 6 CASE 3. VERTICAL CONTROL IN THE BEER INDUSTRY: Building Channels May Imply Building Walls

Introduction	138
6.1. The Description.....	139
6.1.1. The Industry	139
6.1.2. The Companies Interviewed.....	142
6.1.3. Channel Structure	143
6.1.4. Channel Functions: Who Performs What?.....	148
6.2. The Analysis	150
6.2.1. Existing Approaches	150
6.2.2. Proposed Approach.....	152
6.2.3. Final Comments.....	161

CHAPTER 7 CASE 4. THE CHOCOLATE INDUSTRY: Dealing With Externalities

Introduction.	162
7.1. THE DESCRIPTION	162
7.1.1. The Industry	162
7.1.2. The Companies Interviewed.....	163
7.1.3. Channel Structure	164
7.2. THE ANALYSIS	168
7.2.1. Existing Approaches	168
7.2.2. Proposed Approach.....	171
7.2.3. Final Comments.....	179

CHAPTER 8 CASE 5. ELECTRICAL APPLIANCES: Consumer Service Impacts Channel Structure

Introduction	180
8.1. THE DESCRIPTION	180
8.1.1. The Industry	180
8.1.2. The Companies Interviewed.....	183
8.1.3. Channel Structure	185
8.1.4. Channel Functions: Who Performs What?.....	187
8.2. THE ANALYSIS	189
8.2.1. Existing Approaches	189
8.2.2. Proposed Approach.....	192
8.2.3. Final Comments.....	195

CHAPTER 9 CASE 6. THE PHARMACEUTICAL INDUSTRY: Bilateral Monopoly and Integration

Introduction.	197
--------------------	-----

9.1. THE DESCRIPTION	198
9.1.1. The Industry	198
9.1.2. The Companies Interviewed.....	200
9.1.3. Channel Structure	201
9.1.4. Channel Functions: Who Performs What?.....	202
9.2. THE ANALYSIS	204
9.2.1. Existing Approaches	204
9.2.2. Proposed Approach.....	206
9.2.3. Final Comments.....	210

CHAPTER 10. CONCLUSIONS: Theoretical and Empirical Findings

Introduction	211
10.1. Research Questions and Study Propositions.....	211
10.1.1. The Research Questions: a Justification.	212
10.1.2. The Study Propositions.	213
10.2. The Theory.....	215
10.2.1. Existing Empirical Research and Applied Theories.	215
10.2.2. Theoretical Gaps:.....	217
10.2.3. The Absent But Useful Theory: Agency Costs.	220
10.2.4. Proposed Approach.....	221
10.3. Empirical Findings:	222
10.3.1. Channel Control is not the Issue, But the Control of Specific Functions.....	223
10.3.2. Market Structure Affects Channel Structure.....	226
10.3.3. Imperfections in the Loan Market May Induce Vertical Integration or Functional Spin-Off.....	226
10.3.4. Moral Hazard Behaviour in Consumer Financing May Induce Retailing Spin-Off.....	230
10.3.5. Lack of Specialists May Induce Vertical Integration and/or Suppliers Development: An Explanation for the Absence of Wholesalers	230
10.3.6. Retailers Monopolistic Behaviour May Induce Vertical Integration or Functional Spin-Off.....	234
10.3.7. Bargaining Costs Within a Bilateral Monopoly Relation, Affects Channel Structure	236
10.3.8. The Objectives of Control Affect Channel Structure: the Presence of Externalities Force Manufacturers to Perform Key Functions Internally	236
10.3.9. Agency Costs in Transportation Impact Channel Structure	239
10.3.10. Barriers to Entry are the Result of Dealing with Different Market Imperfections and Agency Problems. Ex-Post, Building Channels May Imply Building Walls.....	241
10.3.11. Avoiding Post-Contractual Opportunistic Behaviour. How Does it Affect Channel Structure?.....	242
10.4. Final Conclusions and Comments.....	243

CHAPTER 11: LESSONS, IMPLICATIONS AND FUTURE DIRECTIONS

1. Managerial Implications 245

2. Further Research..... 249

3. Policy Issues..... 254

BIBLIOGRAPHY 258

INTRODUCTION

In the managerial literature, strategic decisions regarding distribution channels are often analysed as part of the marketing mix. In this context, the emphasis of the marketing plan is placed on the development of products which "satisfy consumer needs" while channel design is often regarded as a complementary process. Managers are supposed to "choose" the best alternative, based on product characteristics and consumer's buying patterns, to make goods available to the targeted client. The general impression given in the literature is that managers are supposed to search through a long menu of alternative ways to reach the consumer, and choose the one which is most suitable (Kotler, 1991), (Pride and Ferrel, 1987).

However, companies tie up a significant amount of resources developing channels with very complex structures and which provide them with different degrees of control over the whole distribution process. Vertical integration seems to coexist with other forms of control and with looser forms of organisation in such a diverse way that, as pointed out by Anderson and Weitz (1986), they appear as "variations without a theme". Faced with such a disorderly world, some researchers have tended to concentrate on narrating merely what exists. Thus, as indicated by Frazier (1991, p.268) there is the need "...to change the purely descriptive orientation of the research on channel functions". This dissertation is a contribution to this research effort.

We have found that distribution cannot be viewed as a homogeneous task but as a variety of functions, where each one of them can be (and usually is) organised in different ways. In other words, the structure of the channel depends on the structure of the market for each of the functions it performs. Thus, "variations without a theme" may be the distorted perception of *various themes playing at the same time*. Each channel function within its market is a theme, and different market imperfections have a diversity of impacts on the way those functions are organised.

The objective of this research is to identify the trade-offs between cost and control facing management decisions *vis a vis* channel structure. The trade-offs between administrative costs and vertical control are discussed. The evaluation of these trade-offs is carried out in terms of how they are affected by financial market imperfections, transaction costs and agency problems.

We analyse some of the economic determinants behind the organization of transactions in each of its many alternatives (e.g. hierarchies and other forms of non-market transactions) and we study the different degrees of control they yield. Finally, given the fact that channels are network structures, we analyse how a systemic expression of distribution functions is some times achieved and how harmonization of agents objectives is accomplished. We also study how management decisions are affected by market imperfections such as oligopolistic behaviour in highly concentrated industries, capital market imperfections and lack of specialists in distribution functions.

Since we intend to analyse distribution channel design in light of these elements, we have gone beyond marketing theory, which tends to restrict channel decisions to product characteristics or consumers buying patterns (Aspinwall, 1958). Instead, we have incorporated theoretical frameworks from the field of industrial organisation and from new theories of the firm. The main objective of this work is to expand the traditional marketing paradigm by applying concepts and theories through "cross-fertilization with other disciplines" (Day & Wensley, 1983). In this sense, a conceptual framework is developed in Chapter 3.

In fact, a growing literature has been incorporating new economic concepts into the question of distribution channel structure. Mallen (1973) developed Stigler's functional view and applied it for predicting spins-offs in distribution. Also, transaction cost economics highlighted the possibility of product debasement and other externalities as a criteria affecting decisions on vertical integration into distribution (Williamson, 1985). It also supplied the concept of asset specificity which has been applied to the understanding of similar issues (Anderson, 1985), (John & Weitz, 1988). These different strands of the literature are discussed in Chapter 1.

Alternative theories provide different arguments about the critical determinants of channel structure. For some, product characteristic is supreme. Others emphasize the desire to establish barriers to entry. Industry cycles have been proposed as a determinant of the evolution of structures over time. Agency problems due to incentive incompatibility have also been proposed. We argue (Chapters 1 and 3) that the problem of organising intra-channel financing when capital markets are imperfect is also crucial in this respect.

Given the many determinants proposed in the different theories, we chose to rely on an extensive and in depth case analysis of selected industries. Since existing theories stressed product and industry characteristics instead of competitive

dynamics, we needed to find a method that would allow us to understand the space for managerial discretion, its determinants in different scenarios, and the manner in which various contexts were perceived by the actors. Moreover, we wanted to understand how these elements changed over time, as companies grew, industries matured and the overall environment changed. A justification of this methodological option is presented in Chapter 2. There, we also provide a motivation for the choice of industries and companies.

We opted for six industries in order to bring out different issues in each of them. Fruit juice and dairy products were chosen because they have two lines (cold pasteurized products which need to be stored under refrigeration and "hot" canned products with much longer shelf life). This introduces a key difference, i.e. perishability, between goods which would otherwise be very similar. Cold pack products are different from their hot pack equivalents, not only in the sense stressed by marketing theory (*inter alia*, they require different outlets and are purchased with different frequencies), but in two other crucial ways. First, their perishability generates problems of product debasement and other externalities. Second, they give retailers a monopoly power over the control of the scarce refrigerated space. The contrast between these two different channels of *apparently* similar products in the same firms is brought out in Chapter 4.

In a world of perfect credit markets, commercial or manufacturing firms would never take up the role of providing other intermediaries with capital. However, when different channel members have differentiated access to credit, the responsibility for providing the necessary financing may fall on one of them. This role will interact with other dimensions of the commercial relationship. To highlight this issue we study in Chapter 5 the case of men's wear in the apparel industry, where companies decided to integrate into retailing after a period in which competition led them to provide a growing volume of increasingly longer term credit to retail shops. How a combination of intra-channel financing and spatial monopoly enjoyed by retailers induce manufacturers to integrate forward is analysed in this case. The loss of economies of scope, the gains from integration and other advantages of control are discussed.

The creation of barriers to entry has often been identified as a goal followed by companies when they invest in distribution channels. A typical such example in Venezuela is the case of the breweries (Chapter 6). An impressive, highly controlled distribution system was organised by the leading firms in the sector who dedicated immense resources to the creation and development of a retailing network. However,

a careful look at its history emphasises the point that when distribution channels do not exist and must be created, the necessary process of building such channels may itself result in the barrier. Also, since this industry is some fifty years old, it allows us to discuss the industry cycle theory of spin-offs.

In a similar vein, the leader in the chocolate and sweets industry has developed a distribution network with almost 100,000 outlets visited weekly. In Chapter 7 we discuss how manufacturers in the industry have faced externalities and product debasement in an environment where retail networks are dominated by scattered, small and low capital shops. Industry cycle theories are also discussed in this chapter, where the leader has kept the same highly integrated channel structure since it began operations in 1941.

High quality sale and post-sale service have been considered key elements in developing competitive advantage through product "augmentation" (Levitt, 1980). In other words, services can be added to the factory output in order to offer the consumer a better product-service combination than other competitors. In achieving this objective, marketing channels are strategically important, especially when dealing with durable or semi-durable products which require repair and guarantee services. In Chapter 8 we discuss the impact which these corporate objectives have had in the evolution of channel structure within the electrical appliance industry. Specific attention is given to the differences in channel strategy followed by manufacturers of branded and non-branded products. This allows us to evaluate how channel structure reflects the strategic importance given by management to brand image. We also evaluate the diverse impacts which financing may have on the having-off of functions.

In Chapter 9, the case of the pharmaceutical industry offers an interesting opportunity for the analysis of bilateral monopoly relationships between wholesalers and retailers. The industry presents a highly atomistic structure at the manufacturing level, but with important degrees of market concentration at the wholesale level. Because of government regulations which increase entry barriers, we found exacerbated monopolistic behaviour among agents. This situation permits us to evaluate bargaining costs between wholesalers and retailers, and their impact on the vertical integration strategies followed by them.

The conclusions are summarized in Chapter 10 where a cross-case analysis is presented. Some of the most important empirical findings are derived from the fact that distribution must be seen as a set of different functions which have to be performed by the most efficient agent, and that market imperfections in each function

affect channel structure. This implies that channel control can be achieved by choosing to vertically integrate specific, and not necessarily all, channel functions. This is reflected in the empirical findings which reveal that channel structure is affected by the control objectives defined by management (e.g. to promote sales or to control quality) and by the market structures of each function (e.g. transportation, financing or services). Also spatial monopolies enjoyed by retailers, moral hazard problems and externalities are found to affect vertical control decisions into distribution.

The managerial implications and the policy issues which can be derived from this work are discussed in Chapter 11, where some new avenues for research are also mentioned. In the managerial implications, a "check list approach" of the theoretical framework is developed to offer managers a guideline for vertical control decisions. Policy issues regarding new developments in competition law are identified, and special mention is given to "monopolistic" practices in channel functions such as tied-loans, exclusivity contracts and territorial restrictions. As far as new research areas are concerned, specific ideas are put forward. We stress that the general orientation of future research should be less product and industry specific and more geared to understand the strategic elements which allow managerial discretion in a competitive environment.

CHAPTER 1

THE LITERATURE REVIEW

Introduction

The issue of vertical control and its impact on corporate profit and consumer welfare has been the source of a long and prolific debate. The big question has centered on the purposes behind the decision to substitute the classical market¹ by negotiated rules of exchange. Why would firms want to replace the efficient classical market by more complicated forms of transaction?

Within the firm, the decision of whether or not to extend the direct control of the organisation over the market is a matter of corporate strategy, but usually, government competition agencies must decide whether those strategic moves are socially desirable. Profit maximization and consumer welfare are objectives which might not be reached in unison.

Two lines of thought have influenced economic theory in answering this question. The monopoly interpretation argues that the search for monopolistic rents by increasing barriers to entry explains management decisions for vertical integration. (Bain, 1956) (Scherer, 1980) (Porter, 1980). On the other hand, the efficiency approach holds that economizing purposes are behind non-market agreements since information asymmetries and high degrees of uncertainty have a negative impact on the cost of transactions (Alchian & Demsetz, 1967) (Simon, 1955,1972) (Jensen & Meckling, 1976) (Anderson, 1982) (Williamson, 1985).

The views given in both approaches have been the theoretical source of debate on competition policy due to the different implications they have on the social cost² of non-market structures (consumer welfare). Nevertheless, from the corporate strategy point of view the objective is to increase net corporate profits; whether it is for efficiency or monopoly reasons, it is for competition law to decide.

¹ Where products and services are sold without restriction at a uniform price.

² For an extensive review of the legal analysis and social impact of vertical control see Blair and Kaserman (1983).

Nevertheless, the policy implications vary depending on which point of view is assumed to evaluate corporate strategy. The monopoly interpretation explains vertical integration into distribution channels as a strategic move in order to raise barriers to entry, deter new competition and enjoy monopolistic profits. The efficiency approach, however, may interpret vertical integration as an unavoidable move for survival due to high degrees of uncertainty or inefficiency in output markets³.

To interpret the logic behind management decisions regarding organisational alternatives and to understand the global evolution from competitive markets towards domesticated markets⁴ (Ardnt,1979), contributions from both theoretical branches are illuminating.⁵

The literature review also shows that the unit of analysis has been changing away from the traditional industrial organisation view, which focuses on the structure of the *industry* and its impact on the firm's conduct and performance (Scherer,1978). New theoretical developments recognize that *firms* are complex organisations which operate under *uncertainty, imperfect information and conflicting objectives* (Arrow,1975), (Simon,1955,1972), (Stiglitz,1981), (Jensen and Meckling,1976). Since the 1960's much emphasis has been given to the process by which firms deal with these elements. More specifically:

"What determines the nature and extent of their activities, how they organize their internal decision making processes and how they deal with problems of control loss in absence of perfect information". (Clarke and McGuinness, 1987, p.2).

-
- 3 The case of Savoy, a chocolate manufacturer in Venezuela which owns over 1000 trucks is a good example. They had to integrate the transporting function due to uncertainties such as infrastructural deficiencies and absence of specialized markets.

 - 4 Characterized by long term cooperation agreements where transactions are planned instead of being conducted on an ad hoc basis.

 - 5 Do managers focus only on furthering product differentiation and increasing barriers to entry with the objective of achieving monopolistic rents, or do they focus on hindering inefficiencies and uncertainty through non-market organizations and long term agreements? In the latter case monopolistic rents could appear as a by-product of more fundamental objectives.

1.1. Summary and Conclusions

The literature review presented in this chapter is an effort to summarize economic and managerial theories of the industry and firm. The objective is to set an enriched framework to analyse management behaviour and corporate strategy decision regarding the designing and control of distribution channels. The approaches could be summarized as follows:

a) *The neoclassical view* which focuses on the monopoly model and how monopolistic structures can increase efficiency. Vertical integration is thus explained as a better structural option for maximizing profits through input cost reduction (Arrow,1975). The theory of bilateral monopoly represents an important theoretical breakthrough in this approach (Bowley, 1928), (Morgan, 1949).

b) *The functional theory* for vertical integration developed by Joseph Stigler (1951) concentrates on both, the size of the market and on the firms functions for explaining vertical integration. In small markets, firms would not have other alternatives but to integrate, whereas larger markets would offer incentives to functional spin-offs (Mallen,1973) due to the development of independent specialists searching for economies of scale.

c) *The transaction cost framework* (Coase,1937) (Williamson,1971) has been developed with the specific objective of understanding organisational structures and their boundaries with markets. The centre of analysis is not the cost of inputs, but transaction costs. In other words, firms would optimize by reducing the cost associated with the transaction itself and not with the product and services which are the object of the transaction. Firms would vertically integrate when transaction costs can be reduced by substituting markets with hierarchical organisations; and when these gains are not outweighed by losses in economies of scale and/or scope.

d) *The agency theory of the firm* is based on the idea that the delegation of responsibility under asymmetric information induces high control costs. The "principal" delegates the responsibility to the "agent" who may not agree with the principal's objectives. The alternative is to design *self-enforcing* contracts where the agent complies with the principal's objectives while seeking self-interest. Vertical control is seen as an alternative for reducing monitoring costs (Alchian and Demsetz,1972).

e) *Strategic view of the firm* is based on the idea that firms can make strategic moves in order to influence other firms conduct to their benefit (Schelling,1960). Explanations of vertical integration from the industry point of view are represented by the barriers to entry and the Structure-Conduct-Performance paradigm (Bain, 1968) (Caves, 1967) (Scherer,1980). Their followers maintain that market structure is responsible for industry performance. Vertical integration is seen as an element of market structure which may deter competition.

f) *Marketing and managerial theories* stress that mainly product variables and consumer buying patterns determine the likelihood of firms to integrate forward into distribution channels. (Alderson,1957) (Aspinwall, 1958).

Different theoretical approaches explaining vertical integration are reviewed in this chapter. Those coming from economic theory have been applied mostly to issues of vertical integration of input and output markets in production processes. Even though some theoretical extrapolations for distribution functions are found, these usually do not take account of the complex nature of distribution tasks. Homogeneity of distribution functions is usually assumed whereas diversity tends to be a common attribute. For example, distribution functions like financing, storage, sales and transportation require totally different skills. Furthermore, the suppliers of such functions are usually immersed in radically different markets. In spite of it, *the distribution function* is usually mentioned in the literature as a monolithic task. In consequence the different market imperfections for channel functions are ignored in the analysis, hampering the understanding of management decisions on channel design (e.g. lack of specialists or imperfections in the financial, transportation and service markets)

On the other hand, the theories are usually industry specific or product specific. In consequence, there are few theoretical instruments to explain the differences in channel strategy and design among companies within one industry, or among close competitors. Neither can they explain the differences in strategy followed by the same company, with the same product, along a specified period of time. This theoretical gap impedes the analysis and understanding of managerial discretion in designing and managing distribution channels.

As a result of the literature review, thirty elements impacting forward vertical integration into distribution were identified (See section 3) from the six theoretical approaches mentioned above. Applications of these approaches to distribution

channel design were found in all but one of these approaches, the exception being agency theory⁶. In Chapter 3, where we develop our theoretical framework, elements from this theory are widely used.

1.2. Vertical Integration and Vertical Control: Theoretical Approaches

Six theoretical approaches will be presented in the following sections with the intention of identifying the determinants of vertical integration according to different theoretical bodies. Some of them make explicit reference to distribution channels, (e.g. transaction costs economics, structure-conduct-performance and marketing theories). In others, like in the neo-classical view and the functional theories of the firm, we have made an effort to find examples which apply to channel structure decisions. As far as the agency theories of the firm are concerned, the theoretical applications to channel design are developed in Chapter 3.

1.2.1. Vertical Integration, Efficiency and Input Cost Reduction: The Neo-Classical View

It could be argued that cost reduction, efficiency and optimization goals are part of any theory which intends to explain why firms integrate vertically. Nevertheless, one can distinguish the arguments which centre efficiency on *price conditions for essential inputs*, called by some authors "traditional" (Hay & Morris, 1979) from those which take *costs of transacting* as the key element for optimizing firm-market relationships. In this section we will present a review of the traditional or neo-classical explanations for vertical integration, leaving the transaction cost approach for section 2.3.

The efficiency argument in turn, needs to be analysed from two different standpoints. First, from the view of the firm or what has been called *private*

⁶ Theoretical applications of agency theory to the capital structure of the firm can be found in Brander, and Spencer (1989) and Kiholm, J.(1987).

efficiency, where profit maximization is the ultimate goal⁷. Second, from the society as a whole, since profit maximization of the firm does not automatically imply *social efficiency*. This wider concept of efficiency implies an increase in consumer's welfare through lower prices, better quality and wider product choice. Both interpretations have important impact in the way theories view vertical integration.

Neo-classical views, for example, tend to deny the possibility of successful strategic behaviour by firms and thus believe that monopolistic power⁸ is always temporary, and in the long run private efficiency leads to social efficiency. Since vertical integration could result in reducing or restricting competition, its welfare implications have been widely debated and have been the reason for competition policy. It is generally accepted that firms may integrate to reduce costs but it is also recognized that this may hamper competition and social efficiency. If it does, competition policy steps in⁹.

i) Technological Interdependency or Complementarity

Transport and other cost savings due to *physical proximity* when two technological processes are complementary have been traditionally considered a reason for vertical integration (Bain, 1968). The classical example has been thermal economies. They result in the steel industry when all the production process is developed in the same plant and energy saving derives from the fact that reheating is

⁷ Profit maximization, an important assumption about the objectives of firms has been challenged by the so-called behavioural theories of the firm (Cyert & March, 1963) and Principal and Agents theory (Ross, 1973).

⁸ The term "monopolistic" does not refer to the classic unique supplier of a homogenous product. It is here used for markets with many suppliers and many *differentiated* products (monopolistic competition). The distinctive feature of a monopolist is that its output decisions have a perceptible influence on price. When this is the case, firms are said to enjoy monopolistic power.

⁹ In the U.K., competition policy has been more flexible than countries in like the U.S.. The Monopolies and Mergers Commission analysis, in a case by case fashion has permitted the absolution of companies from anti-monopoly charges of increased profits and high market shares. In these cases, companies have been able to prove that increases in productivity and in consumer's choice were also achieved and therefore, market concentration did not work against the public interest. The Kellogg's case is famous for the company being absolved by the Monopoly and Mergers Commission in the U.K. in Feb. 1973 but being charged in the U.S..

not necessary due to proximity of the successive production stages. Also, taking the argument a little further, in the development of new technologies, new interdependencies may surface encouraging vertical integration.

This theory, widely accepted, raises little controversy. Unfortunately, it is not very useful in understanding forward integration into distribution channels.

ii) Backward Integration to Secure Price

When inputs are monopolized and prices reflect abnormal profits, there is an incentive to integrate backwards as long as the firm can produce the input at a lower cost than the monopoly price. This has been the traditional explanation for vertical integration in industries like copper, steel and aluminum. Also, according to this theory, vertical integration is induced when bottlenecks in supply, or any other uncertainty regarding price, are expected to be exploited through monopolistic behaviour (Arrow, 1975).

The main criticism has come from those who argue that these objectives could also be achieved through other forms of coordinating arrangements less costly than vertical integration.

iii) Bilateral Monopoly.

The bilateral monopoly argument has been widely used to defend vertical integration against anti-trust legislation¹⁰ and is a very powerful theory to understand bilateral dependency in general. The gist of the analysis is that in the case of bilateral monopoly between a monopolist supplier who sells an input to a monopsonist buyer, who in turn uses it in the production of a different good, the price of the input is indeterminate within a fairly wide range. Thus, even if collaboration exists among seller and buyer, bargaining may be difficult and could also give rise to an inefficient solution: less output at a higher price¹¹ (Morgan, 1949). In these circumstances,

10 Recently the same argument was used by the British Brewers Association to defend vertical integration in the industry, against a negative report from the Monopolies and Mergers Commission.

11 For the original description of bilateral monopoly see Bowley (1928).

vertical integration could make everyone better off and therefore improve economic welfare.

Let us take as an example a bilateral monopoly between a brewer (b) and a retailer¹², say a public house (p). The brewer faces a monopsonist buyer (the pub) who uses beer as an input in the production of a different good: a drink¹³. The brewer faces a derived demand curve (D) (Figure 1) which is the marginal revenue product of the pub (MR_p). Being a monopolist, the brewer recognizes that he can influence the price at which he sells by changing the quantity. If he expands output by a given amount, he will have to reduce the price not only on these marginal sales but on all sales (assuming he cannot discriminate). This is captured by his marginal revenue curve (MR_b) which is below the demand curve (D) and steeper. As any monopolist, he maximizes profits by fixing the quantity supplied at a point where the marginal revenue curve (MR_b) crosses his marginal cost curve (MC_b). This occurs at point F, determining an output equal to q_b . He will sell this output at a price determined by the demand curve (P_b).

By contrast, the pub faces a supply curve of beer (S) which is determined, as we have seen, by the marginal cost of the brewer (MC_b). Being a monopsonist, he realizes that he can influence the price at which he can buy by altering the quantities demanded. This effect is captured by the marginal cost curve MC_p . His optimal solution is to purchase a quantity that will equate his marginal cost to his marginal revenue curve (D). This happens at point B, determining quantity q_p . He will then offer price P_b located on the supply curve.

As shown in the figure, the result is a very wide bargaining area ($P_b - P_p$) which may be costly to settle causing potential welfare losses.

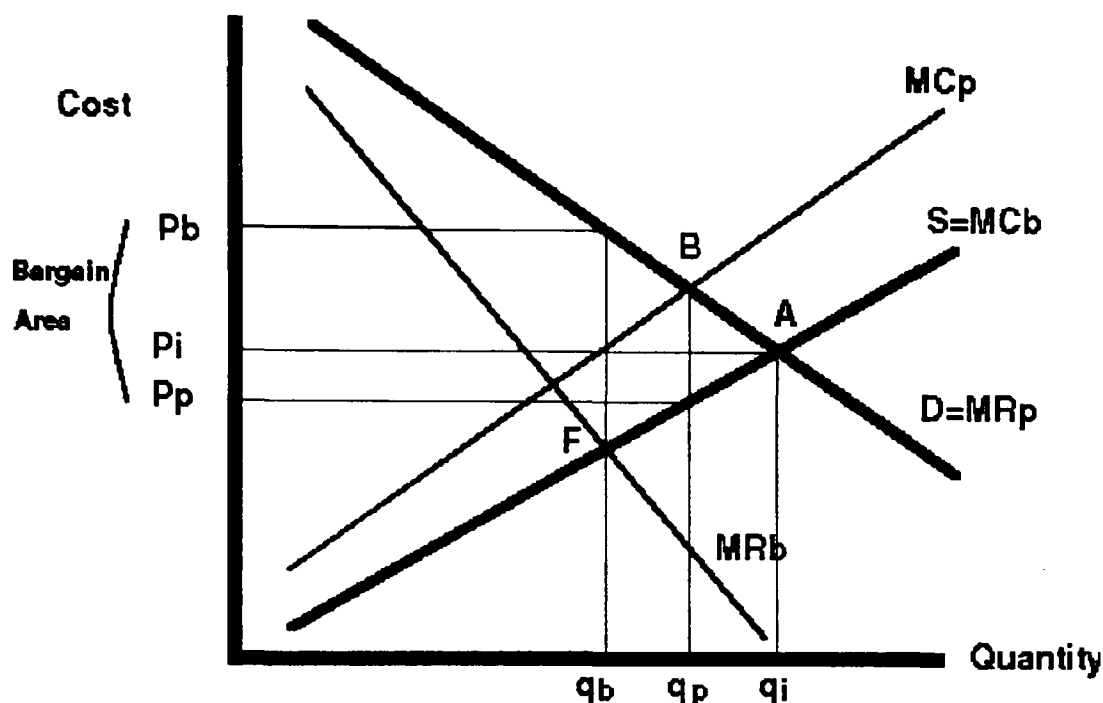
Contrast this solution with the equilibrium which would be obtained if the two firms would integrate. The integrated firm would equate marginal revenue (defined by curve D) to marginal cost (determined by curve S) and would produce a quantity q_i at an implicit price P_i . Notice that q_i is greater than either q_p or q_b . The solution for

12 All retail outlets enjoy spacial monopoly power. In other words, the monopoly of covering a specific geographic area.

13 The beer supplied by the brewer plus the amenities.

the integrated firm is just the competitive equilibrium and will hence imply a welfare improvement over the other two solutions.

FIGURE 1.
BILATERAL MONOPOLY BETWEEN A BREWER AND A PUB



Thus according to this neoclassical analysis, vertical integration enhances efficiency by *dissolving bilateral monopolies bargaining problems*, eliminating double marginalization by vertical chain monopolies, and minimizing input substitution distortions.

The efficiency argument of vertical integration in the case of bilateral monopoly can be compared with interesting results from simple duopoly models with highly competitive products. They show that vertical "separation" can help manufacturers to achieve marketing channel profits close or equal to the cooperative profit level. (Coughlan, 1985) (Bonanno & Vickers, 1988). According to this analysis, the use of middlemen with price autonomy, would represent a less autonomous alternative than vertical integration to respond to price competition. It also induces more friendly behaviour from rival manufactures. Having less degrees of freedom to enter in a price war, the use of independent retailers would represent a more profitable alternative¹⁴.

¹⁴ Coughlan (1985) supports this view with survey data from the international semiconductor industry.

1.2.2. The Functional Approach

Adam Smith, more than two hundred years ago, said that the division of labour *within* firms was limited by the extent of the market. In other words, firms would grow as markets developed, because they would allow new technologies to benefit from increasing returns to scale caused by further division of labor.

Smith's theory, though useful to understand some growth patterns, does not explain why in growing and expanding markets like the United States, vertical integration is no longer a popular strategy and seems to have stabilized after the 1930's. According to a study made by Liveslay and Porter (1969), 11% of their sample companies had integrated into retailing by 1899. This proportion rose to 36% in 1929, but has not changed significantly since.

George Stigler (1951) developed a functional theory to explain the boundaries of firms which seems to offer a better explanation. According to the functional approach, it is the division of labour *among* firms, as opposed to *within* firms, that is limited by the extent of the market.

For Stigler, the total average cost of firms can be divided according to different functions: e.g., production, promotion, information, risk bearing. Firms will not perform or integrate those functions which can enjoy economies of scale when left to the market. Therefore, one explanation for the case of the U.S. mentioned above could be that firms chose to integrate forward into distribution channels while specialist markets for wholesaling and retailing activities had not sufficiently developed.

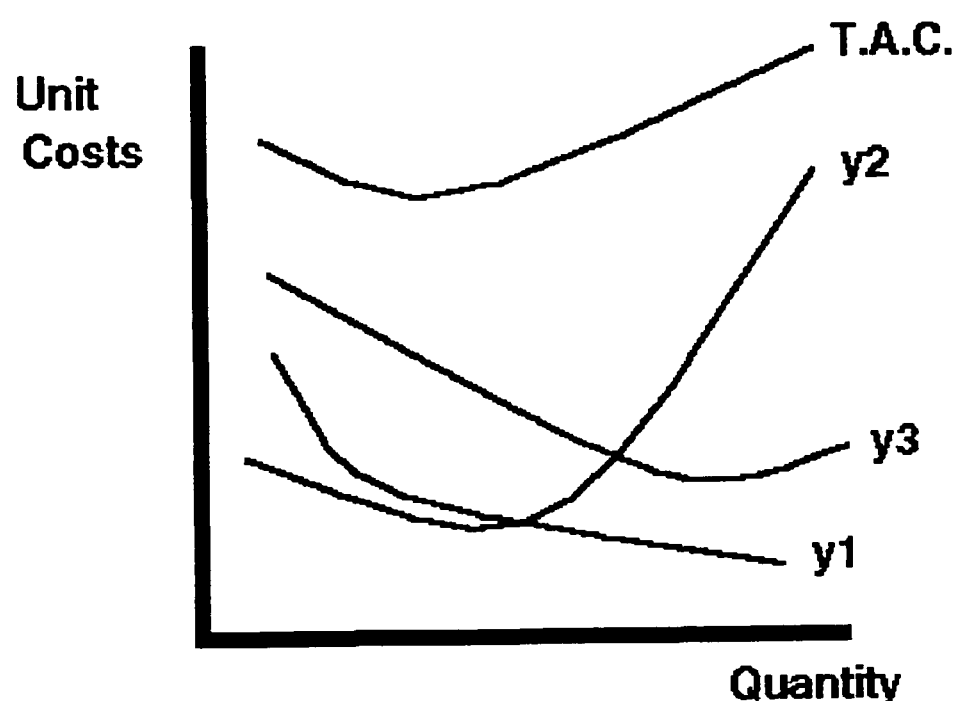
This theory attempts to demonstrate that the degree of integration depends on the size of the industry and that division of labour *among* firms is limited by market size. When industries are small, many production services are required on a small scale and no markets would develop for them, causing firms to produce them internally. As the industry grows, the increasing demand for these production services would sustain a market for specialists. As a consequence, we would expect to find that firms tend to integrate more when markets are smaller.

According to this theory, firms should be viewed as performing a series of functions (e.g. purchasing, storing, transforming and selling) besides the purchase of inputs to sell a product according to a production function. (Stigler, 1951). In other words, Stigler breaks down the total average cost curve of the firm (TAC) into

functions instead of *factors*. The result is an interesting theoretical scheme which helps to understand vertical integration and disintegration of functions.

The firm's total average cost curve would be the sum of the functional average cost curves: some falling, some rising, and some U-shaped (see figure 3). Firms would expand or contract according to the marginal cost of each function. Some functions would enjoy increasing returns y_1 (downward-sloping curves), others would present decreasing returns y_3 (upward-sloping curves), while the TAC

FIGURE 2
TOTAL AVERAGE COST AND COSTS BY FUNCTIONS
ACCORDING TO STIGLER



T.A.C.= Total Average Cost
Yi = Functions

presents its conventional U-shape.

When functions present increasing returns, firms would leave them to the market where specialists can take advantage of economies of scale¹⁵ or economies of

¹⁵ Increasing returns with higher volumes of the same product or service.

scope¹⁶. If the function has decreasing returns, or if the specialists markets are not big enough, firms integrate and assume all the functions.

For example, a manufacturer would tend to spin-off, or leave to the market, those distribution functions which face downward sloping cost curves because somebody else with higher volumes could do the same function cheaper (Mallen, 1973). This opens the door for the development of specialists. For example, market research functions tend to be left to specialists when the demand for it is high enough to support a specialized company. Wholesalers and retailers facing the same cost curve as the producers, can combine volumes of the same product from different manufacturers and, by benefiting from economies of scale, offer the same service cheaper. Also, channel members could combine different products and services, thus benefiting from economies of scope and thus improve the efficiency of the channel system.

The problem beyond the issue of economic efficiency is that manufacturers usually demand exclusivity commitments for their products in order to deter competition. This implies that distributors may often be searching for economies of scope, instead of scale, so as not to create rivalries between their costumers.

Stigler's functional view ties the life cycle of industries to the structural evolution of firms. New industries would have vertically integrated firms while the same firms would tend to separate or spin-off functions when the industry matures. Furthermore, this theory has important implications for the behavior of firms in small markets. What happens if the markets are *structurally* small and specialist markets do not develop?. What are the real choices facing the firm?. *Thus, if the firm decides not to "make" but to "buy" and the market is just not there, what are the structure and performance implications?*

Along these lines, Stigler pointed out the implications of this theory for smaller and less developed markets:

"The vast network of auxiliary industries which we can take for granted here, will not be available in small economies. Their educational institutions will be unable to supply narrowly specialized personnel; they will lack the specialists who can improve raw materials and products." Stigler (1951, p.193).

¹⁶ Increasing returns with higher volumes of different goods or services.

The functional approach, though very helpful to understand organisational choices, does not offer a method for measuring *functions* the same way *production factors* are operationalized in production theory. Any attempt to test the functional theory would face this shortcoming. Stigler also fails to mention intermediate types of inter-firm relationships and vertical control (Vassilakis,1988).

Williamson (1971) has also criticized Stigler's view arguing that economies of scale could also be developed by other manufacturers and not necessarily by independent wholesalers or retailers. The explanation, he thinks, is to be found in transaction costs.

1.2.3 The Transaction Cost Approach

Even though hierarchical structures may differ in form i.e. functional or multi-divisional, *some* degree of vertical integration may be expected in all firms (Davis, 1987). Furthermore, finished goods and services are usually the result of multistage production processes which could be separated into successive independent technological segments. Vertical integration occurs when two or more of these segments operate under the same administrative hierarchy (Koch,1980). Therefore, to understand why these separable technological processes and functions¹⁷ end up linked together under one single organisational structure, a more general question must be raised. *Why do firms exist at all? Why is some degree of coordination often preferred over market transactions?*

According to early theories of the firm which can be traced back to the prominent work of Adam Smith (1776) and Alfred Marshall (1890) the economic system works almost automatically. Through the price mechanism, resource allocation follows an efficient path towards long run equilibrium. Therefore, allocative efficiency can only be reached when equilibrium prices are set in the market place through open bidding among suppliers and consumers. These assumptions, though excellent for explaining profit maximization goals, do not offer any insights about the size or number of firms which are to be found in a particular economy. Furthermore, if its rationale is closely followed, markets would always be better optimizing alternatives than intra-firm transactions. Classical microeconomic

¹⁷ Which the case of distribution channels some of them are purchasing, storage, sorting, transportation and financing.

theory does not offer a full explanation of why firms develop and grow. (Marris & Mueller, 1980)

Explanations for the existence of firms and for the determination of their boundaries are to be found in more recent theories, such as Coase (1937), Bain (1956), Caves (1967), Arrow (1975), Williamson (1975) and Chandler (1977).

The choice facing the firm is not a dichotomic one between doing the function internally or leaving it to the market. There is an array of options between both alternatives which can be called quasi-integration. Brown (1984) calls them firm-like behaviour of markets.

The efficiency argument is the basis of the transaction cost approach. If markets fail to provide efficient solutions there must be *costs* associated with the price mechanism (transaction costs), which tend to be minimized through organisational hierarchies (Coase, 1937, Williamson 1971, 1975).

More than fifty years ago, Ronald Coase raised these issues in his seminal work "The Nature of the Firm" which according to him has been "much cited and little used"¹⁸. It was the start of a whole new line of economic thought and research, which has evolved in a theory of market failure through the transaction cost approach. "If a workman moves from department Y to department X" said Coase in 1937, "he does it not because of a change in relative prices, but because he is ordered to do so". The underlying rationale in this phrase is that two coordinating mechanisms affect the production process: *prices* and the *entrepreneur*. The question is to evaluate when one is preferred over the other.

What transaction cost theory holds is that markets are sub-optimal solutions when the price mechanism exhibits high costs. Therefore, optimization is only reached when those costs are minimized by internalization, i.e. by having the entrepreneur, instead of price system, as the coordinating factor. In consequence, firms would grow until the marginal cost of internalizing the next process equals that of the market.

Although Coase did not go very far in specifying when and why transaction costs would be more likely to be high, he mentioned that the most important costs which would make markets fail were: costs related to finding the *relevant prices*

¹⁸ Cited by Williamson (1983, p. 3).

(searching costs) and costs related to *writing, negotiating* and *enforcing* long term contracts. The *enforcement* element would have a higher impact in countries with weak judicial systems like Venezuela, since large amounts of time and resources would have to be spent in order to resolve conflicts derived from contract violations (Naim, 1980). This could explain why, in such environments, companies tend to put such a high value on loyalty, especially by other channel members.

It must be noticed that *uncertainty* is the common underlying element in both cases. The future is a big and unknown place with costs surrounding future events which cannot be anticipated. Therefore, *information* turns out to be one of the most precious commodities and high information costs, is one the main reasons for market failure.

For example, lower information costs can make organisations more efficient than markets when uncertainty about future prices can be reduced through internalization (Arrow, 1975). Along the same lines, uncertainty makes the writing of *complete contracts*¹⁹ impossible (Williamson, 1971,1975). All contracts are incomplete and therefore unanticipated outcomes may occur.

Williamson criticizes Coase's article as tautological due to its failure to operationalize transaction costs. He develops a theoretical framework with the objective of filling this gap. Whether Williamson has, or has not been successful in operationalizing transaction costs is still a matter of controversy, but it is fair to admit that his theoretical contribution has given much more weight to the transaction cost approach.

Williamson takes Coase's argument further by developing a theory about the circumstances under which transaction costs would tend to be high and therefore hierarchies more likely to develop. Without pretending to summarize Williamson's vast work, the following elements seem to be conditions for high transaction costs.

There are two inherent characteristics of human behavior which have to be incorporated into the analysis of transactions: bounded rationality and opportunism.

1) *Bounded rationality* appears when costs of reaching an optimal decision are high given the fact that human beings are only capable of processing *limited* information, or as Herbert Simon put it:

¹⁹ Contracts which anticipate every possible future outcome.

"The capacity of human minds for formulating and solving complex problems is very small compared with the size of the problems whose solution is required for objectively rational behaviour in the real world." (Simon, 1957).

2) *Opportunism* according to Williamson is:

"lack of candor or honesty in transactions to include self-interest seeking with guile." (Williamson, 1975)

Williamson gives much importance to the consequences of bounded rationality in human behavior and its impact on the costs of writing and enforcing contracts. He also introduces the concept of opportunism and how opportunistic behaviour influences, and is influenced by, economic organizations.

It has been argued that *opportunistic behaviour* may not always be present since it depends on the "attitudes" among channel members and on perceptions towards certain "bureaucratic structures". According to this view, perceptions of coercive power between channel members, leads to a *less* favorable "attitudinal orientation" and more degrees of opportunism, whereas non-contingent power leads to a more "favorable attitudinal" orientation and less opportunism (John, G 1984).

Williamson stresses that together with opportunistic behaviour and bounded rationality, *uncertainty* and *asset specificity*²⁰ give rise to market failure and exchange difficulties (Williamson, 1975). In general, vertical integration is more likely to happen when there are high degrees of uncertainty, highly specific and high frequency of the transaction.

1) *High degrees of market uncertainty*²¹ have been generally as a situation in which it is very costly or impossible to describe the correct decision tree. More specifically, for the case of *forward* vertical integration could be referred to as uncertainty about:

- a) Future prices for input and output products
- b) Quality of the products

²⁰ When transactions require specific assets (human or capital) with little alternative use.

²¹ For a full discussion on uncertainty and the differences between diversity and volatility see Spekman and Stern (1979) and Achrol, Reve and Stern (1983).

c) Availability of price/quality combinations²² (Blair and Kaserman 1983).

Market uncertainty increases transaction costs. In fact, the greater the uncertainty, the greater the protection the parties involved would require from possible outcomes. This in turn increases the costs of negotiating and enforcing the contracts²³ while stimulating vertical integration.

One of the strongest criticisms that transaction cost economics has faced is the difficulty in measuring and testing transaction costs. The treatment of *uncertainty* in the literature is an excellent example to illustrate this shortcoming. Researchers have faced problems operationalizing uncertainty and conflicting results have been reported depending on different definitions of uncertainty.

For example, Dwyer and Welsh (1985) found in 10 industries in the United States that "*variability*" (the variance of the existing demand i.e. availability of resources and intensity of competition) fosters vertical integration to retailers. On the other hand, in the same sample, "*heterogeneity*" (extent to which the environmental entities facing the channel are dissimilar to one another) had no significant impact on integration.

Saul Klein and Victor Roth (1988) report similar conflicting results under different types of uncertainties faced by multinationals when establishing distribution channels in host countries:

"An unbundling of uncertainty-construct is essential for an understanding of the opposing desires for flexibility and efficiency. As was shown, the different components of uncertainty have conflicting implications for optimal structure, and thus must be distinguished. Environmental *volatility*, reflecting transaction cost incentives, has a positive effect on forward integration, while environmental *diversity* reflecting the need for flexibility and adaptation, has a negative effect on forward integration." (Klein & Roth, 1988 p.28).

²² Rationing and its price/quality impacts is an important source of uncertainty. This is an important variable for less developed countries where rationing derived from lack of foreign exchange is a common characteristic of markets.

²³ Contractual incompleteness problems develop when there is *ex-ante* but not necessarily *ex-post* uncertainty. The advantages of hierarchies over markets in this case reside on the fact that the firm's ex-post access to relevant data is much greater. (Williamson, 1971)

Variability, heterogeneity, volatility and diversity, are different ways of defining uncertainty. Measuring and comparing is a difficult task.

2) *Asset specificity* is the other element which according to Williamson encourages vertical integration. It has to do with the level of transaction-specialized human and capital assets. When a transaction is made with items that are unspecialized there is no hazard for the user since alternative sources of supply are easily found. Similarly, no danger is perceived by the supplier when assets are not specific to the transaction, since new clients can be reached if the original deal fails.

However, when specific assets are required for a transaction and the alternative use of human and capital assets are very limited, or nonexistent, the failure of the transaction due to opportunistic behavior bears an important cost for at least one of the parties involved. In this case, and if the *frequency* of such transactions is high, there would be an incentive to reach transactional efficiency by internalizing the function through vertical integration.

For example, other things being equal, hi-tech products which require specialized sales personnel (human asset specificity) would tend to be distributed in integrated channels. The same would apply for highly perishable goods which would require special transportation facilities (capital specificity). Erin Anderson (1985) found support for the human asset specificity element in a study made with data from 13 electronic component manufacturers in U.S.A. Among other findings, more controlled, direct sales-force were more frequent in hard-to-learn product lines, which required more specifically trained personnel. Also Anderson & Coughlan's (1987) findings support the asset specificity argument from data that showed multinationals preferring integrated channels when product distribution required highly trained personnel.

The concept of opportunistic behaviour has been used in different theoretical research works to explain the organisation of economic activity. (Williamson, 1975), (Teece, 1976). To prove how opportunism is exacerbated by asset specificity has also been the objective of important empirical research (Anderson, 1985) (Anderson & Coughlan, 1987) (Klein, 1990). Nevertheless, the concept is sometimes difficult to separate from the rational behaviour of self-interest seeking individuals, which is the basis of economic theory.

Klein, Crawford and Alchian (1978) have defined opportunistic behaviour in a way which can be better separated from rational economic behaviour. According to them, as assets become more specific, more appropriable quasi-rents are created. This

gives rise to the tem, to reinterpret contracts in one's favour. Hence, the costs of contracting will generally increase and may exceed the cost of vertical integration. Hence, *ceteris paribus*, we are more likely to see vertical integration in these circumstances. In other words, according to their view, vertical integration should be examined as a means of *economizing on the costs of avoiding risks of appropriation of quasi rents, in specialized assets*, by opportunistic individuals.

Until now we have talked about variables which transaction cost economics sees as incentives for vertical integration, the elements which impose the limits for organisational expansion will be discussed below.

The limits to the firm's growth, according to Williamson, are imposed by the *governance* or bureaucratic costs which represent all the costs related to organisational size, i.e. distortion in communication and finite span of control. Also, to "make" internally what could be bought in the market, could mean to sacrifice on economies of scope and scale. The limits to growth are mainly placed on governance cost disabilities of internal organisation where asset specificity is not substantial and also when integrating moves bring high losses in economies of scale and scope²⁴ (Williamson, 1985).

Williamson has developed the following model to analyse vertical integration decisions. In more recent works he has put more emphasis on the importance of asset specificity, by considering it the principal factor which explains vertical integration in transaction cost economy terms:

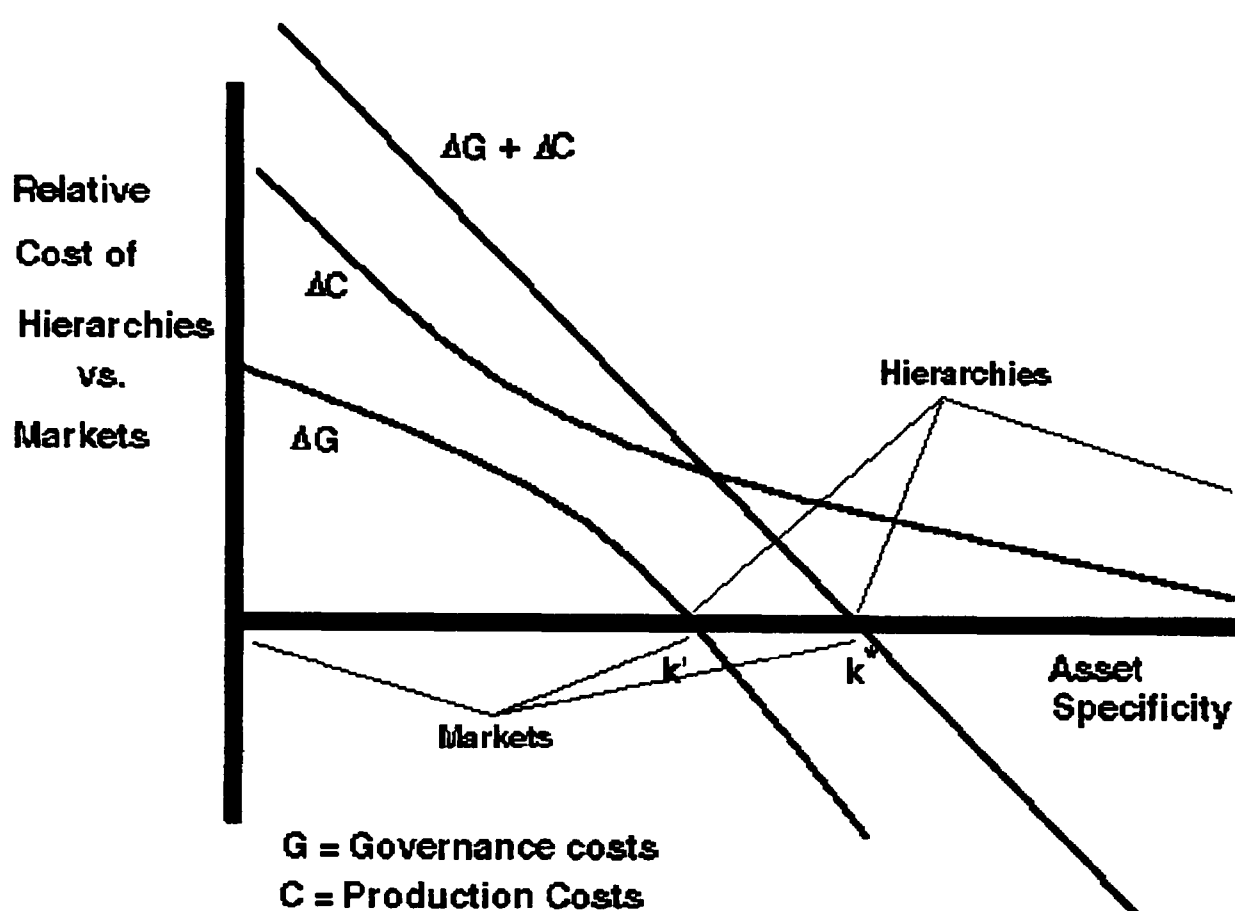
"Without it, market contracting between successive production stages ordinarily has good economizing properties. Not only can production economies be realized by an outside supplier who aggregates orders, but the governance costs of market procurement are negligible since neither party has a transaction-specific interest in the continuity of the trade. As asset specificity increases, however, the balance shifts in favor of internal organization." (Williamson, 1985, p. 90)

As asset specificity increases, vertical integration becomes a more efficient solution, but governance costs and losses in economies of scale and scope have to be weighed.

²⁴ To benefit from the economies generated by aggregating demands is one of the advantages of markets over hierarchical organisations.

Using Williamson's model (Fig.3), we will show how these variables would impact the decision of integrating forward into distribution.

FIGURE 3
COMPARATIVE PRODUCTION AND GOVERNANCE COSTS:
WILLIAMSON'S MODEL FOR ANALYSING THE ORGANISATION OF
ECONOMIC TRANSACTIONS.



SOURCE: Williamson O. (1985) *The Economic Institutions of Capitalism*. Free Press paper back edition. 1987. p.93.

Consider a producer of dairy products that has to decide whether to integrate into distribution. Let us analyse first governance costs and consider that economies of scope and scale are negligible. The determinant factors are production cost control and flexibility (e.g. the number of alternatives available) to respond to environmental changes. According to Williamson, both elements are better accomplished through market transactions. Nevertheless, as asset specificity deepens, bilateral dependency relations between parties build up. This diminishes the advantage of markets over hierarchies since the variety of choices offered by the market narrows down considerably. In our example, the distribution of dairy products requires special assets (e.g. refrigerated transportation units and storage capacity), reducing the alternatives offered by the market to the manufacturer.

Thus, let $B(k)$ be the governance costs of hierarchies, and $M(k)$ the governance costs of markets where k is an index for asset specificity (Figure 3). Assume, that $dM/dk > dB/dk$ evaluated at every (k) since markets have a *comparative* disadvantage in adaptability when compared with hierarchies as asset specificity increases. Letting $\Delta G = B(k) - M(k)$, the curve shown in figure 3 indicates that markets (M) are preferred when asset specificity is low (Ok') and hierarchies (H) when asset specificity is high (i.e., any value over k').

But, on the other hand, markets can aggregate demands and benefit from economies of scale and scope. In our example, independent wholesalers and retailers could benefit from distributing other refrigerated products (economies of scope) or other dairy products (economies of scale). If the impact of distribution costs and economies of scale and scope are included, the following model results.

Let ΔC be the difference in cost between "making" the distribution function internally and "buying" in the market. ΔC decreases as asset specificity increases²⁵ because the cost penalty for using hierarchies is lower when asset specificity is higher, since transactions become less standardized and fewer economies in market aggregation take place. Thus, the ΔC schedule is drawn as always positive and downward sloping. The sum of production and governance costs is shown by $(\Delta G + \Delta C)$ and the value for which the sum $(\Delta G + \Delta C)$ which crosses the x-axis at $k^* > k'$. This indicates that the levels of asset specificity in which the market is preferred is enhanced when considering the production costs of internalizing the function.

Thus, according to Williamson's model:

- a) Markets are more efficient than hierarchies in the presence of low asset specificity (less than k^*), while hierarchies are more efficient when asset specificity is high (greater than k^*).
- c) Economies of scope and scale favour the market over a wider range of asset specificity values (values between k' and k^*).

Mistaken vertical integration decisions are usually made in the area between k' and k^* when the losses in economies of scale and scope are not well assessed by the firm.

²⁵ Also, as the firm increases in size, curve ΔC drops since higher economies of scale can be achieved internally.

When referring to vertical integration into distribution channels, Oliver Williamson introduces the *externality*²⁶ issue as stimulating vertical integration together with asset specificity:

"Externality concerns arise in conjunction with a branded good or service that is subject to quality debasement. Whereas a manufacturer can inspect thereby better to control, the quality of components and materials it purchases from earlier stage and lateral suppliers, it is less easy to exercise continuing quality controls over items sold to distributors". (Williamson, 1985, p.112)

According to this argument, negative externalities arise when the manufacturer cannot extend quality controls over distribution and therefore "internalizing the externality" will require the hierarchical control of distribution functions.

In synthesis, three elements would induce vertical integration into distribution channels according to this model:

- 1) High asset specificity in distribution functions.
- 2) High externalities.
- 3) Low losses in economies of scope.

Williamson's approach has been criticized for emphasizing the markets and hierarchies dilemma in which markets and firms are alternative instruments for completing transactions, without offering a satisfactory explanation for the existence of other types of inter-firm relationships. (Brown,1984) (Casson,1986).

As we have seen, one of the most important shortcomings of this theory is the fact that although it goes much further than Coase in specifying under which set of circumstances transaction costs tend to be high, it fails to determine how transaction costs can be measured and thus how can the theory be tested. The problem arises with key concepts within the theory such as "uncertainty" and "asset specificity". Williamson's theory seems to be more suitable for explanatory purposes than for the development of tools for measuring and predicting phenomena.

Whether the goal of science is explaining or predicting has been a long philosophical debate between realists and instrumentalists²⁷. Nevertheless, a fair

²⁶ Externalities arise when in a transaction there are costs which are not paid (negative externalities) or benefits which are not charged for (positive externalities).

assessment of the theory is that transaction cost economics is a powerful paradigm which, departing from classical theories of the firm, explains the circumstances in which hierarchical organizations are preferred over markets and vice-versa. Nevertheless, we should not expect the theory to determine which mix of transaction cost and governance cost would make a specific firm go for vertical integration.

1.2.4. Agency Theory

The agency theory of the firm, or the principal and agent problem, relate to a number of situations where there is a *delegation of responsibility* from one person (the principal) to another person (the agent) for selecting and implementing an action. The principal is supposed to reward the agent in the presence of *asymmetric information* and knowing that their interests are not in complete harmony. In other words, due to informational asymmetries, the principal can only see the outcome of the action without being able to assess the real effort (hidden action) of the agent in achieving the final objective. Both parties know that they do not share the same information after a certain point in time, and also that they do not share the same objectives.

Jensen and Meckling (1976) have defined the agency relationship as:

"a contract under which one or more persons (the principal(s)) engage another person (the agent) to perform some service on their behalf which involves delegating some decision making authority to the agent. If both parties to the relationship are utility maximizers there is good reason to believe that the agent will not always act in the best interest of the principal." (in Putterman, Ed. (1988, p. 212).

Thus, we can expect principal and agent to differ in their objectives. The principal can limit divergences from his interest by defining appropriate incentives or

27 Realists and instrumentalists defend different views for the goals of science. The former sustain that science should not only develop tools in order to make reliable predictions as the instrumentalists believe, but explain phenomena and discover new truths. (Hausman, 1985).

by incurring monitoring or metering costs²⁸ (Alchian & Demsetz, 1972). This will induce the agent to take advantage of the fact that, for the principal, to measure the agents efforts can be very costly. Since perfect and costless monitoring is impossible, the transaction should be structured in a way that the agent has an incentive to act in the way preferred by the principal (Kreps, 1990). This is what has been called *incentive compatibility*.

As far as vertical control is concerned, incentive compatibility may sometimes be achieved through hierarchical structures. Nevertheless, solving the agency problem may also imply the selection of looser organisational forms or market exchange.

Thus, the principal's problem is to negotiate a contract specifying all the contingencies which would help to reconcile objectives by designing a remuneration scheme for the agent. For example, owner-drivers may have better incentives to operate transportation equipment with care than company employees. Independent sales persons may be more willing to push sales than corporate wage-earners. However, both would shirk if given the responsibility to rotate products on display to improve their appearance.

The problem of "delegation of responsibility in the presence of informational asymmetries" is one of the key issues facing manufacturers when defining a distribution strategy. Nevertheless, little work has been done linking agency theory with channel design.

1.2.5. The Structure-Conduct-Performance View

Vertical integration can also be viewed as a strategic move of an incumbent firm to narrow an entrant's option to the industry, by increasing barriers to entry. Thus a firm's relationships with its competitive environment can also stimulate

²⁸ According to Alchian and Demsetz (1972), one of the key problems facing economic organisations is the payment of rewards according to productivity. "If rewards were random and without regard to productive effort, no incentive to productive effort would be provided by the organisation". Thus, two key demands are placed on an economic organisation: metering input productivity and metering rewards. One way of economizing in monitoring costs is by developing *self-enforcing* contracts by which the agent maximizes the principal's objectives by following a self-interest behaviour.

vertical integration. The structure-conduct-performance paradigm (s-c-p), one of the most popular approaches to industrial economics, offers a strategic explanation for vertical integration.

According to this view, the key to understand and predict the *performance* of an industry in terms of output, growth, profitability and technological advance, is to be found in the structure of the industry. Vertical integration is one of the factors included in the *structure*, together with degree of concentration, (number and size of sellers), barriers to entry, economies of scale and government participation (Scherer,1980), (Koch,1980). The *conduct* of firms covers: pricing and product strategies, innovation, responsiveness to change, advertising and attitudes towards rivals. The conduct (or behaviour) of firms, which is expected to be heavily conditioned by the structure of the industry, is in turn responsible for the performance outcome of the industry.

The core of the theory is deterministic. Market structure determines market performance. For example, high industry concentration induces monopolistic behaviour which in turn brings higher profits. Much of the market structure and conduct is analysed on the basis of barriers to entry. In this manner, vertical integration into distribution channels is a barrier to entry which could make the industry more concentrated and thus more profitable. The same type of analysis is given for product differentiation, advertising and research & development policies. Vertical integration is also considered as affecting the conduct of firms in ways that have feedback effects on structure, e.g. market foreclosure.

Competition policy and especially anti-trust legislation in the U.S. has heavily relied on the structure-conduct-performance framework for anti-monopoly recommendations. In effect, if structure determines performance, i.e. monopolistic profits, the problem could be solved by changing the structure i.e. breaking up a vertically integrated firm.

Neo-classical economists have argued, in response to those arguments, that in the long run all barriers to entry are transitory. The only lasting ones are imposed by a higher authority, such as the government. In their view, government regulation is the primary source of market power. Any strategic move made by one firm can sooner or later be made by another. In the long run, equilibrium is characterized by perfect competition.

The s-c-p paradigm represents a departure from the theories which accept perfect competition as the most appropriate lens through which to view industrial

behaviour, and prefers to center on both, imperfect competition and market structure to explain industry performance (Bain,1956), (Caves,1967), (Scherer,1980). These differences have had important implications in the methodology and the research work which both approaches have stimulated and developed. The s-c-p followers have focused on the inductive method through case studies and empirical work. The neoclassical economists, sometimes called the Chicago School (Martin, 1988), have centered on the deductive method which is characterized by economic analysis in traditional price theory.

Both approaches have greatly enriched the theory of industrial economics. Nevertheless, the debate continues in assessing which approach has been more successful in *predicting* the behaviour of firms. Generally, the s-c-p framework has been characterized as better for explaining than predicting.

Nevertheless, the s-c-p paradigm has been criticized as a short-run, static approach, good to provide a snapshot picture of the forces at work but not to predict the evolution of structure and how future conduct could influence it (Sawyer,1985). It also fails to give an overall theory of industry activity. It is more a framework to analyse what is happening in a certain industry in a specific moment. It is industry centered and not firm centered. This has also raised some criticism because it ignores firm's internal organisation and its impact on performance. (Williamson, 1975, p.8).

Surprisingly enough, the financial sector is not mentioned as part of the structure in which firms operate. The underlying assumption is that financial markets are perfect. The opposite has been argued by Stiglitz & Weiss (1981) who proved that in the presence of informational asymmetries, equilibrium in the loan market is characterized by credit rationing. How this affects industrial structure has not been adequately addressed.

Besides the barrier to entry argument, there is another strategic explanation for vertical integration: the need to avoid government controls by internalizing transactions which would be regulated if left to the market. Examples of such behaviour have been argued for cases of price controls, rationing policies and distortionary sales taxes.

1.2.6. Marketing Theory

In marketing theory, distribution channels are defined as open systems of interdependent organisations involved in the process of making products, services and ideas available for use or consumption. (Stern & El Ansary, 1988). Through their ample array of functions they not only satisfy, but stimulate demand. To accomplish these objectives, a system with an efficient combination of wholesalers, retailers, dealers, sales representatives and promotion offices, has to be organized.

Due to their variety of functions, channel structure and design offer an excellent opportunity to analyze the firm's choice between intra and inter-firm relationships²⁹, and between the different alternatives for channel levels (e.g., depth of the channel),(Frazier,1991).

The essence of channel structure is its complexity. A wide network of intra-firm and inter-firm relationships which may *cooperate or conflict* in the process of making goods and services available for use or consumption. The alternatives open to channel design are wide. It is a fertile area in which to test vertical control theories.

The importance of distribution channel control on corporate strategy is often mentioned in the literature (Alderson,1957) (Porter,1980) (Frazier,1987). Companies like IBM, Caterpillar and NIKKON are successful examples of firms following strategies with high emphasis in distribution design, control and management. Nevertheless, research on the specific issues which impact the development and maintenance of a competitive advantage have been neglected by researchers. Very little is found in the literature about the nature of the control needed by manufacturers and the reasons for controlling specific functions.

i) Distribution Functions and Channel Structure

It is important to understand the nature of distribution functions to evaluate how they impact the design of the organisational structure which makes them possible.

²⁹ Choosing if the firm should have *direct* or *indirect* control over its distribution channels. And if the firms chooses the indirect alternative, what type of interfirm relation would be more efficient (e.g. contractual, leadership).

The list of distribution channel functions seems to be ever increasing. It is often found that the number of functions mentioned in marketing textbooks, gets larger and larger through a combination of remarks and footnotes.

Nevertheless, the following seem to represent an approximate summary of them:

- 1) Sales.
- 2) Transportation or delivery.
- 3) Storage.
- 4) Collection.
- 5) Sorting activities to provide variety.
- 6) Promotion and point of purchase advertising.
- 7) Provision of credit or financing.
- 8) Maintenance of product quality.
- 9) Information: to the user and from the user.
- 10) Risk bearing.
- 11) Post sale service.

Even though the number of channel functions is long and complex, there is a tendency in the literature (specially in the economic literature) to consider distribution as a homogenous task. This approach dangerously ignores the variety of skills needed to perform each channel function (e.g. sales, storage, customer service, transportation and financing). The individual evaluation of functions and tasks helps to establish a more efficient division of responsibilities among channel members which in turn impacts corporate competitive advantage. These issues are not sufficiently discussed in the literature and little empirical and theoretical research has been done in this area.

These functions need to be performed within the distribution channel and the task for the manufacturer lies in finding the most efficient way of organising transactions. This has been called in the literature *the shifting principle*: while it is indeed possible to eliminate or change the parties involved, the functions can not be eliminated. When institutions or specific agents are eliminated, the functions are shifted either backwards or forwards in the channel.

Going back to the functional approach to vertical integration (Stigler, 1951) some insights emerge to explain channel structure and design.

The gist of the functional theory is that firms would tend to integrate forward in the absence of specialized markets for channel functions. On the other hand, according to the shifting principle, those channel functions *have* to be carried out by someone, and they are shifted along alternative parties. Thus, when market

alternatives are scarce, there will be a tendency, by those channel members who have more at stake, to vertically integrate the function. For example, if a high technology manufacturer is designing the channel for a new product, and qualified personnel are not available in the market to provide the appropriate service, internal personnel training would take place and tight controls over the service functions would be necessary. The same would apply for all channel functions listed above, raising many interesting questions regarding firm-market relationships.

A particularly interesting question relates to the provision of credit within the distribution channel. In the literature, this channel function is usually regarded as credit to the consumer. Intra-channel financing, or financing given among channel members, is usually ignored. We believe that this is an important theoretical gap which hampers the understanding of specific channel relations and structures.

In Chapter 3, a theoretical framework will be presented with the objective of understanding some aspects of the way the financing function is organised along the distribution channel. One issue which will be discussed is how the structural disequilibria in the loan market and credit rationing (Jaffee and Russel, 1976) (Stiglitz and Weiss, 1981) impact channel structure and why does a channel member take over commercial lending functions?

ii) Variables that Affect Channel Structure

According to the marketing theory, different variables impact channel structure inducing managers to use longer or shorter channels. Though variables which have to do with the size of the firm and market size are mentioned in the literature, marketing approaches generally place the emphasis on product characteristics and consumer buying patterns.

There are four groups of variables that are usually mentioned in the literature:

- 1) Market Variables and Consumer's Buying Patterns.
- 2) Product Variables.
- 3) Firm Variables.
- 4) Environmental Variables. (Rosenbloom, 1987)

We will assume that, *ceteris paribus*, structurally shorter channels are easier to control than longer ones³⁰, and therefore more susceptible to be vertically integrated.

i) Market Variables and Consumer's Buying Patterns.

a) Market size is the number of customers and potential clients. It is usually positively related to the length of the channel. The larger the market, the longer the channel, since more channel members can benefit from economies of scale on specialized markets.

b) Market Density is the number of buying units in a given area. This relates to the geographic dispersion of costumers. A rule of thumb sustains that it is negatively related to the length of the market: the wider the coverage area and the less the market density, the longer the channel. In this situation market specialists can benefit from economies of scope.

c) Size and frequency of purchase. When buying patterns are in small quantities and frequent, channels tend to be longer, since consumers would not travel long distances to buy. Smaller retailers reaching the consumer would be necessary. (Aspinwall,1958)

ii) Product Variables. Aspinwall Approach.

Characteristics of goods and services are elements of the marketing mix which have direct impact on channel decisions. Distribution channels exist because of the separation of product or service providers from consumers. Therefore, the nature of the product or service should influence the nature of the distribution channel (Frazier,1991).

Aspinwall makes an important contribution linking the characteristics of products to the direct-indirect control decision. According to his approach there are five characteristics which impact the way products are distributed:

³⁰ Less governance costs and lower losses in economies of scope and/or scale.

a) *Replacement rate*³¹, which is the rate at which a good is *purchased and consumed* by users in order to provide the satisfaction a consumer expects from the product.

b) *Gross margin*, being the difference between total unit cost and the final realized sales price.

c) *Level of adjustment*, which are the services applied to goods in order to meet the exact needs of the consumer. These services may be performed as the goods are being produced or at some other intermediate point in the distribution channel.

d) *Time of consumption* is the measured time of consumption during which the good gives up the utility desired.

e) *Searching time* can be defined as the measure of average time needed by the consumer to find and purchase the desired product or service.

Aspinwall (1958) then classifies goods by colours according to the way they match the above five characteristics.

CHARACTERISTICS	COLOUR CLASSIFICATION		
	RED GOODS	ORANGE GOODS	YELLOW GOODS
REPLACEMENT RATE	HIGH	MEDIUM	LOW
GROSS MARGIN	LOW	MEDIUM	HIGH
ADJUSTMENT	LOW	MEDIUM	HIGH
TIME OF CONSUMPTION	LOW	MEDIUM	HIGH
SEARCHING TIME	LOW	MEDIUM	HIGH
LENGTH OF THE CHANNEL	LONG	MEDIUM	SHORT

Source: Aspinwall, 1958, p. 86.

Following this approach some consumer goods (e.g. food, drinks and toiletries) with high replacement rates, low growth margins, low levels of adjustment, low time of consumption and low searching time, will have long channels. By contrast, the transaction between a costumer and his tailor would be an example of a

³¹ The way the five characteristics follow almost identically Aspinwall's definitions given in Mallen 1967, pp.82-93.

red good. Many products lie in the middle range which have been designated as orange goods. According to Aspinwall:

"They have been produced to standard specifications but with the knowledge that they will have to be adapted in greater or lesser degree in each individual installation. The replacement rate is high enough to offer moderate opportunity for standardization and specialization. At least one intermediary is likely to enter in the picture". (Aspinwall, 1958, p. 89).

Durable goods in general belong to this category. They may be produced by standard procedures, but in different models and colours to meet specific segments of the market.

Aspinwall does not explain the reasons for choosing these five characteristics; he fails to explain the reasons and rationale for his approach. Though useful as a check list, it lacks theoretical weight and explanatory value.

Other product characteristics are also mentioned in the literature as impacting channel structure. The following is a representative list of them.

a) Bulk & weight. Due to transportation costs, the bigger and heavier the product, the shorter the channel.

b) Perishability. Goods can deteriorate over time and fashion can change. Both characteristics determine the perishability of the product. When products are highly perishable, e.g. milk, faster and shorter channels would be more efficient. Highly specific assets like refrigerated trucks would be required, and according to Williamson this would make the channel more likely to be integrated.

c) Price Marketing theory holds that the lower the unit value of a product, the lower the product's profit margin, which in turn would require larger channels where independent distributors can benefit from economies of scope. (Rosenbloom, 1987).

However, considering the demand side, the price-income ratio (price of the good and income of the purchaser) is a good rule of thumb measure to assess the amount of time and information that would be required for a buying decision. The higher the ratio, the higher the searching cost the consumer is willing to pay before purchase. Therefore specialized information and service are more valuable than for low price-income ratio products. Thus, products with high price-income ratios tend to have shorter and more controlled channels than less expensive goods (Aspinwall, 1958). For example, in general, durable goods like cars, appliances, computers would have shorter and more controlled channels than consumer goods like cereals. Also

highly specific human capital (Williamson, 1987) will be required in the former in order to provide the information and service needed (Lilien, 1979).

d) Standardization. Custom-made and highly differentiated products and services would tend to have shorter channels than standard, undifferentiated ones. Higher margins would be a characteristic of the former while stronger competition would be the case of the latter. A manufacturer of highly competitive (homogeneous) goods would be better off by leaving the distribution function to the market (Coughlan, 1985).

e) Degree of technical development. The more technically sophisticated the product, the shorter the channel. Highly trained personnel will be required and thus higher transactions costs may be saved. (Williamson, 1987). For example, the sales-force of an electronic component manufacturer would be more likely to be vertically integrated than the sales force of a brewing manufacturer. (Anderson, 1985).

f) Product Life Cycle. During early life cycle stages some products are launched by aggressive promotional campaigns. This would generate incentives for more direct channel structures. (Lilien, 1979).

iii) Firm Variables.

a) Size. Smaller firms would benefit from the use of intermediaries, who in turn would be able to benefit from economies of scale and scope. Bigger firms with increasing returns to scale in production would tend to integrate into mass distribution channels. (Chandler, 1980). Direct channels tend to be used when firms are larger in size. (Lilien, 1979). Growing firms will also have shorter channels, since it is easier to push products and to control promotional policies.

b) Financial strength. The better the firm's access to the financial market and the bigger its own financial resources the wider the choices between alternative channels. Financial strength can be the key variable to define channel design and inter-firm relationships.

This is especially true when financial markets are highly imperfect. Bigger firms would tend to substitute banks and capital markets in financing channel members. The result could be either vertical integration or high channel control through coercive power. Although no specific literature linking *financial market imperfections and marketing channels* seems to be available, we will show the importance of this effect in the cases.

iv) Environmental variables

Under this topic an array of factors are mentioned in the literature. They include: technological, economic, competitive, socio-cultural, legal variables and those related to the country's infrastructure. For example, Chandler (1977) argues that large companies developed the U.S. in the second half of the XIX century because of the development of railroads, telegraph and other communication systems and technological changes that allowed mass production.

1.3 Distribution Channels. When is Forward integration more likely? A Summary

1.3.1. According to the Neo-Classical Theory

1) When there are variable coefficients of production which allow the monopolist of one input to benefit from forward vertical integration by reaching the input mix which extracts maximum profits.

2) When in the case of bilateral monopoly, bargaining is difficult. Also in the case of duopoly when products are not highly differentiated.

3) When there are low degrees of competition in the final consumer market, which permits the forward extension of monopoly profits.

1.3.2. According to the Functional Theory

4) When industries are new.

5) When firms are faced with upward sloping curves for some or all distribution functions.

6) When, even though economies of scale in distribution are available, there is a lack of specialized markets due to structural and socioeconomic reasons³².

³² Some evidence of this kind of problems can be found in the literature regarding multinationals setting distribution channels in host countries. It is also the case for some product specific services. (Blair and Kaserman, 1983, p. 36)

1.3.3. According to the Transaction Cost Approach

- 7) When there are high degrees of *some* types of uncertainty/volatility.
- 8) When costs of writing, negotiating and enforcing contracts are high.
- 9) When law enforcement and judicial systems are weak, which increases the net present cost of contracts.
- 10) When high asset specificity is required.
- 11) When externalities are high.
- 12) When markets have few participants
- 13) When transactions are recurrent and frequent.
- 14) When the losses in economies of scale and scope do not outweigh the benefits of integration.

1.3.4. According to the Structure-Conduct-Performance Paradigm

- 15) To increase barriers to entry.
- 16) To avoid market rationing regulations.
- 17) To avoid price and tax regulations.

1.3.5. According to Marketing Theory

- 18) When markets are small.
- 19) When markets are dense.
- 20) When firms are big.
- 21) When purchases are more frequent.
- 22) When products are custom made.
- 23) When products are highly perishable.

24) When products are new.

25) When the importance of sophisticated service is high.

According to Aspinwall the following five conditions have to be achieved together:

26) When replacement rate is low.

27) When gross margin is high.

28) When the level of adjustment is high.

29) When the time of consumption is high.

30) When searching time is high.

We will come back to these theoretical approaches in Chapter 3. In the next Chapter we will present a discussion of the choice of method and the reasons for electing the case study design.

CHAPTER 2 THE METHODOLOGY

Introduction

This chapter will evaluate the alternative research methods used in organisational research and identify the reasons for selecting the *case study design*¹. First, a quick definition and description of the different approaches will be presented together with the explanation and evaluation of techniques of data collection.

Arguments in favour of, and against, qualitative or quantitative research, though fashionable², will not be presented (Downey, K. & Ireland D., 1979). Such discussions tend to be sterile if the points of view are stressed out of the context of a specific research problem. Thus, the objective of this chapter is to explain how, after defining a research problem, both survey and case study design were evaluated as possible alternative research methods; and how and why it was decided in favour of the latter.

2.1. Types of Research Methods³

Each research strategy represents a different way of collecting and analysing empirical evidence. The research designs mentioned here are those often used for social sciences and in particular for organisational studies. These research methods should be looked at as real alternatives for all the phases of the investigation: the exploratory, descriptive and explanatory. This must be specified because there is a tendency to consider that different types of methodologies should be used for

¹ Research design is sometimes differentiated from "research method". The former is the general orientation and strategy of the investigation, whereas the methods are considered the techniques of data collection. (Bryman, 1989).

² For an extensive discussion on qualitative and quantitative research see the special issue of *Administrative Science Quarterly* Vol 24 No. 4, 1979.

³ The term "methods" is used in this research even though it was found that in some research works the term is confused with "methodology". *Methodology* is "widely misused as a more pretentious equivalent for *methods*. What the term properly denotes is the system of principles and underlying theory which informs the choice of particular research techniques." (Hyman, 1989)

TABLE 1
RELEVANT ELEMENTS FOR DIFFERENT RESEARCH STRATEGIES

METHOD	FORM OF RESEARCH QUESTION	REQUIRES CONTROL OVER BEHAVIOURAL EVENTS?	FOCUSES ON CONTEMPORARY EVENTS?
Experiment	how,why	yes	yes
Survey	who,what,where how many,how much	no	yes
History	how, why	no	no
Case Study	how, why	no	yes

SOURCE: copied from Yin, R. "Case Study Research", Revised Edition. SAGE Publications, Inc. 1989 p.17

different stages of research. In other words, it is argued that case studies are good for the exploratory phase, surveys and histories are useful for the descriptive phase, and experiments are the only way of finding new causal links.

According to Robert Yin(1989) this hierarchical view is incorrect⁴ in that the following conditions really distinguish one approach from the other:

- a) The type of research question posed,
- b) The extent of control an investigator has over actual behavioural events, and
- c) The degree of focus on contemporary as opposed to historical events.

Based on these three characteristics a distinction between experiments, surveys, history and case studies is made (See Table 1).

2.1.1. Experimental Research

Experiment-based research is mainly used when the objective of the research is to determine the specific impact of a small number of independent variables on the dependent variable. Its most important characteristic is that there is a *controlled* environment in order to evaluate the impact of the variables. As far as organisational

⁴ At the same time he stresses that these strategies are not mutually exclusive.

research is concerned this means that real life conditions have to be reproduced⁵ but concentrating on the variables that are to be tested. The other important characteristics are that it responds to "how" and "why" questions and focuses on contemporary events.

2.1.2. Survey Research

The survey is a type of research strategy which usually entails the collection of data through self administered questionnaires or structured interviews. Such data collection is made on a number of units and usually at a single point in time. The objective is to systematically collect a body of quantifiable data and to examine patterns of relationship for a wide range of variables.

The appropriate research goal is *to measure the predictive value of specific theories* by defining well structured and measurable hypothesis. The research questions for which a survey can be usefully designed are "who", "what", "where", "how many" and "how much". The survey designer usually tries to limit the number of variables to be analysed and the number of questions to be asked. The questionnaires are usually self-administered, thus the questions have to be limited in number, clear and easy to answer. Also, special techniques are often used in order to eliminate biased answers.

2.1.3. Case Study

"...is an empirical enquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used." (Yin, 1989 page. 23).

The case study method focuses on understanding the dynamics within a specific setting. It is a useful strategy when the objective of the research is to understand *particular causal links* in situations in which existing theories have "suspicious" applications. Also, they are particularly helpful when one of the

⁵ This has been a source of criticisms from those who stress that "real life conditions" can not be reproduced.

objectives of the research is to evaluate the impact of time and the evolution of variables within specific periods.

This strategy is better for research questions which are more explanatory such as "why" and "how". These questions deal with operational links which usually have to be traced over time. They are different from survey questions which are more oriented to measure frequencies or incidences.

The main difference with the historical approach is that case studies focus on contemporary events (Table 1) and, therefore, the methods for data collection differ.

2.1.4. Action Research

The main characteristic of action research is that the researcher is involved, in conjunction with the members of an organisation in dealing with a problem which is recognized as such (Bryman, 1989). It is usually used in applied social science and it is oriented to "solve a problem" in the organisation. Members of the research team and people from the organisation work together in developing a diagnosis and a solution for the problem.

The main criticism is that it is too close to consultancy and the researcher loses the detachment, by getting too involved in the organisational environment. This has created concern about the ethical implications. Nevertheless, action research has been recognized as explicitly concerned with developing findings which can be applied to organisations. They are "practical" and organisational members like them.

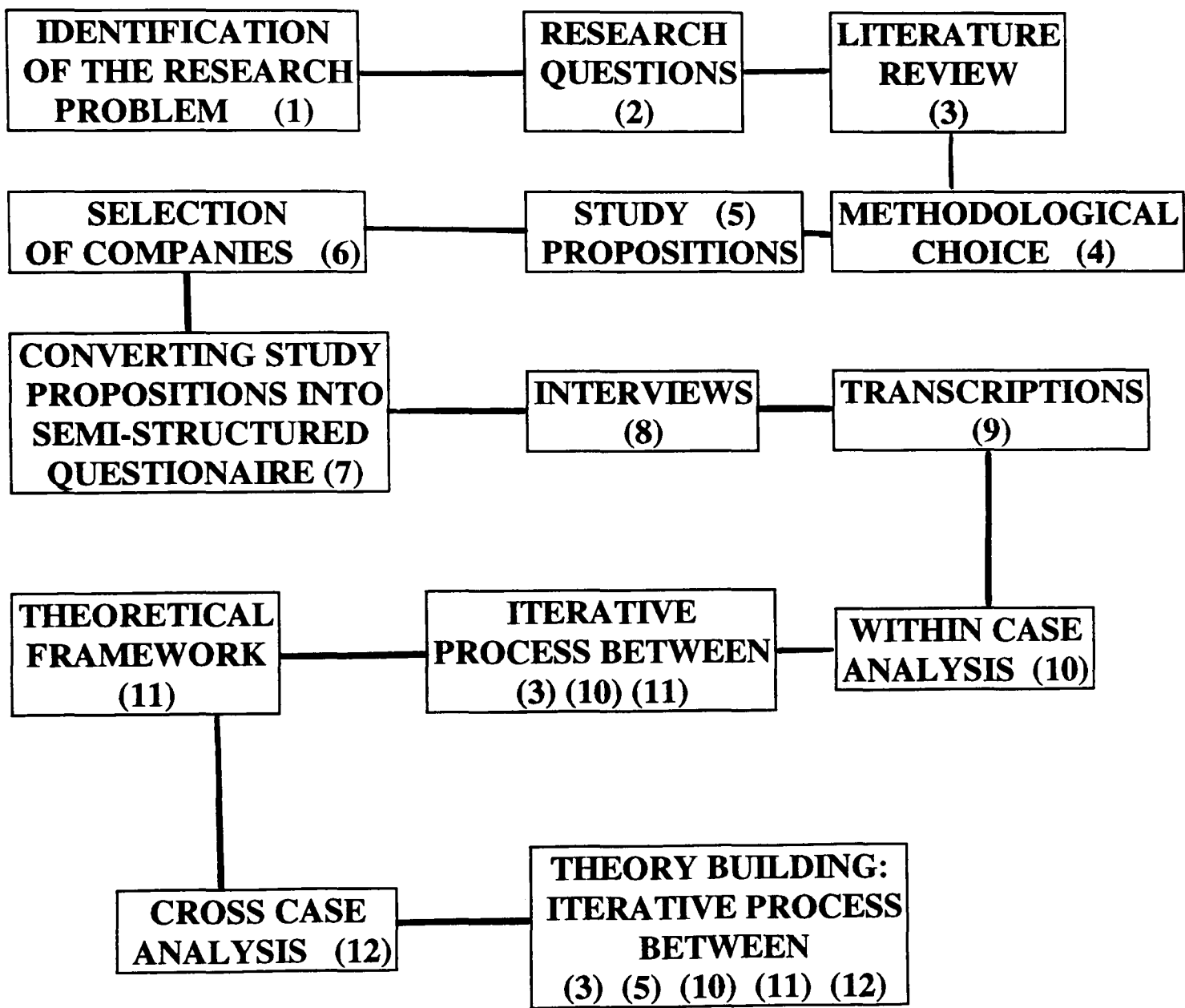
2.2. The Research Design: Building Theory

The most important contribution of this work has been to develop a theoretical framework, presented in Chapter 3, which attempts to provide original insights in order to analyse the determinants of vertical control into distribution channels. The process by which new theory emerged from the process is closely related to the research method which was used.

In this section an explanation of the steps followed to build theory will be given. In doing so, a chronological description of the different phases of the research will also be presented with the objective of identifying when and why different methodological decisions were made (See Fig.1).

The components for case research design and the steps for theory building, explained below, are the result of personal experience. Theoretical elements from the work of Yin (1989) and Eisenhardt (1988) have been used to explain certain phases and iterative processes.

FIGURE 1
STEPS FOLLOWED TO DEVELOP THE PROPOSED THEORETICAL FRAMEWORK



2.2.1. Identification of the Research Problem and Research Questions.
Steps (1) and (2)

Some authors argue that, when using the case study method, it is very important to *first* identify the research problem in order to have a well defined focus and not to become "overwhelmed" by the volume of data.

"Contrary to popular thinking, one of the key features in theory building research (from case study) is initial definition of the research problem at least in broad terms." (Eisenhardt, op.cit p.4)

This is probably true for situations in which decisions about the methodology have been made *before* identifying the research interest. In this study, the process was different, the method was selected *after* defining specific research questions for a research problem; and the case design was chosen *because* it was seen as the best instrument to collect and analyse the data needed to answer the research questions.

The research problem emerged as a combination of the following issues. Marketing and managerial theories usually present *distribution* decisions as "a la carte" menu where all elements are readily available to manufacturers in the desired combination⁶. The task for managers is then to choose the best alternative according to consumer's buying patterns and specific product characteristics⁷.

Nevertheless, it was found in previous interviews that managers in Venezuela thought that "designing" a distribution channel was a very difficult task. Sometimes such a "menu" with market alternatives did not exist, and manufacturers ended up investing important resources either developing channel functions or internalizing them. Furthermore, in such conversations, the growing tension between the marketing and sales departments was always mentioned. Marketing people were trying to convince the rest of the organisation how "old fashioned" it was to place a high strategic significance on distribution. According to them, the most important elements of the marketing mix⁸ were product development to meet consumer needs, and advertising. Products had to be made so that consumers looked for them and distribution was a *complementary* element in the marketing mix. On the other hand, people from sales argued that only they, and not the marketing staff, knew the *real world*:

⁶ E.g. intensive, extensive, exclusive, selective, direct or indirect distribution.

⁷ As it was explained in Chapter 1, marketing and managerial approaches place high emphasis on product characteristics and consumer's buying patterns as impacting channel structure.

⁸ Product design, price decisions, promotion and distribution of the product or service.

"you know these kids from marketing... they do not know what they are doing, they come here to repeat what the books say and it just does not work that way"

There may well be much truth in both positions but it was not easy to identify where and how to close the gap. One of the problems which surfaced is the normative application and extrapolation of theories and strategies built for other realities and from other experiences. As a consequence, there is a lack of understanding about the way distribution functions are perceived by managers.

Another element of research interest was that companies with high market share and important leadership power usually maintain tight control over distribution and have devoted important resources to achieve this goal. Some of them have integrated vertically. This raises important questions: if a company has a leading product, why would it find it so important to integrate or control channels? Furthermore, according to popular thinking, integration into distribution has been one of the most important causes for oligopolistic and monopolistic structures. Was there a relationship between the search for market power and channel control?

These conflicting elements inspired the objective of this research: a better understanding of how distribution channels were perceived by managers and why and how they exert control over them.

The following questions were defined as *research questions*.

1) How are distribution channels perceived by management? (R_1)

2) Why do managers choose more complicated forms of transactions when designing distribution channels (e.g. vertical integration and contracts), instead of keeping to the classic market exchange? (R_2)

After defining the research questions, a review of the literature concerning the theoretical issues and the empirical research in the area was conducted.

2.2.2. The Literature Review. Step (3)

Looking for theories that would offer alternative explanations of management behaviour, we went beyond marketing and managerial theories and incorporated views from industrial organisation theories and new theories of the firm.

The literature review permitted the identification of different determinants of vertical integration and control from various theoretical approaches. From the six theoretical bodies analysed, thirty elements were distinguished as specifically impacting vertical integration and control into distribution channels (Chapter 1). Also some interpretations of the strategic importance of distribution channels were found. Thus, the first idea regarding method was to conduct *a survey* by which the predictive value of these theories could be tested.

Nevertheless, there were other plausible explanations gathered from personal experience which were not reflected in the theories. One of them was the perceived importance of *intra-channel* financing and its impact on channel strategy and structure. This element, totally absent from the literature, was evaluated, and a proposed theoretical explanation developed and presented in Chapter 3. Furthermore, since theories are generally industry or product specific, they have little power to explain strategic differences among close competitors. In other words, these approaches leave little room for managerial discretion and, in consequence, have limited value for explaining the development of a firm's competitive advantage.

Thus, since some important aspects of the issues we wanted to analyse were not present in the literature, some doubts began to emerge about the usefulness of a survey approach.

2.2.3. Methodological Choice. Step (4)

It was not clear whether the theoretical frameworks found in the literature were adequate for the Venezuelan context. Doubts about the *veracity of their implied cause-effect relationships* and the conviction that important elements were missing, paved the road for the search of a research method different from surveys.

The fear was that by using a survey, there was a chance of arriving at the "right" conclusions (e.g. the validity of certain theories), but because of the "wrong" reasons, since the particular causal links were different for each the companies studied. For example, a manufacturer of a perishable product may have integrated forward, not because of the characteristics of the product as some theories predict, but because there was no alternative due to lack of suppliers for channel functions.

In other words there was a risk of getting trapped in "The Name of the Rose" effect, after the famous book by Umberto Eco (1989). In the novel, a series of crimes are solved by William of Baskerville, a Benedictine monk acting as detective, who

finds out that the succession of murders followed the sequence of the seven trumpets of the Apocalypse. Carefully unveiling the pattern, he successfully discovers the assassin: Jorge, a blind monk responsible for the custody of the monastery's library. Nevertheless, an interesting surprise was in store: though the identification of the murderer was correct, the reasoning and cause-effect logic followed by the detective to arrive to that conclusion were totally wrong:

William: "So then I conceived a false pattern to interpret the moves of the guilty man, and the guilty man fell in with it. And it was this same pattern that put me on your trail"

Jorge: "I cannot follow you, you are proud to show me how, following the dictates of your reason, you arrived at me, and yet, you have shown me, you arrived here by following a false reasoning" (p.470-471)

Since discovering the assassin was not enough, and evidence was needed to accuse him, the correct explanation had to be found. In other words "what" happened (who was the murderer) was easier to discover than "why" and "how".

It was the objective of the present research to understand the logic behind management decisions about distribution channels and find an explanation for their behaviour within their unique circumstances.

Robert Yin's approach to choosing research methods according to the type of research questions, also raised doubts about surveys:

"Similarly, like this second type of "what" question, "who" and "where" questions (or their derivatives-"how many" and "how much") are likely to favor *survey* strategies...these strategies are advantageous when the research goal is to describe the *incidence* or *prevalence* of a phenomenon...In contrasts, "how" and "why" questions are more *explanatory* and likely to lead to the use of case studies, histories, and experiments as the preferred research strategies . This is because such questions deal with operational links needing to be traced over time, rather than mere frequencies or incidence." (Yin, R. op.cit. p. 18)

While deciding on the research method, attempts to develop a questionnaire were made, but always ended up too long and complicated. It was difficult to abbreviate historical elements, management perceptions, and the different determinants which could possibly influence management decision in a specific period of time. A survey could not cover adequately all the specific elements which

were needed to understand each case in its specific context and with its own complexity.

In spite of the fact that he was referring to a totally different subject, the paleontologist, Stephen Jay Gould, expresses his view on narrative and on the power of case description:

"This book, using the terminology of one of my least favorite sports, attempts to tackle one of the broadest issues that science can address -the nature of history itself- not by a direct assault upon the center, but by an end run through the details of a truly wondrous case study. Detail by itself can go no further; at its best, presented with a poetry that I cannot muster, it emerges as admirable "nature writing". But frontal attacks upon generalities inevitably lapse into tedium or tendentiousness. The beauty of nature lies in detail; the message in generality. Optimal appreciation demands both, *and I know no better tactic than the illustration of exciting principles by well chosen particulars.*" (Gould, 1991, p.13.).

This is an excellent interpretation of the intrinsic characteristics of case study and one of its major advantages: to permit the illustration of certain patterns and theories by well chosen particulars.

Thus, the alternatives were two: either to use the survey method and develop a questionnaire to test among different companies the incidence or prevalence of some of the patterns predicted by existing theories, or to find out the specific causal links for management decisions in a few cases studied in greater detail.

Given the reasons expressed above, the case study method was chosen. In particular, we opted for a *multiple-case study* in various industries, with two companies in each industry, to eliminate industry specific characteristics and give room for explaining differences in firm's strategies. The logic for choosing the companies and the cases will be explained in Section 2.5.

One of the most common criticisms of case studies is that small samples cannot be used to make generalizations. However, the point is precisely that cases *are not samples* and thus generalizations are not to populations but to theoretical propositions. Within the case method, the units of analysis *are not chosen at random* as in surveys, but according to the theoretical categories which are to be studied. Generalizations are then made to those theoretical categories and not to populations. This is what has been called *analytical generalization* (Yin, 1989).

This criticism has been used to shed some doubts about the scientific power of theories derived from case studies. The erroneous logic behind this belief is that scientific theories can only be built by methods which insure a high probability of getting the same result by consecutive testings.

The counter argument can be found in Popper's (1990) view of the scientific method:

"Tests cannot be carried on ad infinitum: sooner or later we have to stop (p.47)"

"I propose to adopt rules such as will ensure the testability of scientific statements; which is to say their falsifiability (p.49)."

In other words, according to Popper, empirical generalizations are falsifiable instead of verifiable. This means that scientific laws can be testable in spite of being unprovable. Scientific laws can be tested *by systematic attempts to refute them.* (Magee, 1990)

"According to the traditional, inductivist view, *what scientists are looking for are statements about the world which have the maximum degree of probability, given the evidence. Popper denies this.* Any fool he points out, can produce an indefinite number of predictions with a probability almost equal to one... The probability of such statements is maximal because the informative content is minimal." (Magee, 1990, p.35)

"What we are interested in, then, are statements with a high informative content, this consisting of all the non tautological propositions which can be deduced from them. But the higher the informative content the lower the probability, according to probability calculus; for the more information a statement contains, the greater the number of ways which it may turn out to be false... *What we want are statements of a high informative content, and therefore low probability, which nevertheless come close to the truth.* The fact that they are highly falsifiable makes them also highly testable: informative content which is in inverse proportion to probability, is in direct proportion to testability." (Magee, 1990 op.cit. p.36).

In other words the method by which theories are developed is not the crucial issue; it is the resulting theory which must meet a specific requirement: *it should have enough informative content in order to be falsifiable.*

The purpose of this work is to test theories by attempting to falsify them, and in doing so, new theoretical frameworks, also falsifiable, are developed.

2.2.4. Study Propositions. Step (5)

The study propositions are the equivalent of the hypothesis in the survey research. They represent plausible explanations for the research questions and they direct the attention to elements which should be studied and analysed within the scope of the research.

After choosing the case study method, the study propositions were taken from the literature review and from insights which had been originated during past research experiences. The study propositions have to be selected for each study question, and they are as follows.

i) Study Propositions for Research Question (R_1)

How are distribution channels perceived by management in Venezuela? (R_1)

Study propositions:

-Distribution channels are viewed by management as a particularly important competitive tool. (S_1)

-The length and width of the channel is not the issue but who performs which functions and why. (S_2)

ii) Study Propositions for Research Question (R_2)

Why do managers choose more complicated forms of transactions when designing distribution channels (e.g. vertical integration and contracts), instead of keeping to the classic market exchange? (R_2)

According to the literature manufacturers would tend to vertically integrate into distribution when in the presence of the following elements.

From neoclassic economics in the presence of:
Bilateral monopoly relationship with retailers. (S_1)

From the functional theory (Stigler, 1951) when:
Industries are new. (S_2)

There are diseconomies of scale in distribution. (S_3)

From the transaction costs theory when:

There are high degrees of uncertainty. (volatility). (S_4)

High asset specificity is required for channel functions. (S_5)

Externalities are high. (S_6)

Transaction markets are small and opportunistic behaviour is exacerbated. (S_7)

Transactions are recurrent and frequent. (S_8)

To avoid post-contractual opportunistic behaviour. (S_9)

Losses in economies of scope and scale do not outweigh the benefits of integration. (S_{10})

From strategic approaches with the purpose of:

Increasing barriers to entry. (S_{11})

To avoid market rationing regulations. (S_{12})

To avoid price and tax regulations. (S_{13})

The following study propositions were found from the managerial and marketing literature:

Channels will tend to be more direct according to Aspinwall's approach (based on product characteristics) when:

Replacement rate is low. (S_{14})

Gross margins are high. (S_{15})

Level of adjustment is high. (S_{16})

Time of consumption is high. (S_{17})

From other marketing frameworks when:

Searching time is high. (S_{18})

Markets are small. (S_{19})

Markets are dense. (S_{20})

Firms are large. (S_{21})

Products are complex and custom made. (S_{22})

Products are perishable. (S_{23})

From past research experience:

Imperfections in the loan market. (S_{24})

Absence of suppliers markets for channel functions. (S_{25})

Infrastructural deficiencies. (S_{26})

Study propositions for the research questions were then used as a guide for the semi-structured questionnaire.

2.2.5. The Selection of the Companies

Twenty three companies were interviewed: twenty manufacturers and three independent wholesalers (Table 2). With the information gathered from the companies, six cases are presented. The criterion used was to have the industries as the case unit of analysis and compare the strategy followed by different companies within each industry. Only in Case 1 two *apparently* different industries (fruit juices and dairy products) were analysed within a case. Due to the diversification strategies by companies in both industries, they are all producing and distributing similar product lines. In the cases, fifteen⁹ of the 23 companies were analysed plus two other¹⁰ which were introduced later, to give a better understanding of the competitive forces involved in particular industries. The information given by the other six companies, even though incomplete, was very useful for the development of the theoretical framework and in understanding the cases.

⁹ The companies could not be used to write the cases if the detailed information needed to make comparisons among firms was not available.

¹⁰ INSANOVA in the electrical appliance sector is a non-brand producer (Case 5) and FARVENCA in the pharmaceutical sector is a wholesaler that has integrated into retailing (Case 6).

The guidelines for selecting the industries and companies were a combination of five criteria:

- a) Companies that pioneered distribution functions (e.g. INDULAC and SAVOY). The objective was to evaluate how industry cycles could impact channel structure and how changes in environmental and market variables affected channel structure over time.
- b) Companies whose distribution networks are considered a symbol of efficiency and viewed by competitors as important *barriers to entry* (e.g. POLAR and SAVOY). The purpose was to understand how a "successful" channel was built and how it was viewed strategically by firms.
- c) Companies which have adopted important strategic changes in distribution, integrating vertically forward (e.g. MONTECRISTO, RORI, YUKERY and FRICA). These were considered important cases to evaluate the reasons which triggered those changes and how they were perceived by managers. In particular, we were interested in MONTECRISTO where intra-channel financing problems were one of the main difficulties facing management.

TABLE 2
THE COMPANIES AND INDUSTRIES CHOSEN.

INDUSTRY	COMPANIES	CASE
1)Fruit Juices.....	Frica	1
	Yukery	1
2)Milk and Dairy.....	Indulac	1
	Ilapeco	1
	Inlaca	1
	Montecristo	2
3)Apparel(Men's Wear).....	Rori	2
	Polar	3
4)Beer.....	Nacional	3
	Savoy	4
5)Chocolate & Candies.....	Perugina	4
	Madosa	5
6)Electrical Appliances.....	Frigilux	5
	Insanova*	5
	Farma	6
	Hoecht	6
8)Icecream.....	Efe	--
	Tio Rico	--
9)Ceramic Tiles.....	Carabobo	--
	Balgres	--
10)Independent distributors.	Tamayo & Cia.	--
	H.L.Boulton.	--
	Farvenca*	6
Total Number of companies	23	

- d) Companies which had recently entered industries where well established firms had important control over distribution. (e.g. PERUGINA and FRIGILUX). The objective was to evaluate the entrants strategy and how they viewed distribution networks.
- e) The other criteria was product characteristics and consumer buying patterns. An effort was made to combine the variables defined above, with a variety of products, to evaluate the impact of product attributes on distribution design. (e.g. perishability, post-sale service, level of adjustment, margins and time of consumption).

2.2.6. Converting Study Propositions into a Semi-Structured Questionnaire. Step (7)

The objective of a semi-structure questionnaire is to guide the interviews and make sure that all the issues are properly and equally discussed in each encounter. This improves the quality of intra-case analysis and makes cross-case comparisons easier. The study propositions must be covered in the questionnaire and an effort should be made to avoid asking questions which would bias the responses (e.g. have you made any decisions with the objective of keeping new competitors from entering the market?)

The questionnaire is described in the appendix.

2.2.7. Interviews and Transcriptions. Steps (8) and (9)

Two or three people were interviewed in each company. Usually they were the general manager and the marketing and sales managers. In some companies, former managers were also interviewed when important decisions in distribution had been taken in the past. This was the case for Savoy, Polar, Indulac and General Electric.

The interviews were recorded and usually managers felt very comfortable with the procedure. Only in one company did they refuse to have the interview recorded, and even then, since they gave advance notice, two people (instead of just the researcher) went to that interview. One person could concentrate on the questionnaire and the other could devote all the attention to taking notes. This also helped to make the conversation more fluent. The interviews were transcribed and sent to the companies so they could be approved by the interviewees.

Later in the process, when the analysis of the cases was being developed, some new interviews were organised to get information which was lacking.

2.2.8. Within Case Analysis. Step (10)

"One cannot ordinarily follow how a researcher got from 3600 pages of field notes to the final conclusions, sprinkled with vivid quotes though they may be."¹¹

Analysing data is one of the most difficult tasks in case studies. Since there is no statistical package forcing the researcher to conduct a specific data analysis, the process requires a constant effort in keeping rigorous thinking and strict logic. Information unrelated to the study propositions, though always interesting, should be left aside. A conscious effort should be made to define the study propositions, define the questionnaire accordingly and begin to analyse the data early in the process.

"Analysing data is the heart of building theory from case studies. It is both the most difficult and the least codified part of the process. Since published studies generally describe research sites and data collection methods, but give little space to discussion of analysis, a huge chasm often separates data from conclusions." (Miles and Huberman 1984:16).

One of the key issues to avoid this problem is to begin by analysing data in each case: the description of the site and those issues which would be relevant for the analysis. Then, also, an effort should be made to begin the analysis in each case by defining *categories*. They are usually derived from an iterative process which involves the literature review (3), the study propositions (5) and the interviews (8). In this research, this iterative process made possible the definition of the theoretical framework presented in Chapter 3. In this framework, issues from the existing theories and new elements were combined in a scheme which was used to develop the categories for the analysis within cases.

2.2.9. The Theoretical Framework. Step (11)

The shaping of the theoretical framework presented in Chapter 3, was a long and intense iterative process since the elements of each case had an impact on the

¹¹ Taken from Eisenhardt (1988, p. 11).

framework; but at the same time, every change in the theoretical framework had an impact on the analysis of the cases. The most important lesson derived from building the framework in this manner was that it gave the cases a direction, a structure and a purpose from an early stage. This worked very well for developing subsequent analysis.

2.2.10. Cross Case Analysis. Step (12)

Together with the within-case analysis, there is the cross-case search for patterns.

"The tactics here are driven by the reality that the opportunity for bias is immense. People are notoriously poor processors of information." (Eisenhardt, op. cit. p.12)

The theoretical framework developed to organise the analysis within the cases helped to construct the main conclusions of the study. Nevertheless, cross-case analysis and comparison among groups of cases, together with the search for patterns is needed at this stage. It is also helpful to identify common grounds, surprises¹² and general conclusions.

One of the tactics to enrich the analysis is to look for similarities and then differences within the similarities. At the same time, the inverse process is also important to avoid biases, i.e., to also look for differences and then similarities within the differences. This forces the researcher to search for complexity and feel comfortable with it. It also helps to find more sophisticated explanations and new questions for further research. The best feeling comes when the researcher is *surprised* by what emerges from the cross-case analysis.

The idea is to *force* the researcher to go beyond the initial impressions and try to derive new explanations which are novel and accurate rather than his own initial presumptions.

Theory building is a high iterative process by which the emergent framework is systematically compared with the evidence, the literature review, and the cross case analysis. The strategy is to constantly compare theory and data, and then go back to

¹² Surprises are always pleasant; and in case studies they are also welcome as proofs that the process has not been biased by the researcher.

theory. Together with this iteration there is a constant process of parallel thinking by which explanations tend to converge into the framework but at the same time, the evidence is looked at in new ways in order to avoid the bias of old thinking patterns and allow for the emergence of new ideas (Eisenhardt,1988).

Even though the cases studied come from a developing country, we are certain that the lead to a much more general application and that the theoretical framework proposed will be helpful in understanding management decisions and channel structure in different contexts. However, the proof of the pudding remains in the eating.

2.3. Appendix: The Semi-Structured Questionnaire

The questions included in the questionnaire were the following:

- 1) When did you start operations?
- 2) What is your volume of sales?
- 3) From whom do you buy inputs or services? To whom do you sell products or services? How has this changed over time? Why? (limits of the firm).
- 4) How many products or lines of products did you have at the beginning? How many do you have now? What are they? How old are they? (product and industry life cycles)
- 5) What are the characteristics of your product(s). The following list must be used as a guide:
 - Perishability
 - Degree of adjustment to customer needs/degree of standardization.
 - Price and margins.
 - Rate of replacement. How often consumers buy them.
 - Time of consumption.
 - Searching time.
 - Services required along the channel including sales and post sale services.
- 6) What is your market share? What are the market shares of your competitors? (market structure)
- 7) How is your distribution channel structured today? (A brief history of the channel) How has it changed since it started operations?, Why? How has the competition reacted to those changes?
- 8) Who, where and how many are the wholesalers and retailers which deal with your products. How was it in the past?
- 9) Mention the functions performed along the channel. The following list should be the guide:
 - Sales to retailers.
 - Sales to consumers.
 - Collection.
 - Transportation.
 - Storage.
 - Financing to retailers or wholesalers.

Financing to consumers.
 Merchandising
 Risk Bearing.
 Promotion.
 Information.
 Post Sale Service.

10) Who performs *each* function today. How was it in the past? Why?. (An explanation for the division of responsibilities among agents must be given. The idea is to evaluate which elements are important in the assignation of tasks).

11) (If it is the case) explain the reasons for the company to be performing functions directly. How was it in the past? How does the competition do it? (identification of specific competitive advantages)

12) What kind of contracts have you developed with other channel members? (franchises, concessions, specific written contracts, verbal agreements, other?)

13) Can you identify the leader(s) in the channel? Why do you perceive him (them) as the leader (s)? (It is important to identify the reasons for their perceptions of relative power)

14) Are there any conflicts in the channel. If yes, what are they? Who are involved? (the idea is to identify bargaining problems, opportunistic and/or monopolistic behaviours, principal-agent incentive incompatibility)

15) How are those conflicts solved? (The objective is to understand how contracts evolve, what are their incentive structure and how enforceable they are).

16) Have government policies affected your distribution strategy. How?

17) Which have been the most important decisions the company has faced regarding channel operation or design? (the interviewee should be forced to choose the most important).

CHAPTER 3

THE THEORETICAL FRAMEWORK: Determinants of Vertical Integration and Control into Distribution Channels

Introduction

The review of the literature offered many scattered concepts and ideas which may be useful in shedding light to issues of channel structure, but showed no unified approach. Moreover, most theories emphasize industry and product characteristics and thus leave little room for managerial discretion and strategic behaviour in responding to the forces of competition and the problems of effective cooperation. The purpose of this Chapter is to develop an integrated theoretical framework where the determinants of vertical integration and control into distribution channel functions can be analysed in a manner that yields a deeper comprehension of existing practices. This is important in the field of business studies, where much of the literature has been normative and has not showed much understanding of the current structures used by firms, the constraints to which they are geared to respond and the managerial intent behind them.

We will illustrate our conceptual framework with examples taken from various manufacturing and wholesaling companies in Venezuela. Nevertheless, we believe that the concepts are applicable in general and the dynamics identified are not specific to that managerial environment.

The Chapter is structured in six sections, where each brings out a different factor affecting vertical integration and control into distribution channels (See Figure 1). In Section 3.1 the issue of lack of competitive markets for channel functions will be discussed. It deals with market structure problems and how they affect channel design. Positive and negative impacts on vertical control for five elements are evaluated. In Section 3.2, the strategic issue of barriers to entry is defined and its application in the context of distribution functions is assessed. In Section 3.3, elements from the transaction cost theory are discussed, using a more restricted approach for the popular concept of opportunistic behaviour. In Section 3.4 agency problems and their impact on vertical control or vertical spin-off are presented. Sections 3.5 and 3.6 will deal with some cost elements to be assessed by management and which usually hold back vertical integration decisions.

The theoretical framework presented here has been used to structure the analysis of the six cases presented from Chapter 4 through Chapter 9.

3.1. Lack of Competitive Markets for Channel Functions.

Usually firms benefit from vertical control into distribution channels when there is a lack of competitive markets for distribution functions. In other words, when either the manufacturer faces a total absence of specialized markets, or when it faces monopoly power from suppliers of distribution functions. In this context, the manufacturer may be less efficient from the social perspective but can perform the function cheaper. Nevertheless, in other situations the same imperfections may induce vertical spin-off.

Under this situation we can identify *five* cases with different implications for management decision making:

- a) Absolute absence of specialized markets for channel functions.
- b) Monopolistic power enjoyed by existing suppliers of channel functions.
- c) Retailers' markets and spatial monopolies.
- d) Bilateral monopoly and
- e) Financial market imperfections.

3.1.1. Absolute Absence of Specialized Markets for Channel Functions.

In this section we will examine how management faces the situation of total absence of specialized markets, an extreme case of lack of competitive markets. This may happen in the case of new industries and of products in early stages of their life cycle. In the case of new products in mature industries, there might be some functions like servicing, information, special handling or even aggressive promotion for which there is no developed market (Lilien, 1979).

Seen from the perspective of the industry life cycle, new industries would have more vertically integrated firms which later, as they mature, will tend to spin-off their functions since there would be enough demand to support specialized markets (Stigler, 1951) (Mallen, 1971).

FIGURE 1
DETERMINANTS OF VERTICAL INTEGRATION AND CONTROL
INTO DISTRIBUTION CHANNELS

LACK OF COMPETITIVE MARKETS FOR FUNCTIONS	{ Absolute Absence of Markets (+) Monopolistic Power of Suppliers (+) Retailer's Markets (+) Bilateral Monopoly (+) Financial Market Imperfections (+/-)
DEVELOPMENT OF BARRIERS TO ENTRY	(+)
POST-CONTRACTUAL OPPORTUNISM	{ Specialized Quasi-Rents (+) Contract Re-interpretation (+)
SOLVING AGENCY PROBLEMS	{ Externalities (+) Moral Hazard (+/-)
REDUCING GOVERNANCE COSTS	{ Administrative Costs (-) Scattered Distribution Networks (-)
LOSSES IN ECONOMIES OF SCALE AND SCOPE	(-)

(+) Elements which stimulate vertical integration.

(-) Elements which induce more flexible forms of organisation.

In other words the corporate strategy decision of "making" or "buying" a channel function can be a very easy one if there are no suppliers available. If, for example, there are no transportation or storage facilities which can be bought in the market, or if there is a lack of the appropriate customer service when retailers are not

well developed, management will have to dedicate important resources in order to develop these functions.

The absence of specialized markets applies to each of the different functions expected to be performed along the distribution channel: transportation, storage, financing, information, promotion, merchandising, maintenance of product quality, and other retailing-specific functions such as sale and after-sale customer service. The literature (Aspinwall, 1958) has stressed the dimension of the length and the width of the channel (intensity of distribution) as the key strategic issue. However, this does not address the crucial question of *who along the channel should perform which function and why*¹. In other words, vertical integration and control into distribution channels is not to be viewed only as a decision of using, or not, wholesalers and retailers, (length and width of the channel) but also as deciding which of the functions should be left to the market and why.

In six of the companies studied, the executives interviewed argued that lack of specialized markets forced them to internalize some of the functions and/or dedicate important amounts of time and financial support in order to *promote* a market of suppliers for the functions.

Savoy (Case 4) and Nestlé, (Indulac today, Case 1) both established in the 1940's, did not find enough specialists in transportation to move their products. Hence, they had to develop a hierarchically organised distribution network. Nevertheless, Indulac found, later on, alternative contractual agreements to spin-off the transportation function. Nacional Breweries, one of the oldest Venezuelan companies, which started operations in 1890, had to face the same problem.

Carabobo (ceramics), General Electric (Case 5) and Polar breweries (Case 3) had to face the absence of specialized retailers². Polar, which now controls 85% of the Venezuelan market, found out after starting operations in 1940, that in order to grow they had to aggressively develop the market. The problem they faced was that there were not enough bars in the country and there were not enough refrigerators in retail outlets to sell cold beer. Thus, they developed a strategy which consisted in

¹ Study proposition No.2 for research question No.1: "How are distribution channels perceived by management in Venezuela?". See Chapter 2.

² Sale and post-sale service are specific channel functions for retail outlets.

giving away refrigerators, ice boxes, furniture for bars (small tables and chairs), paint and the sign with the name of the bar for the facade and up to six month (sometimes more) financing on beer sales. They even paid for the liquor licenses which they negotiated by the dozen with government agencies.

General Electric also had the problem of lack of specialized markets in sales and post-sales service. In this case, due to the high degree of information and consumer service required, specially trained personnel was needed (high human asset specificity) and management decided to integrate vertically into retailing. General Electric's (Madosa) retail stores have been very well known for over 30 years in Venezuela, but now management has decided to sell them out since they believe that it is now cheaper to "buy" the function in the market.

Carabobo (ceramics), also had to dedicate important resources to the development of retailers. Even though they never decided to integrate vertically forward, they demanded exclusivity from outlet owners in a sector where you would usually expect them to profit from economies of scope by improving their assortment.

These characteristics take us to the next section in which we will analyse some cases of monopoly power in suppliers of channel functions.

3.1.2. Monopolistic Power Enjoyed by Existing Suppliers of Channel Functions.

The other situation in which it might be beneficial for the firm to integrate forward is when the supplier markets for channel functions are subject to monopolistic behaviour, threatening manufacturer's profits³. Firms could benefit by internalizing channel functions when suppliers are capable of increasing prices and extracting monopoly profits up to a point where it is cheaper (though socially less efficient) to internalize the function.

³ There is a difference between *opportunistic* and *monopolistic* behaviour. Opportunistic behaviour (Williamson, 1975) arises when individuals seek self-interest in a *deceitful* manner. This must be clearly differentiated from the rational economic behaviour of self interest seeking agents while maximizing profits in imperfect competition. Here, we will refer only to the latter, leaving opportunistic behaviour to be analysed below as agency problems.

The decision taken by Yukery (Case 1), a fruit juice manufacturer, illustrates this situation. They used to sell almost 80% of their canned products through an exclusive independent wholesaler⁴. According to management, they had to cancel the agreement since the wholesaler constantly increased prices to a point where it could be done cheaper by internalizing the function. The wholesaler charged 15% of sales while Yukery could do it for 8% of sales. Also Savoy, the leader of the chocolate industry, claims that it costs them less (12% of sales) to get directly to the retailers than by using independent distributors.

The possibility of internalizing functions supplied by monopolistic markets will depend on the degree of contestability⁵ (Baumol, 1982) of those markets. For example, wholesaling-specific functions such as transportation, sales to retailers and collecting, may show higher degrees of contestability than retail specific functions (e.g. sales and post-sale consumers' service).

In fact, Yukery and Frica (Case 1) achieved very quickly the objective of designing and setting up their own network to serve retailers directly (highly contestable) after independent distributors increased their prices. Nevertheless, the spatial monopoly enjoyed by some retailers do not show such a degree of contestability. Furthermore, the spatial monopoly enjoyed by retailers can be so powerful that manufacturers may end up spending considerable resources trying to please them. We will talk about this issue in the next section.

3.1.3. Retailers' Markets and Spatial Monopolies.

Retailers are spatial monopolies which sometimes enjoy important degrees of market power. In these circumstances, manufacturers develop competitive tools which do not reach or benefit the consumer, but which please retailers. We will call this situation *retailers' markets* since for all practical purposes, in this context, the retailer is the *relevant client*, not the consumer.

⁴ In Venezuela there are five large independent distributors for consumer goods that may have difficulties achieving economies of scale since all manufacturers demand that competing products not be distributed simultaneously (exclusive distribution).

⁵ Markets with low entry and exit barriers which are vulnerable to occasional entrances of new competitors.

Some examples of manufacturer's practices when in the presence of *retailers markets* are the following: EFE, an ice cream manufacturer, gives away freezers to retailers in exchange for space. Perugina (Chocolates, Case 4) gives higher margins to penetrate the market dominated by the leader Savoy. Dairy product companies (Case 1) bear all the risk of perishability in order to fill the retailer's refrigerators with their products. Yukery (fruit juices, Case 1) buys milk from another company in order to offer retailers the variety of products they want. In the ceramic industry, Carabobo pays for 50% of retailers advertising. In the apparel industry, (Case 2) financing retailers up to 360 days without interest payments became a normal practice.

It must be added that the retailers' power is enhanced under the following situations:

- a) When they can *influence consumer decisions*. This is particularly true in over-the-counter stores where self service is not permitted and consumers have to ask the sales person for a particular product or brand. The salesperson has in this case the opportunity of influencing consumer choice. Pharmacies, small supermarkets, bakeries, photo shops, electrical appliances stores, and specialty stores tend to have these characteristics.
- b) When products have *low degrees of brand loyalty*, since the consumer is indifferent between the brands available in the store.
- c) In situations where *buying patterns* or habits induce consumers to visit specific stores⁶.
- d) When *specific assets* are required to perform sales and post sales services. The more specific the assets, the higher the retailer's monopoly power (e.g. refrigerated space and highly trained sales personnel).

Manufacturers facing a retailer's market might benefit by vertically integrating when the losses in economies of scale and/or scope are not outweighed by the power gains. Some manufacturers may decide that those losses can be fully compensated by the benefits of integration. In the apparel industry (Case 2), Montecristo decided to integrate vertically and sell directly to consumers only

⁶ For example bakeries are shops with high monopoly power in Venezuela since consumers visit them daily to buy fresh bread, milk and to have breakfast.

through totally owned stores. Though it implied reducing the number of outlets from over 100 to 36, management claims that profits have increased dramatically.

The situation for manufacturers of dairy products and fruit juices has been different (Case 1). They have to face important monopoly power from bakeries (which represent 80% of their sales) but forward vertical integration is not an efficient solution for them, since it would imply high losses in economies of scope and scale.

3.1.4. Bilateral Monopoly.

Bilateral monopolies (Bowley, 1928) (Morgan, 1949) are characterized by situations in which a monopolist sells to a monopsonist. Since each agent has market power over the other, bargaining costs tend to be very high, transactions very costly and vertical integration socially (and sometimes privately) desirable.

This is a powerful theoretical tool to understand relationships among firms which show some type of monopoly power. In distribution channels, depending on the characteristics of each market, different members can engage in bilateral monopoly relationships. The three elements which are usually present are:

- a) Some kind of monopoly power by the manufacturer, either because of high degrees of market concentration or brand loyalty,
- b) Spatial monopoly enjoyed by retailers, and
- c) High asset specificity⁷ required by distribution functions (i.e. specially trained sales personnel and specific transportation or storage conditions.)

In the oil industry for example, independent petrol transportation companies (vehicles are highly specific) can engage in bilateral monopoly situations with refineries since they can only do business with each other. In the U.K., bilateral monopoly has been argued to exist between the breweries and pubs in order to defend the high degree of vertical integration shown by the industry.

In the industries analysed in Venezuela, one of the clearest cases of bilateral monopoly was found in the pharmaceutical sector between the drug distributors and

⁷ When human or physical assets required to perform the function have low alternative uses.

the pharmacies (Case 6). The pharmaceutical sector is a very atomized industry with 75 laboratories where each has no more than a 3% market share. Nevertheless, the drug distributors and chemist shops show a different picture. There are over 50 drug distributors but 50% of the market is controlled by only *two* of them. They are able to offer the chemists the variety of products they need by dealing with the 75 laboratories. The number of chemist shops are highly regulated by the government and only a certain number are allowed by geographic area. This gives them a clear spatial monopoly power. The drug distributor (high market power) and the chemist shop (spatial monopoly) engage in a bilateral monopoly situation which has evolved into vertical integration.

It has been argued that the reason for vertical integration lays in the margin differential set by government price regulations according to which, chemist shops are allowed to have higher margins (30%) than drug distributors (14.5%). However, this would explain forward integration from drug distributors buying chemist shops. Nevertheless, backward vertical integration is the most common case where chemist shops buy drug distributors. This behaviour can be better understood within the bilateral monopoly framework.

3.1.5. Financial Market Imperfections: Financing as the Forgotten Function in Distribution

Imperfections in the loan market can impact channel structure and make vertical integration a more efficient solution. The financing function is usually regarded as a problem of financing consumers in the purchase of durable or semi-durable goods. According to this view, the decision involved only consists in who should give the financing and how much credit should be extended to the consumer (Stern & El Ansary, 1988). What we would like to bring out here is something different: the issue of how financing is given *between* channel members when access to financial resources is restricted.

The objective of this section is to present a theoretical framework which would help to understand some aspects of the way the financing function is organised along the distribution channel. In particular, we want to determine why and when the financing is given by non-financing agents along the distribution channel. Also, what type of relationships are more likely to develop among its members and how it impacts the degree of integration found in channel structure.

The first question that arises is why does the manufacturer or any other member of the channel carry out the financing function? In other words, why do they decide to "make" instead of "buy" through the loan market? It will be argued that it is due to imperfections in the credit market that the financing function ends up being performed inside the channel.

The simplest answer to the question of why "make" instead of "buy", is to suppose that there must be some advantage for somebody along the channel-chain in performing the financial function; compared with the alternatives given in the credit market. In other words, due to some imperfections in the loan market, the distribution system generates the financing it needs through an internal credit market. Now, what are those imperfections? And more specifically, why would the distribution channel be able to offer a more efficient solution? As we will see, the answer is to be found in the nature of the financial transaction and its departure from a neo-classical world of perfect and complete information.

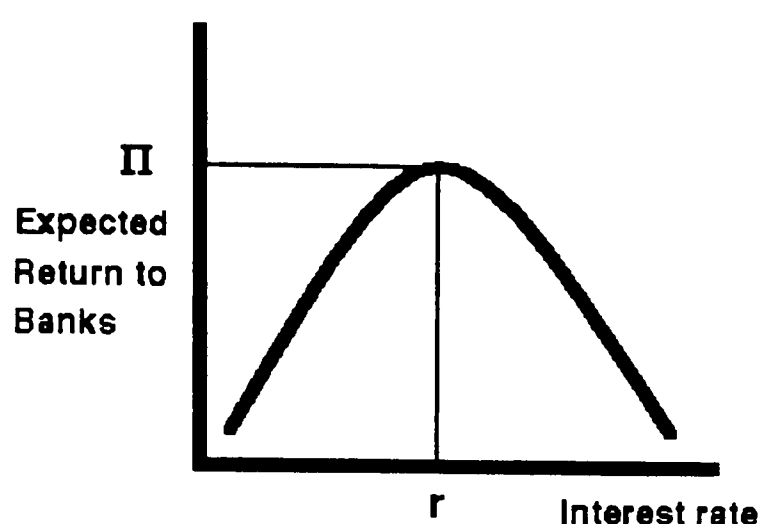
Differences in the amount and structure of *information* available to the bank regarding potential borrowers, and the difficulty of exerting control after they are granted, are some of the issues that will be discussed as affecting the interaction between channel members and the financial market.

Recent theories on the economics of imperfect information⁸ have developed important concepts which explain why, in equilibrium, loan markets are characterized by *credit rationing*. In other words, why is it that, as opposed to other markets where everybody can buy as many goods and services as they want at their current price, in the loan market it is not possible to get all the desired credit at the current interest rate. This comparison is important because it implies that in the case of loan markets, rationing is not the result of fixed prices⁹. In fact, even with fully flexible interest rates, borrowers would still face credit rationing in equilibrium (Stiglitz and Weiss, 1981). Furthermore, the situation of rationing also persists even when borrowers are charged with different risk premiums.

⁸ For a thorough discussion of these theories see Philips (1988).

⁹ The traditional economic explanation of rationing suggests that it is the consequence of fixed prices since producers will offer less output than what consumers are willing to buy at that price.

Figure 1



Rationing in the loan market has to do with other elements different from price rigidity. One such element is asymmetry¹⁰ of the information structure. When a bank gives a loan, what it obtains in exchange is a promise of repayment of the principal plus a fixed amount of interest. The banker has no way of evaluating with *certainty* the quality of the promise and neither has he the way to *monitor and control* costlessly the behaviour of the borrower. Furthermore, if the bank decides to charge higher interest rates in order to compensate for the amount of perceived risk, it could have a contradictory effect: higher interest rates attract riskier projects¹¹. This brings into the picture a second element which has been called the *adverse selection* effect. In other words, above a certain level, the higher the interest rate, the lower the expected return for the bank (see Figure 1).

The third element, the *moral hazard* effect, is a consequence of the difficulties in controlling the behaviour of the borrower after he gets the loan. This concept also helps to understand why the probability of recuperating the loan could be negatively related to the risk premium. Moral hazard arises when the buyer of a good or a service can influence an outcome against which he is somehow insured or protected,

¹⁰ Asymmetric information exists when there is complete information in one side of the market whereas incomplete information characterizes the other side. In the case we are analysing, the borrower knows more about the risks and problems of the specific project being financed than the banker.

¹¹ Borrowers are willing to take high interest rates because they perceive the probability of repaying the loan to be low.

while the seller *cannot* monitor or detect his action¹². In the case of bank loans, moral hazard arises because borrowers might want to use funds in ways that increase their expected return by increasing the risk faced by the bank¹³.

Summarizing, imperfect information and lack of control bring up asymmetric information, moral hazard problems, and adverse selection which in turn induce banks to develop screening devices to discourage riskier borrowers. In this manner, banks reach equilibrium¹⁴ while in situations of credit rationing.

Thus, going back to our first question regarding why do non-financial agents in the distribution channel¹⁵ perform the financing function, we can now answer that it is a result of a financial market, imperfect in its nature and characterized by credit rationing. If financial markets were perfect, the distribution channel would not perform any credit operation since by doing so, nobody would be better off.

When the distribution channel interacts with these imperfections in the loan market, two general situations may emerge. First, the channel may perform a *profitable* financing function when cost advantages are present. Second, in the absence of cost advantage, some kind of non-profitable or "forced" financing may develop depending on the power structure.

The first case would be characterized by a situation in which non-financial agents in the distribution channel consider profitable certain loans which banks do not. Thus, there must be a *cost advantage* for the channel member when compared to the bank. This advantage resides in either better information regarding the borrower easing the asymmetric information problem or better control after the loan is granted,

¹² This concept has been very useful in understanding the insurance market where the behaviour of the insured changes immediately after acquiring an insurance policy (i.e. people may drive less carefully after taking out insurance against accidents). This is why insurance companies include a deductible in most policies and develop incentives for "good behaviour" through their pricing policy.

¹³ One extreme case would be for example if the borrower decides to gamble the total amount of the loan. If he wins, he makes juicy profits. If he does not, the bank is the main loser.

¹⁴ Set equilibrium prices (interest rates) for their loans.

¹⁵ It could be any financing arrangement in any direction between the manufacturer, the wholesaler and the retailer.

diminishing the moral hazard effect. In other words, the non-financial lender sees the same financial operation with less risk than the banker¹⁶.

Looked at this way, the cost advantage for the channel member could be compared with one of *financial monopoly* since everybody else would have much higher costs.

What is to be expected is that this cost advantage or financial monopoly will interact with different power relationships along the distribution channel originating a diversity of financial arrangements. One of the most interesting relationships could be that of bilateral monopoly, which according to the theory, due to the bargaining problems that it creates, vertical integration seems to be the most efficient solution. This would mean that if, for example, the seller has the cost advantage (financial monopoly) and the retailer the spatial monopoly, one of the efficient solutions could be either *tied-loans* or *vertical integration*.

If cost advantage is not present because neither the asymmetry of information nor the moral hazard problem can be improved by internalizing the financial function, channel members would still have to face a situation of credit rationing. This may induce, as we have said before, some type of "forced" (non-profitable) financing among the channel members. The interesting element here will be that since the financing function is not profitable, members with less power will be forced to perform it. This is the typical case of large retail chains being financed by small producers.

Thus, due to structural imperfections in the loan market, the distribution system generates the financing it needs through an internal credit market. In this manner, the market reaches equilibrium while in a situation of credit rationing. Such rationing may induce channel members to provide financing. The degree of this *intra* channel financing and its impact on channel structure will vary depending on:

- a) The possibility of channel members to extend credit to others by internally generated cash.
- b) The degree to which they have an informational advantage.
- c) Their relative access to loan markets.

In the latter case, channel members may work as financial intermediaries because of their better relative access to funds. The basic issue here is that the non-

¹⁶ In Oliver Williamson's terms, this is a *transaction* cost advantage.

financial agent might have a *cost advantage* compared to banks in providing credit to other channel member. This implies that, *ceteris paribus*, lower interest rates could be used as a competitive tool without damaging corporate profits.

It was found in the interviews that out of twenty companies, nineteen were giving financing at apparently below market rates (from 6 to 360 days).

How financial market imperfections can make vertical integration a more efficient solution is illustrated by Montecristo (Case 2: men's wear). They decided to integrate vertically forward into retailing since the credit they had to extend to retailers ended up being too costly. Manufacturers failed to charge interest rates to shops after using financing as a competitive tool. The finance function became so expensive that it was cheaper for them to integrate.

Financial market imperfections can also impact channel structure inducing looser forms of organisation. This is the case when, for example, manufacturers finance at cheaper rates¹⁷ the spin-off of specific functions. For example, POLAR (Case 3) has leased vehicles to owner drivers in order to spin-off the transportation and sales function.

3.2. Development of Barriers to Entry: Deterring Competition

Another way of enhancing profits through vertical integration is by increasing monopoly power through barriers to entry against future competitors. Access to distribution channels has been stressed in the literature as an obstacle to entry together with economies of scale, product differentiation, customer switching costs, capital requirements¹⁸ and government policies (Bain, 1956)(Porter, 1980).

Nevertheless the concept of barriers to entry has been mistreated in some of the corporate strategy literature as it has been confused with the impact of market

¹⁷ Due to less moral hazard and ex-post control problems.

¹⁸ It could be argued that the concept of capital requirements as a separate barrier to entry is difficult to isolate. All barriers to entry imply capital requirements since, at the end of the day, they are a problem of matching the incumbent's sunk costs.

imperfections in the distribution of profits among channel members¹⁹. Barriers to entry will depend, among other things, on market contestability and capital market imperfections. There is no clear theoretical framework, as far as distribution channels are concerned, to differentiate between companies that are responding to market imperfections and those that are pro-actively building barriers to entry in search of monopoly profits. This implies that the barriers to entry argument may have been abused when describing strategic decisions regarding distribution channels (See Cases 3 and 4).

Under situations of lack of competitive markets or agency problems, designing an efficient distribution network can become so costly that once built they are perceived as barriers by future entrants.

Furthermore, a research study for the U.S. (Karakaya & Stahl, 1990) shows that managers view access to distribution channels as a less important strategic issue than other sources of entry barriers: economies of scale, product differentiation, capital requirements and customer switching costs. Only government policies were rated by managers as less important than distribution channels.

In Venezuela, due to the highly protectionist development strategy followed by the country since the 1950's, government policies have been one of the most important sources of barriers to entry. We have also discussed how lack of specialists in the context of young industries has been one of the most common reasons mentioned by management to devote important resources for channel development. Companies have had different reasons for building channels but building barriers was never stated as an important element. Only one company in the ceramic tile industry argued that in order to keep competition out, it strengthened the exclusivity agreements with its distributors.

3.3. Avoiding Post-Contractual Opportunistic Behaviour.

Opportunism relates to situations where manufacturers may decide to integrate forward, in order to avoid contract reinterpretation and other forms of

¹⁹ Michael Porter, for example, has emphasized that barriers to entry exist when a "new entrant must persuade the channels to accept its product through price breaks and cooperative advertising, and the like, which reduce profits" (Porter, 1980 p.10). This resembles more a situation of market imperfection where firms interact strategically in order to guarantee for themselves a share of appropriable rents.

deceitful behaviour from channel members, when highly specific assets are required to perform the channel functions.

The transaction cost literature has incorporated the concept of opportunism into the analysis of economic organisations, as an intrinsic characteristic of human behaviour²⁰ (Williamson, 1975, 1985). Often this concept has been misused by misinterpreting the competitive behaviour of firms in imperfect markets. For example, a retailer asking for higher margins to keep specific products on his shelves, would be called opportunistic instead of profiting from spatial monopoly. It has also been confused with other concepts like moral hazard, an agency problem that will be discussed below.

To avoid such confusions we will narrow the concept down to two specific situations:

- 3.1) Post-contractual opportunistic behaviour in the presence of specialised quasi rents and
- 3.2) Contract reinterpretation.

3.3.1. Appropriable Specialized Quasi-rents.

As assets become more specific, quasi rents are created²¹ and opportunistic behaviour is more likely to arise in order to take advantage of those quasi-rents (Klein, Crawford & Alchian, 1978). The potential of their appropriation affects organisational structure, since highly specific contracts or vertical integration may be the alternative to avoid post-contractual opportunistic threat.

The problems faced by distribution channels in the oil industry is a good example, since highly specialized transportation units for petrol have very little alternative use, inducing truck owners to act opportunistically and appropriate quasi-rents from oil refineries. In Venezuela, oil companies have integrated forward into the transportation function after a long period of costly negotiations and union strikes by truck owners. It is interesting to mention that Polar (Case 3), the leader in the brewing industry, sells specially designed trucks to drivers through leasing contracts.

²⁰ Opportunism has been understood as a devious kind of self-interested behaviour. As Oliver Williamson defines it: "Self-interest seeking with guile".

²¹ The quasi-rent of the asset is the excess of its current value over its value in its next best use.

In this case opportunistic behaviour is not feared by management who argue that owner drivers, not being unionized and tied down by financial obligations, are very unlikely to develop such post-contractual opportunistic behaviour.

3.3.2. *Contract Reinterpretation*

On the other hand, post-contractual opportunistic behaviour can also be the result of favorable re-interpretation of explicit or implicit²² contract provisions. This reinterpretation is opportunistic when deceit is guiding the logic of such reinterpretation.

For example, in the apparel industry, both manufacturers studied here, Montecristo and Rori, tried to agree with their clients (retailers) on credit terms of 30/60/90 days. Instead, by the end of the third month clients would "pay" with post-dated cheques. In other words they reinterpreted the agreement by "paying" with an instrument which was not valid within the maximum 90 days credit extended to them. The cheques were usually dated for one or two months later.

3.4. Agency Problems.

Distribution channels are open systems of interdependent organisations which may *cooperate or conflict* in the process of making products and services available to the consumer (Stern & El Ansary, 1988). This organisational complexity raises an important strategic issue regarding channel design: how to define individual contracts in order to induce every channel member to act according to a global strategy. In other words, what are the different contractual and organisational alternatives open to management in order to achieve cooperation along the channel and meet corporate standards. This has obviously become increasingly important to manufacturers with high brand loyalty.

22

Some environments are characterised by lack of written contracts. In such situations management usually hold doubts about the effectiveness of written words, and business relationships rely more on "loyalty", "implicit contracts" or "power relations". *Loyalty* can become one of the more precious qualities by which members of the organisation can achieve increased rewards. In other words, opportunism through contract re-interpretation can induce management to search for alternative solutions; and praising loyalty can be one of them.

This type of problems has been formalized by principal and agent theory²³. Agency problems arise when in the presence of asymmetric information, a person (the principal) delegates to another person (the agent) the responsibility of selecting and implementing an action (delegated choice). Due to the informational asymmetry, the principal can only see the outcome of the action but is unable to know the amount of effort (hidden action) which was put in by the agent in achieving the result. Therefore the two individuals will have different optimizing behaviours: the agent will try to get the most out of the fact that for the principal, to measure the agents effort, can be very costly. Since perfect and costless monitoring is impossible, the transaction should be structured in a way that the agent has an incentive to act in the way preferred by the principal. (Kreps, 1990)

Thus, agency problems emerge in a situation of delegated choice among two self-interest seeking individuals and the solution rests in finding the optimal contract which would induce the agent to complete successfully the delegated action according to the principal's best interest.

From a different perspective Alchian and Demsetz (1972) Jensen and Meckling (1976) and Fama (1980) argue that firms should be viewed as a set of contracts among factors of production with each factor motivated by its own self interest. Agency problems are solved by designing implicit or explicit contracts which would make their incentives compatible. It is interesting to note, due to its implication in channel structure, that this *incentive compatibility* may sometimes be achieved by vertical integration, through the control which can be achieved through hierarchies, or may also take place through looser organisational forms or through market exchange.

When managing distribution channels, to achieve self-enforcing contracts among the diverse channel members, may be of important strategic significance. It may be in the manufacturer's best interest to maintain the optimal quality standards for his products, but that interest may not, and usually does not, coincide with the other channel members. This is why an optimal organisational or contractual form can be very difficult to achieve.

²³ Some authors make no difference between principal and agents or agency theory and moral hazard problems (Kreps, 1990) (Phlips, 1988).

In Venezuela, industries are usually highly concentrated. The power implications of such oligopolistic structures may help to solve agency problems since a high percentage of sales and profits are contributed by only a few sources. It is in the best interest of independent channel members to achieve a viable contract with the manufacturer.

In distribution channel management, it will be particularly difficult to achieve a self-enforcing contract in the presence of:

- 1) Externalities and
- 2) Moral hazard problems.

We will discuss them in the following sections.

3.4.1. Externalities.

Externalities arise when there are costs which are not paid, (negative externalities) or benefits which are not charged for (positive externalities). For example, we are in the presence of negative externalities when a channel member sells a spoiled perishable product or gives poor service to the customer, thus damaging the reputation of the brand name. Prices do not suffer any change in the short run but the manufacturer's future sales and brand name has been negatively affected. In this case, the problem for the manufacturer (principal), is to design an explicit or implicit contract to induce the channel member (agent) to avoid free riding on the brand's good name. This contract should *internalize* the externality by making the channel member's remuneration reflect the effort of avoiding the externality.

When managing distribution channels, externalities are more likely to appear in those cases when products or services are more easily subject to quality debasement. For example, in the case of highly *perishable brand* products, special care should be taken in order to guarantee that they arrive in a good condition to the consumer. Polar (Case 3) and Savoy (Case 4), two of the companies interviewed, have devoted great time and effort in avoiding such externalities. Their purpose has been to control the channel by increasing the number of visits to retailers and often rotating the products on shelves. In their case, the presence of externalities and the need to solve agency problems has impacted channel structure either by integrating vertically in order to keep direct contact with retailers, or by company hired supervisors who monitor points of purchase.

Product quality debasement can also be present in products where sale and after-sale support and service are important parts of the expanded product. Negative externalities in this case are the result of client dissatisfaction with the actual service received when compared with the service expected or promised by the manufacturer. Estee Lauder and Clinique, in the cosmetic industry, are very good examples. They select and train the sales-force who are to be in the retail outlets selling their products. By the form of a "boutique in the store" they are totally in control of the sale, and post sale service, and they make sure that the consumer gets the information, the service and the guarantee they consider appropriate to their high quality brand.

In the electrical appliances industry, both companies interviewed considered that post-sale service was an important factor for their product image (Case 5). In effect, it has been the fear of negative externalities that has made Madosa maintain its own retail stores, and has induced Frigilux to develop control mechanisms through supervision in independent retail outlets.

In more general terms, an interesting case of agency cost avoidance is tight franchise agreement. By extensively specifying the standards which should be kept for products and services and the penalties incurred in case of non-compliance, the franchisor seeks to guarantee brand recognition, consumer's satisfaction and high quality standards.

3.4.2. Moral Hazard.

When designing distribution channels, risk bearing is one of the strategic issues which has to be decided, negotiated or imposed. Risk bearing by channel agents brings moral hazard problems since self interested behaviour by some channel members may mean increased risk for others (risk bearers). There are many types of risks involved in distribution e.g. perishability, technical obsolescence, fashion and product damage. The moral hazard problem arises when one channel member can influence the occurrence of an event for his own benefit (in this case product failure or decay) against which he is insured, since some other channel member is bearing the risk.

For example, to reduce negative externalities, manufacturers of juices and milk products bear the risk of product damage. Unfortunately for management, getting the externality problem solved by bearing the risk of product spoilage, brings up another agency problem: retail store owners turn off refrigerators and freezers

during the night in order to save electricity with its obvious negative consequences to product quality. In this case, optimal behaviour for the retailer does not work in the manufacturers best interest due to moral hazard.

Similar agency problems have been reported by managers when referring to the undesirable behaviour of drivers in company owned trucks. Their poor effort towards keeping them in good condition is evident when looking at the results: less operating life and high maintenance costs²⁴. This moral hazard problem has been solved by some companies, like Indulac in the milk industry, by spinning-off the transportation function. Others, like Perugina and Polar, have solved the problem by leasing the trucks to drivers. Thus, in these cases, looser and less vertical forms of organisation have been preferred by management to solve agency problems.

The merchandising function also seems to pose serious moral hazard problems when an independent distributor is performing the function. It is in the best interest of the manufacturer to display well his products on the shelf. Nevertheless, it is difficult to think of a type of contract which would make the independent distributor willing to perform that function well. Again the agency problem arises because the optimal behaviour of the agent (the independent distributor) is not necessarily compatible with the optimal behaviour desired by the manufacturer (the principal).

3.5. Governance Costs.

The cost of integration into distribution channels can be mainly found in two different elements: governance costs and losses in economies of scale and scope. They are the elements pushing manufacturers away from hierarchical control since they represent the costs of integration. They have to be constantly weighed against the gains in control and power which vertical integration would bring.

3.5.1. Administrative and Informational Costs.

Administrative and informational governance costs arise as firms grow, making it more difficult to maintain administrative coordination. As distribution

²⁴ As stated by an interviewee: "they park anywhere, they leave them open and therefore sometimes get robbed, they take them home and use them for personal purposes; they even cheat on petrol expenses".

channel functions become more centrally coordinated by the manufacturer, the costs of efficiently managing such structures increase. As the firm increases in size, it loses its comparative advantages relative to the market (e.g. incentive controls and economies in information exchange) making internal optimal contracts more difficult to achieve. This has been called "managerial diseconomies" and have a negative impact on organisational performance.

Yukery and Frica (Case 1) have total control over their distribution network for the hot pack lines through which they sell directly to retailers over 80% of their total sales. However, they rely on independent distributors to reach the small shops in lower income areas, because they consider it too costly.

3.5.2. Distribution Networks with Scattered, Low Capital, Family Owned Retail Shops.

Transportation can become an important strategic issue in societies with low GNP per capita and low population density. (Table 1). In this case, the distribution network is dominated by *a large number of small, family owned and low capital retail outlets*. This makes the structural separation²⁵ of the channel more difficult than in economies in which retail chains dominate the distribution network, since they permit the process of negotiation and sale to be totally separated from the transportation function. In effect, taking orders, billing, collecting, merchandising and transportation can be performed by different people. In the case of poor economies, there is very little centralized purchasing power and storage capacity from retailers. This makes visits more numerous (to each retail outlet) and more frequent (small inventories). Also, the low possibility of structurally separating the channel has an important impact on the function played by truck drivers in the selling process, since all the functions fall under their responsibility; transportation implies sales, invoicing and collecting.

One possible indicator of the relative importance of transportation as a strategic issue for manufacturers is the *relative number of retail outlets compared to the size of the population*. The fewer people per retail outlet, the higher the transportation effort made by manufacturers. As shown in the chart below, the

²⁵ When channel functions can be divided and performed by alternative agents, e.g. the salesman visits the retailer with a catalog, closes the sale and the transportation is done by a separate process with different personnel.

number of people per outlet is directly related to the relative number of inhabitants per square mile, to the GNP per capita, and to the percentage of households with cars²⁶. Countries with low GNP per capita, and poor transportation means, require more outlets to reach the consumer.

Furthermore, inadequate transportation systems and low number of households with cars makes it difficult for consumers to travel long distances to shop, hence making retailers enjoy important spatial monopolies.

Also, lower income implies that less capital is invested in stores making small family owned shops very common. For example in the United Kingdom large grocers represent 8.9% of food retailers while in Greece they only constitute 0.98% and in Venezuela 0.38%. Small, low capital, family owned retail outlets, are *spatial*

Table 1

COUNTRY	Peop./Sq.K.	Peop./food Ret.Outlet.	% h.h. with car	GNP pc.
France	101.9	415	76	13.9
W. Germany	244.4	687	68	14.7
Greece	73.8	153	10	5.5
Spain	77.0	143	53	8.9
U.K.	235.2	579	63	12.3
Venezuela	20.8	292	39	4.3
*Real GNP per head, adjusted for purchasing power parity 1987, thousands of US\$.				
Source:	Corporate Intelligence Group. The Economist. June 1 1990. p.111 DATOS. Used for Venezuelan data.			

monopolies which show three characteristics with important implications for channel functions and power relations:

- a) They give financing to consumers.
- b) Due to the small storage capacity of the store, they pre-select the brands available for the consumer.
- c) Compared to the big supermarket chains, they atomize the purchase of goods.

²⁶

Japan with \$13.135 income per head is an important exception since the average number of people per food retail outlet is only 224. One of the reasons mentioned has been the traditional Japanese diet which consists mainly of fresh produce and raw fish. (Maeda, 1990)

This has important implications for channel design and increases the monopoly power as it was discussed in Section 1.3.

3.6. Losses in Economies of Scope and Scale

Economies of scope are achieved when distribution channels are used to carry out various types of products simultaneously. Classical examples are supermarkets and hardware stores. On the other hand, economies of scale are accomplished when similar, usually competing, products are distributed through the same channel structure: for example in speciality stores where different brands of similar products are sold and channel members specialize in the required functions.

By integrating vertically, manufacturers often give up the economies of scale and scope which can be achieved by independent distributors. When Montecristo (Case 2) integrated forward, it not only reduced the number of retail outlets from over 100 to 35 but the new stores had a much reduced assortment of goods. In order to diminish their losses in economies of scope, formerly achieved by independent retailers, they had to increase the variety of products they offered. They decided to start manufacturing some products like men's shirts and to buy from other manufacturers underwears, belts and shoes.

Rori decided to follow a different strategy. They integrated only partially by opening five totally owned retail stores, which represent 30% of total sales, while using independent retailers for the rest. In order to achieve this without facing price conflict with independent outlets owners, they have had to guarantee that their prices to the public will not undercut that of other retailers.

3.7. Final comments

We have presented a theoretical framework with the determinants of integration and control over distribution channel functions. In doing so, different theoretical approaches were applied in order to explain the rationale behind management decisions. Also, experiences from several Venezuelan companies were used to highlight key elements of the framework.

It is important to stress that this framework is especially suited to the study of the distribution channels *by function*. It will allow to bring about the many specific aspects which generate a legitimate space for managerial discretion. In particular, the analysis by function will allow us to understand how competitive dynamics and

market development are key elements in the strategic choices of firms. The six cases studied in the following chapters will hopefully constitute well chosen particulars which bring to life hidden determinants of managerial intent, often little understood by many existing approaches to channel design.

INTRODUCTION TO CASES

Chapters 4 through 9 present six extensive and in-depth cases studies of selected industries. In them, the distribution strategy of twenty three companies from seven different industries is analysed and used to test existing theories and our proposed theoretical framework. We study at least two companies in each industry in order to see beyond sector and product determinants, into individual firm strategies. The industries and companies were chosen to cover the different theoretical categories defined in the research. In each chapter an extensive analysis is done. However, in the title we highlight the specific theoretical category which the case helps to demonstrate.

Case 1 deserves a special mention since it includes the evaluation and comparison of two industries, fruit juices and dairy products, in contrast with others where only companies within a specific industry are analysed. The reasons for studying the two industries together are a consequence of the close competition for the scarce refrigerated space in retail shops and which have tended to force them into a diversification strategy which makes them now almost indistinguishable.

Case 2 (men's wear apparel) shows how imperfections in the credit markets may generate vertical integration into retailing. In Case 3 we show how the process of building a distribution network in the beer industry may in itself result in barriers to entry. Case 4 indicates how externalities and product debasement in the chocolate and sweets industry has required a highly integrated channel that directly sells to 100,000 retailers on a weekly basis. In Case 5 we show how post-sale service and consumer financing have had strong and opposite effects on integration. Finally, Case 6 shows a classic case of bilateral monopoly between wholesalers and retailers in the pharmaceutical sector, a process that, as predicted by the classical works in this area, is showing tendencies towards more integration.

The cases will be presented in two sections. The first, mainly descriptive, emphasizes the industry and company characteristics which are relevant for the case. The second, mostly analytical, relates management decisions about channel structure to the existing approaches and the theoretical framework proposed. A cross case analysis is carried out in Chapter 10 where the overall lessons are extracted .

CHAPTER 4

CASE 1. THE DISTRIBUTION OF DAIRY PRODUCTS AND FRUIT JUICES: Facing Moral Hazard Problems and Retailer's Markets

Introduction

When analysing the evolution of management decisions regarding distribution channel strategy and design for dairy products and for fruit juices, remarkable similarities stand out in spite of their differences in product attributes and characteristics. Both industries offer a wide variety of product lines, some of which are highly perishable and require refrigeration such as pasteurized goods, which are called cold line products, while others can be preserved for longer periods at normal temperatures and are referred to as hot line products.

These transactional requirements have determined that in both industries, a specific channel structure has been designed for highly perishable cold-pack products with totally separated operations from other less perishable lines. Second, since both industries have to compete for the scarce refrigerated space available in retail outlets¹, all firms have tried to keep other suppliers of cold line products out by offering a wider variety of goods (i.e. dairy companies offer fruit juices and firms in the juice industry offer dairy products, either by producing them directly or by purchase agreements with other manufacturers). In other words, the possibility of rapid product decay and the need to have access to the scarce refrigerates space in outlets, generates a peculiar type of competition that sets an interesting dynamic for product diversification strategy and channel control. It also gives retailers an unusual degree of market power. The objective of this case is to analyse, in this context, the reasons for choosing alternative organisational structures for channel functions in both industries in Venezuela.

In this case, *five* companies will be analysed. From the dairy industry we will study Industria Lactea Venezolana, C.A. (INDULAC), Industrias Lacteas del Perijá,

¹ This has enhanced retailers spatial monopoly power which makes manufacturers spend considerable resources with the only purpose of pleasing the retailers. This will be discussed in Section 2.

C.A. (ILAPECA) and Industrias Lacteas Lara-Carabobo (INLACA) and from the fruit juice industry two firms were interviewed: YUKERY C.A. and Frutera Industrial C.A. (FRICA). Each company has designed two totally independent channels structures (Table 1), one for the pasteurized products (cold line) and the other for non-pasteurized (hot line) products with completely different organisational structures, managers, functions and personnel. It is the purpose of this chapter to analyse the intrinsic characteristics of the transactions involved in both product lines - hot and cold- and to understand the reasons which have induced management to define two separate distribution networks within the same corporate structure.

TABLE 1
COMPANIES INTERVIEWED AND PRODUCT LINES

COMPANIES	HOT-LINE PRODUCTS	COLD-LINE PRODUCTS	CHANNELS USED
INDULAC (1945)	Powdered milk Canned butter Condensed milk	Pasteurized milk Pasteurized juices Yoghurt Chocolate drinks	2
ILAPECA (1960)	Powdered milk Canned butter Condensed milk U.T.H.	Pasteurized milk Pasteurized juices Chocolate drinks	2
INLACA (1949)	----- -----	Pasteurized milk Pasteurized juices	1
YUKERY (1963)	Juices: Cans Bottles Tetrapack	Pasteurized juices Chocolate drinks Pasteurized milk* Yoghurt*	2
FRICA (1957)	Juices: Cans Bottles Tetrapack	Pasteurized juices Pasteurized milk** Chocolate drinks** Yoghurt	2

* Products from other manufacturers which are distributed by YUKERY

** Products from SABANA C.A. a pasteurizing company recently acquired by FRICA as part of its diversification strategy. Also FRICA has distribution agreements with another 5 pasteurizing companies:UPACA, LOS ANDES, IDEAL, TACHIRA and SANTA BARBARA.

The case will be presented in two sections: the first, mainly descriptive, will highlight the industry issues and firm characteristics which will be relevant for the

analysis. The second section analyses the channel structure using the theoretical framework presented in Chapter 3.

4.1. The Description

4.1.1. The Industries:

The dairy industry began to develop in Venezuela at the beginning of the 1940's when Nestlé established the first milk powderizing company in the western state of Zulia in 1945. Now, there are over one hundred companies in the industry of which twenty operate in the pasteurizing business. For the past 30 years the government has followed a highly interventionist policy in the industry since the supply of milk has been considered a "strategic" issue in economic and social programs. Indirect subsidies to pasteurizers and tight price controls have been the main policy tools applied.

As it is shown in Table 2, in spite of the fast increase in production units, the dairy industry is highly concentrated. INDULAC, and ILAPECA control 100% of the powdered milk market and with INLACA, 75% of the pasteurized milk market.

TABLE 2
MARKET SHARE FOR SOME DAIRY PRODUCTS

	POWDERED MILK	PASTEURIZED MILK	CONDENSED MILK	BUTTER
INDULAC	70%	25%	75%	60%
ILAPECA	30%	20%	25%	25%
INLACA	30%		--	
OTHERS	-----	25%	-----	15%
TOTAL	100%	100%	100%	100%

A unique characteristic of the Venezuelan market is the high proportion of powdered milk sales when compared with the other dairy products (Table 3). The evolution of this consumption pattern was due to a combination of two factors, a low percentage of households with refrigerators and a high concentration of milk production in the western region of the country.

TABLE 3
PERCENTAGE OF SALES BY PRODUCT LINE

PRODUCT LINE	INDUSTRY SALES
POWDERED MILK	50%
PASTEURIZED MILK	20%
OTHER PRODUCTS	30%

The fruit juice industry, on the other hand, started in Venezuela during the 1950's, the domestic demand was satisfied before that time through imports from the United States. Currently there are around 20 manufacturers competing in the industry, nevertheless the structure of the market, as for dairy products, presents high degrees of concentration. When comparing market shares for both lines, the hot (non-pasteurized) and the cold (pasteurized), the latter shows less degrees of concentration within a more competitive business due to less brand loyalty from consumers, and to specific characteristics in the distribution network structure. These two conditions place *high market power on retailers for cold products*.

TABLE 4
MARKET SHARE IN THE FRUIT JUICE INDUSTRY

	HOT LINE	COLD LINE
FRICA	60%	32%
YUKERY	30%	9%
ILAPECA(FRUKO)	7%	
INLACA(CARABOBO)	----	28%
INDULAC(MILKY)	----	12%
OTHERS	3%	19%
TOTAL	100%	100%

4.1.2. The Companies Interviewed

The dairy sector has three leading companies: Industria Lactea Venezolana C.A. (INDULAC), Industrias Lacteas de Perijá C.A. (ILAPECA) and Industrias Lacteas Lara-Carabobo (INLACA). In 1977 Nestlé, which had started operations in 1945 was nationalized through a friendly agreement with the Venezuelan government and converted into a joint venture company (INDULAC) with government (20%), workers (20%) and local farmers (60%) ownership. INDULAC is the leader in the industry followed by ILAPECA, a much younger company founded in 1960, which is

perceived by INDULAC as its closest competitor since they have almost identical product lines.

INLACA on the other hand is the leader for pasteurized milk with 30% of the market share and second in the market for pasteurized juices, with 28% market share. This company, in contrast to INDULAC and ILAPECA, was created with the objective of serving only the pasteurized market.

In the fruit juice industry two companies were interviewed, the leader, Frutera Industrial C.A. (FRICA) which was founded in 1957, and YUKERY C.A. which started operations in 1963. Both belong now to larger highly diversified corporate groups, CORIMON and Organización Diego Cisneros (ODC), respectively.

FRICA, in its early days, sold fruit pulp and concentrates to fruit juice manufacturers. Later, management reoriented the company's objectives by initiating a vertical integration and diversification strategy into fruit juices, milk, yoghurt, chocolate drinks and rice drinks or "chicha"². This strategy has been designed with the objective of benefiting from economies of scale and scope in the distribution network for pasteurized, cold products³. In 1985, FRICA decided to cease the contract it had with an independent distributor and assumed hierarchical control of the distribution functions for hot line products.

The trade mark YUKERY was launched in 1959 by Venezuelan Trading Co., which had been founded in 1939 and used to import LIBBY's fruit juices from the United States of America. In 1963, Venezuelan Trading Co. stopped operations while YUKERY C.A. was born as a corporation, its objective was to manufacture and distribute fruit juices by processing local fruit and importing pulp. YUKERY also introduced the trade mark TODDY, a highly successful pulverized chocolate drink for children, which has become traditional among Venezuelan consumers. In 1981, Industrias YUKERY C.A. acquired a food manufacturer, Venezolana de Alimentos C.A. (canned and baby food) and in July 1986, after a long deterioration process

2 "Chicha" is a rice based cold drink which has a long tradition in Venezuela, it was domestically produced until recently when manufacturers started to produce it and sell it in pure-pack containers.

3 The low brand loyalty which characterizes this market and the insufficient refrigerated capacity in wholesale and retail outlets has induced highly aggressive behaviour among those firms who participate in the distribution of cold drinks. Sales managers call the daily competition process in the distribution channel a "refrigerator war".

caused by administrative problems and distribution inefficiencies⁴, YUKERY was acquired by the Organización Diego Cisneros (ODC), a powerful and internationally diversified Venezuelan corporation.

4.1.3. Channel Structure

Two typical channel designs have been identified: one for hot-line⁵ products, which is very short and reaches directly larger retailers with over 80% of sales, and the other, for pasteurized cold-line products, in which exclusive wholesalers and owner drivers are used for 100% of company sales. In other words, for cold line products, manufacturers do not reach retailers directly.

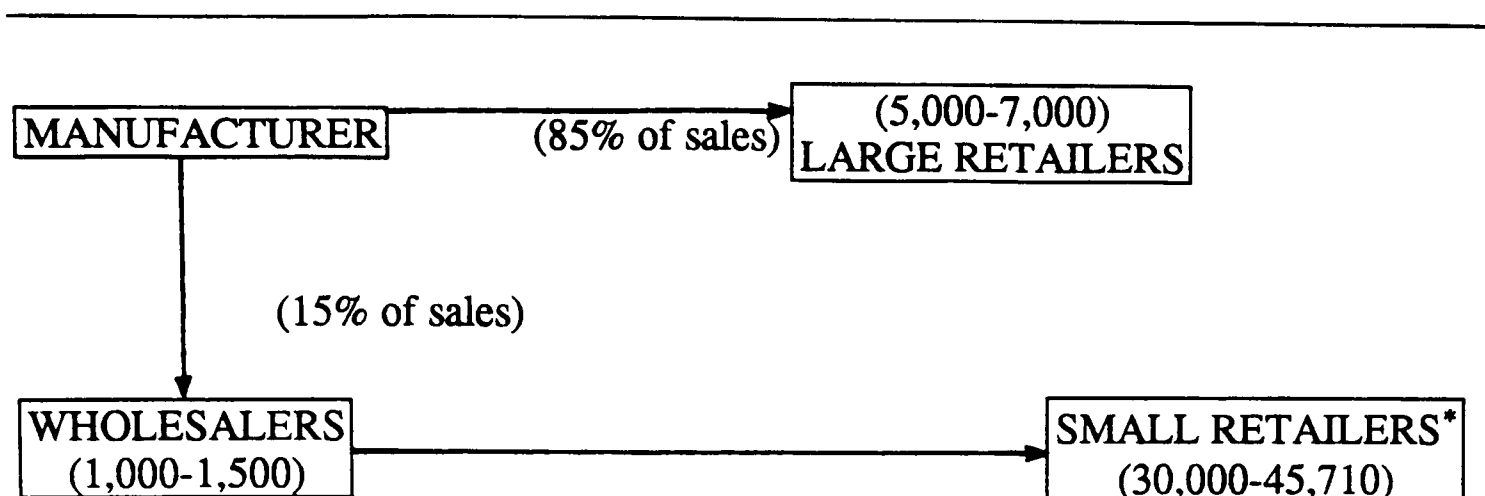
i) Channel Structure for the Hot Line

For their hot line products, INDULAC, ILAPECA, YUKERY and FRICA have designed a very similar, highly controlled distribution structure which reaches directly between 5000 and 7000 retail outlets representing 85% of sales (Figure 1). In order to achieve this, INDULAC and ILAPECA have hierarchically controlled sales companies: Compañía Distribuidora de Alimentos (CODALIM) and Compañía Anónima Distribuidora de Productos (CADIPRO) respectively. Each sales company performs different marketing functions like market research, product development, promotion, storage and delivery. Nevertheless, according to management, the real reason for these companies to exist is for tax reduction purposes. YUKERY and FRICA perform the same functions with similar control through a sales and a marketing department.

4 According to management, the independent wholesalers used by YUKERY for the distribution of their products were highly responsible for the important market share losses experienced between 1982-1986. They say the wholesalers were "careless", "negligent", expensive and unwilling to assume any credit risk.

5 All goods which do not need refrigeration.

FIGURE 1
CHANNEL STRUCTURE FOR THE HOT LINE



*Very small retail outlets called "bodegas".

The type of retail outlets used for this line are supermarket chains, independent supermarkets⁶, medium and small grocery shops (bodegas) and chemist shops for baby milk formulas. The manufacturers very seldom reach directly the small retailers (abastos y bodegas) who though they only account for 15% of sales, represent 78.14% of total food shops (Table 5). They are usually visited by small independent wholesalers. YUKERY estimates that while they visit periodically 5,000 retailers, the small distributors reach over 30,000 small retailers, which in their case amount for 18% of sales. Management appraisal of these small wholesalers is very high, since they represent the only alternative to selling to the very small, low capital and family owned stores. According to manufacturers, it would be impossible for them to assume directly the distribution to the small retailers due to the high risk⁷ involved in the transaction. In the theoretical framework presented in Chapter 3 the relative importance of these outlets is evaluated in the context of less developed economies.

⁶ Medium sized stores which offer the same product variety without belonging to a chain. They are usually family owned enterprises.

⁷ Any financing arrangement with these small retailers is seen as highly risky.

TABLE 5
FOOD RETAILERS

STORE	No. OF OUTLETS	% SHARE
SUPERMARKET CHAINS	223	0.38
INDEPENDENT SUPERMARKETS	3,001	5.13
MEDIUM GROCERY SHOPS	9,567	16.35
SMALL GROCERY SHOPS	45,710	78.14
TOTAL	58,501	100.00

Source: Datos C.A. de Venezuela.

ii) Channel Structure for Pasteurized Products: the Cold Line

In this product line the five companies interviewed have almost identical structures: less controlled and more flexible than the hot line. Manufacturers sell to the wholesalers who in turn either sell or give products on consignment to owner drivers who make daily visits to over 12,000 retail outlets. The distribution cycle from the manufacturer to the retailer (Figure 2) is achieved in less than 24 hours. It starts at 10:00 P.M. when trucks leave the plants, reaching the wholesalers deposits by 1:00 A.M.. There, owner drivers start loading between 1:00 A.M. and 4:00 A.M. to begin their daily visits to over 12,000 retailers. The wholesalers perform reception and storage functions, nevertheless, according to the sales and marketing managers from INLACA, INDULAC, ILAPECA, YUKERY and FRICA, the most important function performed by these wholesalers is the daily bargaining with owner drivers. These are very tough people who have been in the business for over 40 years and belong to a very powerful union. INLACA and INDULAC for example, had to spin-off the function and leave it to be performed by the market since it became impossible to control with company employees. A quote from INLACA's marketing manager illustrates this point:

"Forty years ago we did not have independent wholesalers and it was a disaster because we had to negotiate every day with owner drivers. No matter how good our employees were, we always ended up losing money, paying more margins and accepting returns for damaged products for higher percentages than expected."

The retailers in the pasteurized line are mainly supermarket chains, independent supermarkets and "panaderias"⁸ or bakeries. The bakeries are by far the most important retailers since *80% of pasteurized products are sold through these outlets.*

FIGURE 2
CHANNEL STRUCTURE FOR PASTEURIZED PRODUCTS.



4.1.4. Channel Functions: Who Performs What?

It is important to stress that one of the study propositions presented in Chapter 2 was that distribution channels are seen by management as a *set of functions* with different strategic values which have to be assigned to the most efficient parties. In other words, the number of agents along the channel (length and width) is decided by *function* and not by product: a manufacturer may decide to leave transportation, financing and storage to be performed by independent agents and keep the service and merchandising function hierarchically controlled. Or, as for pasteurized products, manufacturers may decide to spin-off sales, transportation, storage and collection, but to keep for strategic reasons the risk-bearing and the promotion functions. The analysis provided in the second part of the case will be based upon the information given here.

8 Even though "panaderia" is the exact translation of bakery, it is in fact a combination of a bakery, a small coffee shop and a small food store. The service is over-the-counter and they are usually family owned. They are very densely distributed and people go there for breakfast, to buy the daily bread and milk and to drink the mid-morning and afternoon coffee. Due to this consumer buying pattern, these points of sale are becoming increasingly important for food products.

i) Channel Functions in the "Hot Line"

In the distribution of non-pasteurized products the number of functions which are hierarchically controlled by the manufacturer is very high (Table 6). In effect only the transportation and collection functions have been totally left to be performed by the market i.e. independent transportation companies. The people responsible for sales are company employees called "brief-case salesmen" who visit retailers usually once a week and take the orders. These orders are processed and the products delivered by independent transportation companies to the stores. The manufacturers also have supervisors who check the relationship with the clients and merchandisers who are in charge of the display and rotation of the products on shelves.

TABLE 6
WHO PERFORMS THE CHANNEL FUNCTIONS IN THE DISTRIBUTION
OF NON-PASTEURIZED PRODUCTS*.

FUNCTION	INDULAC		ILAPECA		YUKERY FRICA
	before	after		before	after
SALES TO:					
a)Retailers	MAN.	MAN.	MAN.	I.D.	MAN.
b)Consumers	RET.	RET.	RET.	RET.	RET.
COLLECTION	MAN.	T.C/MAN.	T.C.	I.D.	T.C.
TRANSPORTATION	MAN.	T.C.	T.C.	I.D.	T.C.
STORAGE	MAN.	MAN.	MAN.	I.D.	MAN.
FINANCING TO:					
a)Retailers	MAN.	MAN.	MAN.	I.D.	MAN.
b)Wholesalers	MAN.	MAN.	MAN.	MAN.	MAN.
MERCHANDISING	MAN.	MAN.	MAN.	I.D.	MAN.
RISK BEARING	MAN.	MAN.	MAN.	MAN.	MAN.
PROMOTION	MAN.	MAN.	MAN.	I.D.	MAN.
INFORMATION	MAN.	MAN.	MAN.	I.D.	MAN.

MAN.=Manufacturer (Hierarchically controlled personnel)

T.C.= Independent Transportation Company

I.D.= Independent Distributors

* This is true for 85% of sales, the rest is done through small wholesalers who perform all functions except MERCHANDISING and PROMOTION.

It is important to stress that, as shown in Table 6, INDULAC spun-off the transportation function in 1965 since, according to management, it had become very costly and logistically very difficult to carry out. Also, the changes in YUKERY and FRICA are worthwhile mentioning since between 1984-1986 both companies decided to cancel the contract each of them had maintained for many years with exclusive and large independent distributors who used to perform all the distribution functions for

both companies. Both companies stress that by integrating vertically, not only have they achieved a better service for their clients, but that they can do it cheaper. According to YUKERY, while independent distributors used to charge them 15% of sales, they spend now only 8% of sales for all distribution functions.

As it has been said, for the remaining 15% of sales, all companies use small wholesalers⁹ which take care totally of the distribution functions to serve smaller retailers.

ii) Channel Functions in the Cold Line

For the distribution of pasteurized products the situation is radically different, as it can be seen in Table 7 manufacturers have been more inclined to use market suppliers of functions instead of performing them internally. Even in the case of INDULAC who decided at the beginning to reach retailers with company owned trucks and company personnel, management changed its strategy and decided to spin-off those functions. Also INLACA decided to spin-off the storage function to wholesalers. The storage function is usually made by wholesalers, only ILAPECA sells directly to owner drivers.

It is interesting to note that also in this line, the companies involved have ended up with very similar allocation of responsibilities among agents.

It is also worthwhile stressing that even though manufacturers exert very little control over channel members, they have all kept the risk bearing and promotion functions. In other words, going back to the argument of management seeing channels as a set of functions with different strategic values which must be performed by the best qualified, all manufacturers in this case, have reached the conclusion that they should keep those two functions to be performed by company employees. We shall see the reasons for this in Section 2.

9 Totally different in organization and size from the big independent distributors mentioned before who used to work for YUKERY and FRICA

TABLE 7
WHO PERFORMS CHANNEL FUNCTIONS IN THE DISTRIBUTION OF PASTEURIZED PRODUCTS.

FUNCTIONS	INDULAC, ILAPECA YUKERY AND FRICA	INLACA
SALES:		
a) To retailers	O.D.	O.D.
b) To consumers	RET.	RET.
COLLECTION	O.D.	O.D.
TRANSPORTATION	O.D./w.s.	MAN./O.D(2)
STORAGE	w.s.	w.s
FINANCING TO		
a) Retailers	-----	-----
b) Wholesalers	MAN.	MAN.
MERCHANDISING	O.D.	O.D.
RISK BEARING	MAN.	MAN.
PROMOTION (1)	MAN.	MAN.
INFORMATION	MAN.	MAN.
RET.= Retailer		
MAN.= Manufacturer (Hierarchically controlled personnel)		
O.D.= Owner Driver		
w.s.= Wholesaler		
(1) Very seldom are promotions launched		
(2) INLACA is the only manufacturer of pasteurized products which has internalized milk transportation from farms to plants and from there to wholesalers.		

Channel design has been very similar among manufacturers, nevertheless, some important differences should be pointed out and we will discuss these in the following section.

4.2. The Analysis

In this section we will analyse the rationale behind management decisions regarding channel design. We will start by studying the predictions of existing theories in order to identify the areas where they do not give an adequate account of the data. We will then use our theoretical framework in order to propose an alternative view.

4.2.1. Existing Approaches:

According to traditional marketing theory, (Aspinwall, 1958, Rosenbloom, 1987) distribution channels for dairy products and juices should be long and indirect since as shown in the chart below their characteristics correspond exactly

to those of *red* products. This classification has been proposed by and discussed in the literature review. It defines the type of distribution channel and promotion according to the five categories specified in the first column in table 8.

TABLE 8
CLASSIFICATION FOR COLD AND HOT PRODUCTS ACCORDING TO
ASPINWALL.

PRODUCT CHARACTERISTICS	RED LINE PRODUCTS	COLD LINE PRODUCTS	HOT LINE PRODUCTS
REPLACEMENT RATE	HIGH	HIGH	HIGH
GROSS MARGIN	LOW	LOW	LOW
LEVEL OF ADJUSTMENT*	LOW	LOW	LOW
TIME OF CONSUMPTION	LOW	LOW	LOW
SEARCHING TIME	LOW	LOW	LOW
TYPE OF CHANNEL	LONG AND INDIRECT	LONG AND INDIRECT	LONG AND INDIRECT
* Number of services applied to goods in order to meet the exact needs of the consumer.			

According to Aspinwall's approach, products are *red* when the replacement rate is *high* and the other four characteristics are *low*. Red products should have long channels and broadcast promotion. On the other hand, products are *yellow*, when they show low replacement rates, high gross margins, high levels of adjustment, high time of consumption and high searching time (Table 8). Hence, they call for short channels and highly focussed promotion.

Other authors have stressed the fact that highly perishable products will tend to have shorter, more controlled channels due to the externalities involved and specific asset requirements (Williamson, 1971). Manufacturers would prefer to maintain hierarchical supervision along the channel in order to avoid product decay and insure the quality of the goods until they reach the consumer. This implies that, *contrary* to what has been found, the cold line should be more hierarchically controlled than the hot line.

In fact, even when a transaction cost analysis is made by *functions*, less vertical integration is to be expected for non-pasteurized products due to high economies of scope together with negligible externalities and asset specific requirements for most functions (Table 9).

TABLE 9
VARIABLES WHICH IMPACT VERTICAL INTEGRATION INTO
DISTRIBUTION FOR NON-PASTEURIZED PRODUCTS: A TRANSACTION
COST APPROACH BY FUNCTIONS.

FUNCTIONS	ECONOMIES OF SCOPE*	EXTERNALITIES	ASSET SPECIFICITY	VERTICAL INTEGRATION
SALES TO				
a)Retailers	+	0	0	Unfavourable
b)Consumers	++	0	0	Unfavourable
COLLECTION	0	0	0	Unfavourable
TRANSPORT.	+	0	0	Unfavourable
STORAGE	0	0	0	Unfavourable
FINANCING	?	?	?	?
MERCHAN.	+	+	0	Unclear
PROMOTION	0	+	0	Unclear
INFORMATION	0	?	0	?
? =difficult to asses with the given variables.				
0 =negligible				
+ =some				
++=considerable				
* Or scale.				
SOURCE: based on the model presented by Oliver Williamson in "Economic Institutions of Capitalism", (1985) page 113.				

For the pasteurized line a different picture emerges, under the same ar more controlled channel is expected. In other words, higher specific ass risk of negative externalities "should", according to Williamson, indu ner control from manufacturers. Even though that is not exactly the case, ' uation by functions helps to understand why some of them are kept rol for pasteurized or cold products (Tables 9 and 10).

TABLE 10

VARIABLES WHICH IMPACT VERTICAL INTEGRATION INTO DISTRIBUTION FOR PASTEURIZED PRODUCTS:A TRANSACTION COST APPROACH BY FUNCTIONS.

FUNCTIONS	ECONOMIES OF SCOPE*	EXTERNALITIES	ASSET SPECIFICITY	VERTICAL INTEGRATION
SALES TO				
a)retailers	0 ⁽¹⁾	+	+	Favourable
b)consumers	++	+	+	Unclear
COLLECTION	0	0	0	Unclear
TRANSPORT.	0 ⁽¹⁾	+	++	Favourable
STORAGE	+	+	++	Favourable
FINANCING	?	?	?	?
MERCHANDISING	0 ⁽¹⁾	+	+	Unclear
RISK BEARING	0	++	++	Favourable
PROMOTION	?	?	+	?
INFORMATION	0	?	0	?
? =Difficult to assess with the given variables.				
0 =none				
+ =some				
++=considerable				
* Or Scale				
(1) Due to the diversification strategy followed by the five companies.				
SOURCE: based on the model presented by Oliver Williamson in "Economic Institutions of Capitalism", (1985) page 113.				

In fact as it can be seen in Table 10, according to the three variables used by Williamson, the risk bearing and the storage function which have been controlled by management, show a "favourable" tendency towards vertical integration. Nevertheless, it does not explain why sales to retailers have been left to be performed by the market and furthermore, why has the storage function been spun-off.

Other theories are needed to fully explain management choices in channel design. In the successive sections a separate analysis for each line will be proposed, given the intrinsic differences in product characteristics and in the nature of transactions. In particular, we would like to address the following questions which are left unanswered by existing approaches:

* What are the elements which determine management choice between "making" or "buying" a specific channel function?

* Why, even though channel structures have evolved in a very similar way for the five companies analysed, some key differences are found?

* Why have the cold and hot lines evolved in a totally different manner and, furthermore, why do their evolutions conflict with the predictions of transaction cost theory (Williamson, 1970)?

* Why, if according to marketing theory (Aspinwall, 1958), these products should have long and loose channels with traditional market transactions, the opposite is true for the hot line?

* Why does the hot line present a double structure where a portion of sales is still canalized through small independent wholesalers in spite of management decision of achieving total forward vertical integration?

* Why does the cold line generate a complicated and dynamic behaviour between wholesalers and retailers, which is largely out of the control of the manufacturer, but tolerated by him?

* In the cold line, where most functions are out of manufacturers control, why have all companies kept the risk bearing and promotion functions to be performed internally?

* Why did the large independent distributors fail to give good service to manufacturers?

In the following sections these, and other questions, will be answered by using the concepts presented in the literature review and the theoretical framework proposed in Chapter 3.

4.2.2. A Proposed Approach: The Hot Line

One alternative explanation for the high control of the distribution for hot line products could be a strategic behaviour by firms which are *building barriers to entry*. In fact, due to the high levels of concentration displayed in both industries, this is an attractive interpretation for some policy makers which rapidly call for competition law. We shall discuss this below and while doing the analysis, different interpretations to management behaviour will be presented.

i) Development of Barriers to Entry

A reason for this high control in the hot product line could be a strategic move with the objective of setting up a distribution network as a barrier to entry for new competitors and to enjoy monopoly rents. New entrants would have to incur the same sunk costs by buying trucks and storage centers in order to set up a similar distribution network and compete with INDULAC, ILAPECA, YUKERY and FRICA. The imperfections in the capital market, the argument follows, also contributes to the enhancement of the deterrent effect since the potential entrants would have to face increased difficulties in financing sunk costs. Judging by the results it could be said that the strategy has been successfully implemented, since INDULAC controls 75% of the powdered milk market, 75% of the condensed milk market and 25% of pasteurized milk market. ILAPECA, being its only competitor, controls the rest of the powder and condensed milk markets. In fruit juices the situation is similar, YUKERY and FRICA control 90% of the market.

Nevertheless, these arguments fail to explain why YUKERY and FRICA had historically used the market to perform channel functions by using independent distributors until five years ago, when they both decided to integrate vertically forward. Neither does it explain the reasons behind INDULAC's decision to spin-off the transportation function after having controlled it for over twenty years.

An alternative explanation to the barriers to entry argument could be that management had little alternative but to control functions if efficiency was to be achieved. Going back to the analysis presented in the theoretical framework, four situations are identified in which firms usually benefit from vertical integration, building barriers to entry is one of them, the other three are when:

- There is a lack of competitive markets for distribution functions.
- Avoiding post-contractual opportunistic behaviour.
- Solving agency problems.

These elements and others are discussed below.

ii) Lack of Competitive Markets for Channel Functions: Absolute Absence

Fifty years ago in Venezuela, the choice between "buying" or "making" channel functions was a very simple decision, since manufacturers could not find any suppliers in the market they had to "make" the functions internally. Hence, the

explanation for Nestlé's decision back in 1945, to integrate vertically into distribution was that they did not find in the market the suppliers for transportation services to move their products from the plant to retailers. This was an obvious case of what has been described as the lack of specialists, which characterized the early stages of the industry life cycle period in which firms are expected to be more vertically integrated since there is not yet enough demand to support specialized markets. (Stigler, 1951). In other words, lack of specialists are the consequence of diseconomies of scale in certain firm's functions when markets are too small or when industries are still young. The following quote is a good example:

" We used to do everything, all the transportation and selling was done by our employees. Distributing was a big problem and we needed people to do just that ... The roads were in terrible shape, and sometimes there even weren't any roads, thus we used everything we could: our own trucks but also mules, canoes, anything."

Nevertheless, later in 1965, INDULAC decided to spin-off that function and leave it to be performed by specialists who had developed as independent transportation companies. ILAPECA has also chosen the same alternative and sub-contracts the transportation in the market. The reasons for having decided to hive-off only the transportation function remains unanswered. We will discuss this below.

iii) Avoiding Monopoly Power from Suppliers of Channel

Functions

The industry life cycle argument proposed by Stigler (1951), helps to understand management preferences for vertical integration during the early stages of industry evolution. Nevertheless it fails to explain why 45 years later, in a mature dairy industry, INDULAC and ILAPECA still keep control over a high number of functions. The same argument applies for YUKERY and FRICA in the fruit juice industry (Table 6). Furthermore, they fail to use more wholesalers which is a way of spinning-off other functions like selling, collecting, servicing, merchandising, information and financing.

One of the reasons why management does not use more wholesalers is because it has a low opinion of independent distributors. They have been showing monopolistic behaviour by increasing margins at higher levels than it would cost manufacturers to perform the functions themselves. For example, FRICA and

YUKERY decided to integrate vertically forward and stop using independent wholesalers as a response to their increased monopolistic behaviour:

"They were always threatening that they would stop the delivery of products if we did not accept an increase in their margins. We tried to negotiate with them until we got fed up because their service was getting worse and worse".

According to management the service was deficient and getting increasingly bad reviews from manufacturers, because:

"They have taken too many products which have very little in common, requiring different channels and different services. Besides, they never pushed sales, they only took orders, they neither do the merchandising function. Our people spend between one hour and four hours organising the shelves, this is very important now that competition is tougher."

A FRICA manager defined channel control as follows:

"In other words, to control the channel means to be there on time, to rotate the products when it is needed and to take care of shelves. The clients (retailers) were very upset and they did not want to carry FRICA products because the distributors would not accept back the products that had expired"

Large independent distributors charge manufacturers around 15% of sales while on average the same functions are performed by manufacturers at a cost not higher than 8%. YUKERY claims that now it costs them almost 50% less to perform internally the wholesaling functions.

The sales manager from ILAPECA summarizes management perception:

"We have our own distributor (Sales Company) because nobody does it better than you. Besides if you depend on others, they can get organised, as has happened to others in the past, and ask for more and more margins. What can you do then?"

Management even expresses fear of the monopoly power from transportation companies:

"We have had serious problems with them because they want to increase the prices too much and if we don't agree they just stop the service... that is why we have some trucks of our own, to use them when we face problems with them ... you know, just to show them that we do not depend totally on their service."

iv) Facing Agency Costs: Moral Hazard Problems

There are a few questions which are still unanswered. If there is such a fear of monopolistic behaviour from transportation companies, why do they not follow the same behaviour as with independent distributors by integrating vertically? Furthermore, as can be seen from Table 4 the only function which has been left to the market by the four manufacturers of non-pasteurized products is transportation. The explanation for this apparently incongruous behaviour lies in management assessment of relative risks when comparing *the monopoly power* from transportation companies with the *agency costs* due to drivers careless behaviour when using company owned cars. In other words, manufacturers face moral hazard problems with drivers, since it is the manufacturer who is bearing the risk of any damage to the transportation units. Thus, agency problems can make vertical integration into transportation a very expensive organisational design. In the case of INDULAC, according to the words of the sales manager for non-pasteurized products:

"INDULAC does not have its own transportation units, we had them once but it turned out to be too expensive. Drivers did not take care of the trucks, they altered the receipts to get more payments, and so, gradually we started to use third parties. Now, we contract it all".

Or as an ILAPECA manager puts it:

"It is a matter of what is worse, in our case we believe it is worse to deal with truck drivers and their problems than with transportation companies."

v) Facing Agency Costs: Externalities

Another agency problem reflected in the evaluation of independent distributors performance by manufacturers as it was highlighted by a YUKERY manager is their lack of effort in assuming the *merchandising* function which management feels is highly important in marketing consumer goods.

"They want to charge us as if they took good care of the products, but they just throw the products in storage rooms and leave."

Hence, due to agency costs, it can be very expensive for the manufacturer to leave the merchandising function to be performed by the market. In other words, manufacturer's frustration comes from the difficulty of solving the agency problem of making the independent distributor worry, as much as he does, about keeping product

quality standards until they reach the consumer. There is obviously an agency problem of defining a self-enforcing contract, since it is in the manufacturer's best interest to give a high quality service and product to the consumer while not in the distributor's, who finds an incentive to shirk. Distributors get paid by units delivered and they claim not to be paid enough:

"They pay us too little, the cost of trucks and repairs have gone up, petrol has gone up, salaries have gone up, we try to do our work the best we can."

Since supervision of the independent distributor implies high monitoring costs, the manufacturer finds it more efficient to pay its own personnel to perform the required control. Even though it is not very clear whether independent distributors are inefficient or are simply unwilling to squeeze profit margins, after interviewing independent distributors, we are more inclined to believe in the former.

Thus, currently, given the theoretical elements above, the optimal channel design for 85% of company sales in the hot line is to buy the transportation function in the market in order to solve the risk bearing agency cost, and to hierarchically control the other channel functions in order to achieve two objectives: to avoid the monopolistic behaviour from independent distributors and to solve the agency problem for the merchandising function.

vi) Governance Costs: the Case of Scattered, Low Capital, and Family Owned Retail Shops

As analysed in the section above, the possibility of structurally separating the channel functions is an important element which splits physical *transportation* from other channel functions such as *sales*, *merchandising*, *servicing* and *financing*. It allows the manufacturer to abandon the transportation function while maintaining hierarchical control over the others with more strategic significance. But, what happens when such separation is not possible? In fact, if the functions cannot be split so as to be performed by different agents, the options are obvious; the manufacturer keeps them *all* under hierarchical control or leaves them *all* to be performed by the market, in this case the wholesaler.

The possibility of a structural separation of the channel will depend on the nature of the transaction. The greater the storage capacity and the more centralized purchasing power of the buyer, the higher the chances of separating the channel. As can be seen in Table 4, small food stores called "bodegas" represent 78.14% of food

outlets. For manufacturers it would be too costly to maintain frequent visits to these small retailers which are very numerous and where sales are also very small. In other words, *governance costs* or administration costs will be very high if they try to centralize all the functions.

"We use the independent distributors for the smaller retailers since it would be highly expensive for us to sell directly to them. You see, they do not have space to carry inventories and they do not have money to pay, thus, you have to sell them in small quantities more often".

Each of the manufacturers estimate that between 30,000 to 40,000 small retail outlets are reached by 1500 assume wholesalers. This information would seem to be accurate since, according to the data presented in Table 4, the total number of these small retailers is 45,710.

vii) Losses in Economies of Scope

Also high losses in *economies of scope* would be another cost to pay if manufacturers assumed the distribution to small retail outlets. These wholesalers do *not* work under exclusivity contracts with any of the manufacturers, since they are aware of the fact that increasing economies of scope by offering different products and brands is what makes this small scale wholesaling economically viable. they benefit from economies of scope by carrying different brands. This would obviously be difficult to achieve for any individual manufacturer.

Another reason to use wholesalers is that they have a *cost advantage* compared to manufacturers in financing small retailers. Since they usually know them personally, this solves the problem of informational asymmetry or moral hazard which would arise if the manufacturer extended credit to them. In the words of the ILAPECA management:

"The wholesalers are the only ones who can finance those small retailers, they know them very well personally and know how much credit they can give."

4.2.3. A Proposed Approach: The Cold Line

"This market is in the hands of the retailer, not in the hands of the manufacturer. It is controlled by the baker who can tell you: if you do not give me so and so margin I do not receive the milk today, and what are you going to do about it?"

"The company does not have any control of the business, we are in the hands of the distribution network, we cannot decide either our margins or our prices, not even our sales volume ... Our volume of sales depends on how the owner driver pushes and convinces the retailers -who are 80% bakeries- to buy our product ... Some times we loose the bakery, other times we loose the owner driver because competition offers them better deals. I tell you we are killing ourselves in order to please the distribution network."

These quotations illustrate the way manufacturers feel about the distribution of pasteurized products. They consider it a subworld of strange deals and unclear negotiations from which they prefer to stay away even at the high cost of loosing control of the business.

When comparing the pasteurized line with the increasingly controlled hot-line, all companies interviewed have been experiencing the opposite process, they have been spinning-off functions for which they have been unable to define a self-enforcing contract within a hierarchical structure. In other words, the agency problem of delegating some of the distribution functions has only been possible through traditional market relationships¹⁰. Hence, the manufacturer does not reach the retailer directly as it does in the hot line, on the contrary, the channel has two intermediaries, the wholesaler and the owner driver, before reaching the retailer (Figure 1 and 2).

Nevertheless, as can be seen in Table 6, two functions are kept under hierarchical control the risk-bearing and the promotion functions, we shall discuss the reasons for this apparently contradictory behaviour.

i) Facing Agency Costs: Moral Hazard Problems

As it was described at the beginning of the case, products travel from the manufacturer to the retailer in an average period of 24 hours. In order to accomplish this demanding schedule, wholesalers have to begin their operations as early as 2:00 A.M. dealing with owner drivers who in turn start visiting their clients from 3:30 A.M. until 2:00 P.M.. According to INDULAC and INLACA, when they used to control those functions internally, employees were not sufficiently motivated to

10 In this case solving agency problems implies disintegration of functions instead of vertical integration.

perform their tasks efficiently. INDULAC, in its early days, even tried to get directly to the retailers through a hierarchically controlled salesforce. That experience was a failure and they had to spin-off the functions due to high agency costs in two different situations. First, the salesmen very quickly realised that it was the organised baker who had the relative power-incentivating agreements among them, against the manufacturer. Secondly, since the transportation units were company property, the drivers took terrible care of them, developing a typical moral hazard behaviour which turned the operation into a highly expensive affair to the manufacturer:

"They used to say that they gave more margins to the retailers but in fact they were splitting between them the difference. Even though we had an agreement of exclusivity, they used to sell products from competition, on top of that, they never had the money to pay us. As far as the way they treated the trucks, that was another problem, the batteries got lost, the spare tyres got lost and accidents were an every day event. We decided to get rid of them, and of the wholesalers, now they negotiate among themselves and with the retailer, fine, that is not our problem and we do not want to know about it."

Why does management feel so unable to exert any control over the channel when the opposite is true for the case of the hot, non-pasteurized line? Why should such striking differences be found? Why, if according to some theories (Williamson, 1985), the distribution for the pasteurized line,-due to its high externalities¹¹ and its specific asset¹² requirements- should be more controlled than the hot line opposite is true?

ii) Lack of Competitive Markets for Distribution

Retailer's Market

Around 80% of pasteurized products are sold in bakeries which, due to their characteristics, enjoy high monopoly power and have become the *relevant client* to dairy manufacturers. In other words, the manufacturers develop competitive tools which do not reach the consumer and are only aimed to please the retailer. Retail outlets are by definition spatial monopolies which can be used to extract rents from manufacturers or other channel members. This monopoly power can be enhanced by

11 Danger of rapid product decay.

12 Refrigerated storing capacity.

the following conditions which are all met by the transactions between the bakery and the dairy manufacturers:

- 1) Consumer buying patterns. The more inclined the consumer is to visit a particular store the higher the retailer's power. This is true for bakeries where consumers go almost every day for fresh bread and breakfast.
- 2) The degree of brand loyalty for products. The lower the brand loyalty the higher the monopoly power since the consumer would buy any brand in the store which is nearer and more convenient¹³.
- 3) The possibilities for the consumer to self-serve. The less the chances for the customer to choose its own brand the higher the monopoly power enjoyed by the retailer. The over the counter design of bakery shops makes it difficult for consumers to make their own choices.
- 4) The availability of specific assets required to perform the sales and post sale service. The less availability the higher the monopoly power since there would be more competition from different products to use the assets. The importance of the refrigerated space will be discussed below.

Hence, the existence of a retailer's market explains why, for the distribution of pasteurized products the *promotion* function is kept under manufacturer's hierarchical control. (Table 7)

iii) The Impact of Perishability

The basic attribute which differentiates cold from hot line products is their high perishability and thus their higher chances of spoilage before reaching the consumer. Thus, it is important to stress how it affects the transaction and how it alters channel functions. Among others, the following characteristics of perishability are determinant for channel design when, as in the case of Venezuela, the percentage of independent family owned food retailers is very high and their purchasing patterns highly decentralized:

- 1) Sales are made in smaller quantities which means higher transaction costs per unit.
- 2) Sales are made more frequently, thus a larger salesforce is needed.

13 In a survey conducted by INDULAC, only 1% of consumers said that they would go to a different bakery if they did not find INDULAC's products.

- 3) There are specific physical asset requirements for retailers. Their cooling facilities are usually very limited. This increases their monopoly power.
- 4) If there are long distances involved, the negotiating terms may lean towards the retailer, especially if the transportation units are not refrigerated.

These characteristics make it very difficult to accomplish a structural separation of the channel and therefore impossible to split the transportation function from the others. The difficulty lies in the fact that it would be highly inefficient to have salesmen and drivers visiting the retailers every day when the driver alone can do it¹⁴.

iv) Opportunistic Behaviour and Appropriation of Specialized Quasi-Rents

The refrigerated space is such an important strategic issue and its supply in retail outlets so scarce, that management from the five companies have agreed that competition in this business can be narrowed down to a "war for refrigerators". To secure and sometimes to "seize" them has become the key competitive tool since a pre-selection of brands by the baker is almost unavoidable. Thus, it is not surprising to find that most sale efforts are made to persuade the baker to carry a specific brand and to fill the refrigerator with the company products before the competition does.

"We have to offer the retailer as many products as possible, juices, milk, yoghurt, chocolate drinks...the more products you have and the sooner you fill the refrigerator, the less the chances for competition to sell."

In consequence, bakers usually develop *opportunistic behaviour* since they know that they are in possession of a very important and scarce *specialized asset*: the refrigerated shelf space. In order to appropriate quasi-rents from it, they usually lie about how much margins the other manufacturers are offering in order to raise the bids. As it was discussed in the theoretical framework, manufacturers can benefit from vertical integration¹⁵, by avoiding post-contractual opportunistic behaviour.

14 This does not mean that manufacturers have totally given up the sales function to the owner drivers. INLACA controls a salesforce which visits periodically the retailers.

15 Together with situations in which there is lack of competitive markets, barriers to entry development or solving agency problems.

This is exactly the situation here, the bakers own a specific asset: the refrigerator, the suppliers market of goods is highly competitive since brand loyalty is very low, thus bakers extract specialized quasi-rents by asking for higher margins.

The alternative would be to integrate forward into retailing, in order to avoid the bakers squeezing manufacturers margins. Nevertheless, the costs which manufacturers have to face to escape from this opportunistic behaviour are, besides the obvious investment required in infrastructure: the governance or administrative costs, and the losses in economies of scale and scope. These costs, in this case, are higher than the benefits from integration. Developing a strategy of vertical integration would imply a dramatic reduction of product coverage in retailers, since probably a lot less than the current 12,500 retailers would be visited every day and the volume of sales would be reduced drastically bringing the manufacturers income below their equilibrium point.

Hence, with the high costs from integration, manufacturers have decided not to own retailers, nevertheless, some of them have decided to own refrigerators in the store. INLACA, for example, has developed a strategy of offering refrigerators on consignment to bakeries, with the condition of selling only INLACA products.¹⁶ Management claims that through this mechanism they have stopped price wars with competitors and have restricted opportunistic behaviour from bakers.

With the same theoretical approach an explanation can be given for INLACA's particular decision to retain the transportation function while all its competitors have chosen to leave it to the market.

"We have always performed the transportation function from the farmers to the plants and from there to the wholesalers, we think that it is one of our major strengths since it permits us to offer better quality than the competition. We are the only manufacturer who owns specially refrigerated transportation units for that purpose."

INLACA is the only major company with nationwide distribution of pasteurized products, which implies that their products have to travel longer distances than that of the competition. For this reason, INLACA is also the only one who owns a large fleet of cistern trucks for transporting milk. This highly specific asset with

16 INLACA owns refrigerators in approximately 10% of the bakeries they visit. When this is the case, the sales manager calls them "our bakeries" since only INLACA products can be sold there, otherwise they take the refrigerator away.

very little alternative use is a clear case of post-contractual opportunistic behaviour avoidance. In other words, since as assets become more specific, quasi-rents are created, management has decided to integrate the function in order to avoid the possibility of opportunistic behaviour by third parties when trying to appropriate quasi-rents.

v) Solving Agency Problems: Externalities and Risk Bearing

High perishability increases the chances for negative externalities, since the brand name reputation can be badly damaged and sales can be negatively affected in the long run¹⁷. If a spoiled product is sold to a consumer and the brand image is negatively impacted, the retailer can always sell products from competitors making the manufacturer the only loser. Thus, it is in the best interest of the manufacturer to defend product quality whereas the same is not necessarily true in the case of retailers. Negative externalities have encouraged firms to integrate forward and to control distribution as has been historically the case in U.S.A. for beer, chocolates and meat industries (Williamson, 1985).

The alternative, for the manufacturer, for solving the externality problem when vertical integration is too costly and its benefits do not outweigh its costs, is to bear the risk of product damage. In other words, the manufacturer internalizes the externality by assuming the cost of product damage instead of making other channel members pay for it. The way the manufacturer does it, is by implementing highly flexible policies for returning damaged products. This explains why the *risk bearing* function is hierarchically controlled by the manufacturer (Table 6). INLACA's marketing manager points out:

"We have to be responsible for damaged products, if we do not do it, it is our brand name that suffers and nobody but us cares."

But why do manufacturers usually set limits to the percentage of returned products from the retailers? Why if they are solving externality problem do they

17 One of the strategies followed by brewers in Venezuela has been to remove from shelves and destroy the products which have not been sold by the expiry date (beer has usually 3 months of shelf life). When Nacional faced cash flow problems it stopped replacing old beer and consumers responded by changing brands.

develop rules which could result in not solving the original problem it was designed to face?

" They do not care about keeping the goods cold and in order to save electricity they turn off the refrigerators during the night."

Thus, avoiding an agency cost by internalizing the risk-bearing function induces moral hazard behaviour from retailers. Since the retailers, as agents, feel that their actions are "insured" by the manufacturer, as principal, they develop moral hazard actions like unplugging the refrigerators in order to save electricity, regardless of the negative impact it has on product quality. In other words, the agents display a conduct which works in their best interests but against the principal's. The alternative policy for the manufacturer, in order to limit such moral hazard behaviour, is to regulate the return of damaged products according to pre-established ratios given by quality control standards.

These apparent contradictions explain why manufacturers have preferred the flexibility of market transactions instead of trying to define self-enforcing contracts within a hierarchical structure. In the five companies interviewed, management has decided to leave to the market as many functions as possible, showing that as opposed to the hot line, in this case, the market shows a clear superiority in solving agency problems.

4.2.4. Final Comments

Throughout the discussion of the case the main objective has been to look at management decisions with the analytical tools given by different theories. By doing so those belonging to agency theory have proven to be more useful than others. Also, using functions as units of analysis has proven to be better to evaluate strategic decisions. Also, the reinterpretation of corporate behaviour by using the theoretical framework given in Chapter 3 has allowed us to reach a deeper understanding of the rationale behind management actions.

CHAPTER 5.
CASE 2. THE APPAREL INDUSTRY:
Financial Market Imperfections and Vertical Integration
into Retailing

Introduction

To identify the best channel structure for distributing and selling men's ready-to-wear garments in Venezuela, a normative approach could be followed. Doing so, such a channel would probably show the following pattern: manufacturers would be using middlemen to serve smaller stores and shops, while selling directly to big department stores. Products aimed at high income consumers might enjoy more direct distribution through hierarchically controlled shops¹, where brand awareness is developed with top quality service and information. Following this concept, some companies have set up franchises with the objective of increasing direct contact with consumers without incurring the high costs of opening up the stores. In the apparel industry, Bennetton, Ted Lapidus, Phillip Laurent and Christian Dior are successful examples of this type of strategy.

Two apparel manufacturers will be analysed in this case, MONTECRISTO and RORI INTERNACIONAL, with the objective of understanding why management decided to integrate vertically forward into distribution channels after 25 years of operations.

The case we will be analysing is particularly interesting since one of the companies interviewed (MONTECRISTO) has integrated forward into retailing for other reasons than those mentioned above. The company decided to open its own exclusive stores in order to break the monopolistic behaviour developed by retailers who demanded increasingly longer and cheaper credit terms. This meant reducing the number of outlets from over 100 to just 15. The other company in this case, RORI, faced similar problems and also integrated forward into retailing, but with a different and less radical strategy. Thus, a particular form of competition led companies to

¹ These shops can also be set up by renting floor space in large department stores.

offer increasing volumes of financing to retailers until it became cheaper for companies to open their own stores.

In previous chapters, we argued in favour of the importance of this channel function in distribution strategy and remarked the general lack of attention given to it in the literature. Intra-channel financing², and its consequences is what determines forward vertical integration in this case.

5.1. The Description

5.1.1. *The Industry*

The apparel sector in Venezuela is highly atomized, according to OCEI³ (Statistics Central Office) there are 957 manufacturers of which over 90% had less than 100 employees.

Nevertheless, the men's wear market presents the highest levels of concentration with 6% of the manufacturing units producing 45% of the total output⁴. Furthermore, within this market, men's suits, also called the "heavy line" is highly concentrated with two companies controlling 80% of the market. (Table 2).

² Financing given only among channel members, not consumer credit.

³ 25 Anos de Encuesta Industrial, OCEI, 1986.

⁴ Estudio sobre la Competitividad del Sector de la industria de la Confeccion. Working Paper. Alonso, Oswaldo. July, 1990.

TABLE 1

**NUMBER OF MANUFACTURERS ACCORDING TO LINE OF BUSINESS
AND NUMBER OF EMPLOYEES.**

LINE OF BUSINESS	LESS THAN 100 TOTAL	OVER 100	
UNDERWEAR & BATHING	38	11	49
SHIRTS	116	5	121
BABY WEAR	16	2	18
JEANS	9	4	13
TIES	13	-	13
KNITTED WEAR	91	14	105
MEN'S WEAR	193	13	206
WOMEN'S WEAR	248	4	252
OTHERS	155	25	180
TOTAL	879	78	957
PERCENTAGE	91.8	8.2	100
SOURCE: ENCUESTA INDUSTRIAL, OCEI, 1988 and "Estudio Sobre la Competitividad Industrial de la Industria de la Confeccion". Alonso, O. July 1990.			

Higher degrees of market concentration in the production of men's suits are common. Men's ready to wear suits have longer life cycles than casual or women's wear, since they are usually designed with more traditional and classic lines. These attributes make them less dependent on fashion and fad, which in turn permits mass production and important economies of scale. Thus, the market is usually controlled by fewer and larger manufacturers with mass production technology, mass distribution and a strategy concentrated in lower prices.

This contrasts with the low volume, direct sales, personal service and higher prices which have characterized tailor shops for decades. In fact, with technological change, lower costs could be achieved by larger manufacturers. Also, with the emergence of larger firms, the production and retailing functions -once unified under the responsibility of the tailor- were separated into two different organisations with radically different objectives. This has had important implications in their distribution process and marketing strategies. The manufacturer faced the challenge of having to develop a mass distribution strategy which could compete with the high quality

service of tailor shops. The strategy chosen by MONTECRISTO and DORSAY has been to place the emphasis on lower prices.

TABLE 2

MANUFACTURER	MARKET SHARE HEAVY LINE
MONTECRISTO	60%
RORI	20%
DORSAY	15%
OTHERS	5%
TOTAL	100%

5.1.2. The Companies Interviewed

In this case two companies will be analysed, Confecciones Paris C.A. which from now on will be called by its trademark: MONTECRISTO, and RORI Internacional. Both have specialized in the production of men's suits for over 25 years, nevertheless they claim that they do not compete with each other since they have developed strategies to serve "radically different" target markets. According to the general manager of MONTECRISTO:

"We do not have competition. RORI and DORSAY are not my competitors because they go to a different consumer. Dorsay's suits are aimed to the lower income consumer and RORI's high prices only appeal to the consumer who can afford it. Our target is the middle income consumer"

Even though MONTECRISTO's management insists on the issue of lack of competition for their products, this could be a distorted perception which results from the following elements. They are currently facing a seller's market situation where it is very difficult for them to totally satisfy the existing demand for their products⁵. Furthermore, after they integrated forward they have been concentrating their efforts on increasing sales through their totally owned stores where they sell only their products. This highly controlled structure has induced them to concentrate on

5 They are evaluating an expansion plan project.

efficiency, a dangerous inward looking strategy, without worrying about what competition is doing⁶. According to management they "see" themselves as manufacturers, while retailing is something they do because they have to have a "place" to sell their products. Their major task is to produce "a good value product which would sell by itself". Thus, they have not "seen" competition and even though they have been constantly increasing sales, the question of what would have happened if they had been more aggressive, remains unanswered.

Both companies have integrated forward into retailing with two different strategies. MONTECRISTO was the first⁷ when management decided in 1984 to stop selling to the 100 retailers which carried their products, while opening four hierarchically controlled and totally owned stores. The number of outlets has now been increased to 30 and the policy has been to "sell to the consumer at wholesale prices", meaning 50% below the recommended retail price⁸. RORI on the other hand has also integrated into retailing by opening three stores which operate as profit centers. As opposed to MONTECRISTO, RORI continues to sell to independent retailers. This arrangement has been possible since RORI does not compete in price with its clients.

MONTECRISTO started operations in 1956 with three main products: trousers, jackets and suits. Nevertheless, since 1984, after management decided to integrate vertically into retailing, the company began a product diversification strategy in order to be able to offer consumers the required variety of garments and accessories in their hierarchically controlled retail outlets. To achieve this objective, they diversified into shirts, ties and dinner-jackets. Additionally they began to subcontract to smaller manufacturers the production of underwear, flannel shirts and belts.

An interesting element of the company's marketing strategy has been to use only one trade-mark, MONTECRISTO, for all products either manufactured by them

⁶ One of the elements mentioned by management, which was seen as a "relief" after integrating forward, was the fact that they did not have to "listen any more" to the retailers demands regarding fashion, colours, competition, etc.

⁷ DORSAY followed and immediately after, RORI.

⁸ In Venezuela the recommended retailing price "Precio de Venta al Publico" (P.V.P.) is set and stamped by manufacturers.

or by concessionaires. They have historically invested large sums in advertising to create brand awareness. The success of this strategy was finally confirmed after integration took place when management realised that consumers "looked" for the MONTECRISTO brand and were willing to travel in order to buy their products in their totally owned stores which are also named MONTECRISTO. These stores can only sell MONTECRISTO products and within the same strategy, MONTECRISTO products can only be sold in stores which are hierarchically controlled.

RORI, on the other hand, started operations in 1964 manufacturing "light" products like shirts, swimming costumes and casual jackets. Eight years later, in 1972, they began production of men's suits. During the 80's, RORI decided to diversify into women's wear and casual wear for both sexes.

Contrary to MONTECRISTO, RORI has followed a strategy by which they use different names for a diverse variety of products which are targeted to specific market segments. Thus, they use Christian Dior as a name for top quality suits, Phillip Laurent for a less demanding market segment and JEUNESSE for casual wear.

5.1.3. Channel Structure

The channel structure of both companies has been characterized by a lack of wholesalers⁹ and a traditional direct relationship with retailers.(Figure 1 and Figure 3)

When they started operations manufacturers of men's suits were competing for the scarce retailing services available in a situation in which large economies scale pushed them to produce more. Retailers made good use of this circumstance and benefited from their spatial monopoly demanding longer and better credit terms. Manufacturers were desperate to sell more and began to compete by giving longer financing periods to retailers. The following quote from a RORI manager illustrates what happened:

"We do not know who started but we ended up with an average of 240 days in pending collections, retailers just did not want to pay, they were *spoiled* by us, the big manufacturers."

⁹ They have used wholesalers very seldom and for no more than an average of 5% of sales,

The direct contact with manufacturers who were competing fiercely with each other, was used by retailers to extract monopoly profits at the expense of manufacturers margins. Thus integrating the wholesaling function and eliminating the possibility of using a middleman (who has less degrees of freedom to negotiate prices and conditions with retailers), automatically increased the manufacturers speed of reaction to competitors price changes (in this case better credit terms to retailers) which ended in a war between manufacturers to please the retailer. (Coughlan, 1985).

FIGURE 1
CHANNEL STRUCTURE BEFORE 1984
MONTECRISTO

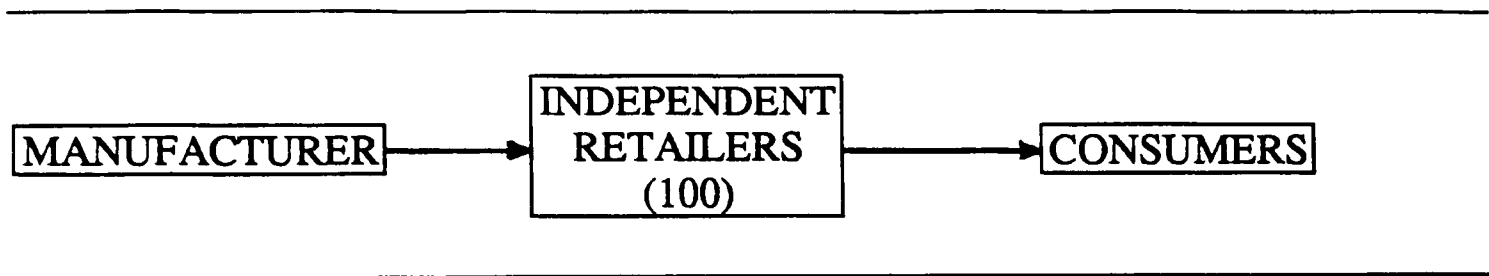
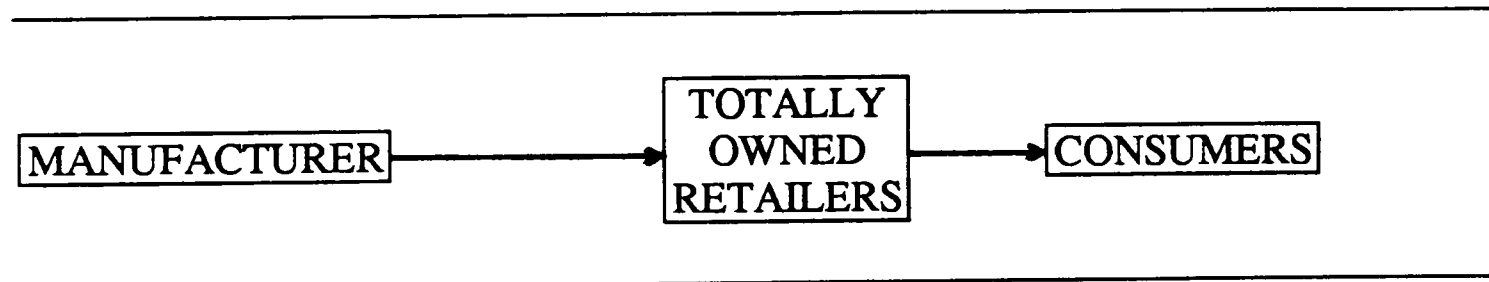


FIGURE 2
CHANNEL STRUCTURE AFTER 1984
MONTECRISTO



MONTECRISTO decided to integrate into retailing in 1984 when management stopped selling to their 100 clients and opened four totally owned stores through which they sold 50% less than the previous year. By 1986 they had 15 stores and 20 by 1987. In 1990, seven years after following the total integration strategy, MONTECRISTO owned 30 stores. According to management it took them only three years to reach the same sales volume they had before integrating:

"We had to face a fall of over 50% in sales volume the year we decided to integrate but let me tell you, we felt a lot better with the cash flow. We decided to aggressively collect our pending receivables in order to finance our new stores. Besides, it took

us only three years to reach the same sales volume. By 1987, three years after integrating and with 20 stores operating we were selling the same volumes as in 1984, before integration".

It is important to stress that it is management's perception that, regardless of the costs they had to take the step to integrate forward if they were to "survive". When management was asked about the high setting-up costs for their stores the answer was:

" We had over 250 million bolivares¹⁰ in accounts receivables and we calculated that to open a store would cost us between 10 and 15 million bolivares depending on the area. We could open 20 stores with the money our clients had from us"

It is important to stress the fact that for management, the drastic decision of decreasing the number of retailers from over 100 to 3 was perceived as a viable alternative since 65% of their sales were (and still are) concentrated in two major cities: Caracas and Maracay. The first 4 stores were opened there and they recuperated sales volume very quickly.

"People looked for us, they had known us for a long time, they wanted MONTECRISTO. With only one store in Maracay during the first year we could reach 60% of the sales we used to have in the area."

When MONTECRISTO management was asked for the reasons for integrating they answered:

" We got tired of the abusive conduct of retailers, they did not pay us, when competition gave them 90 days credit we gave them 120, then 150 and we ended up with over 360 days credit, it was crazy. We decided to sell directly to consumers and having gotten rid of the financing problem, we could at the same time, reduce our prices¹¹."

RORI's channel structure also suffered important changes when they faced the same problems with retailers as well as having to respond to competitors integrating moves. MONTECRISTO was gradually opening stores where they started selling at

¹⁰ \$ 17.5 million at the official exchange rate.

¹¹ In order to be able to maintain such long credit terms, MONTECRISTO had to keep increasing prices to retailers.

dramatically lower prices, 50% below market price. After MONTECRISTO decided to integrate, it triggered a chain of reaction among competitors.

DORSAY, who had been a company which specialized in the retail business, decided to integrate backwards into production, *also* with the strategy of selling at lower prices. RORI decided to follow a different strategy. Since everybody was integrating they saw an opportunity in continuing to do business with retailers since now, with less suppliers, the suppliers market structure was less competitive. Thus, RORI opened only 4 retail outlets, managed as profit centers and with the intention of breaking their high dependability on retailers and reaching the consumer directly. In other words, RORI's decision to integrate forward has more of the traditional elements mentioned at the beginning of the case than MONTECRISTO's.

In the words of RORI's general manager:

"We wanted to reach the consumer directly, follow his taste and needs, and serve him better. We also wanted to develop our own brand image. On the other hand we did not want to get into the same costly financial game with retailers, we wanted to have an alternative channel in which to sell our products".

RORI sells 30% of their annual sales through their stores¹², while the rest is channeled through former clients. This parallel channel structure has allowed RORI to enter the retailing business without sacrificing economies of scope. In other words, since their stores operate as profit centers, they sell a wide variety of products from other manufacturers.

¹² As in the case of MONTECRISTO, RORI has a high sales concentration in major cities. For example, Caracas represents 50% of its market.

FIGURE 3
CHANNEL STRUCTURE BEFORE 1985
RORI

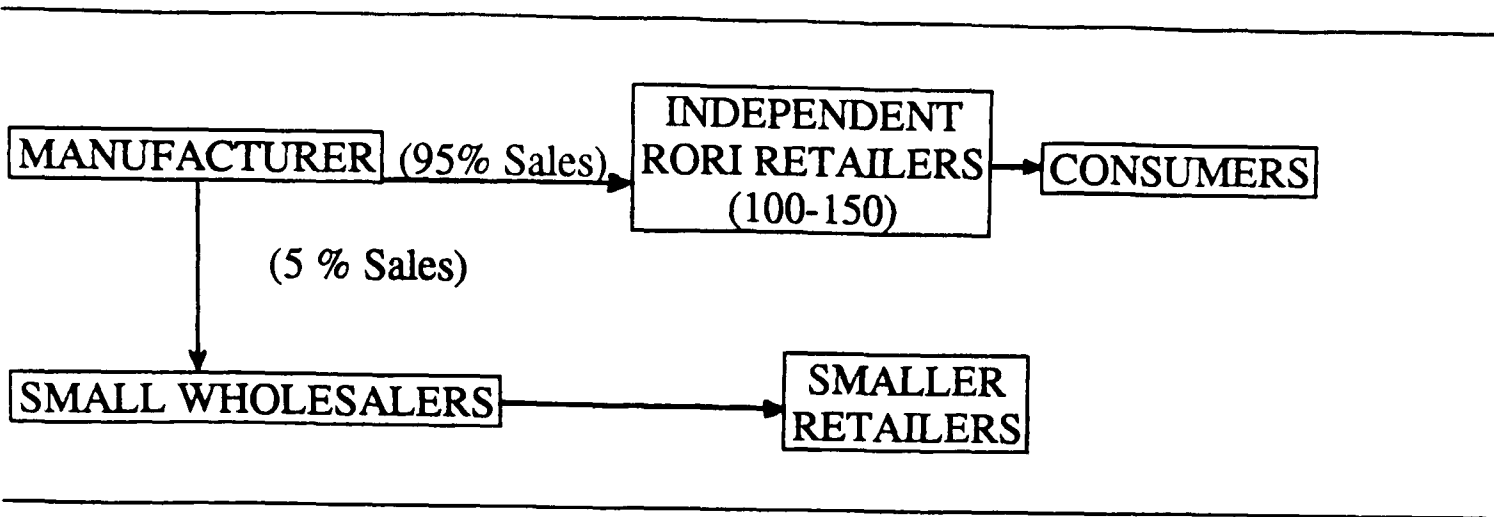
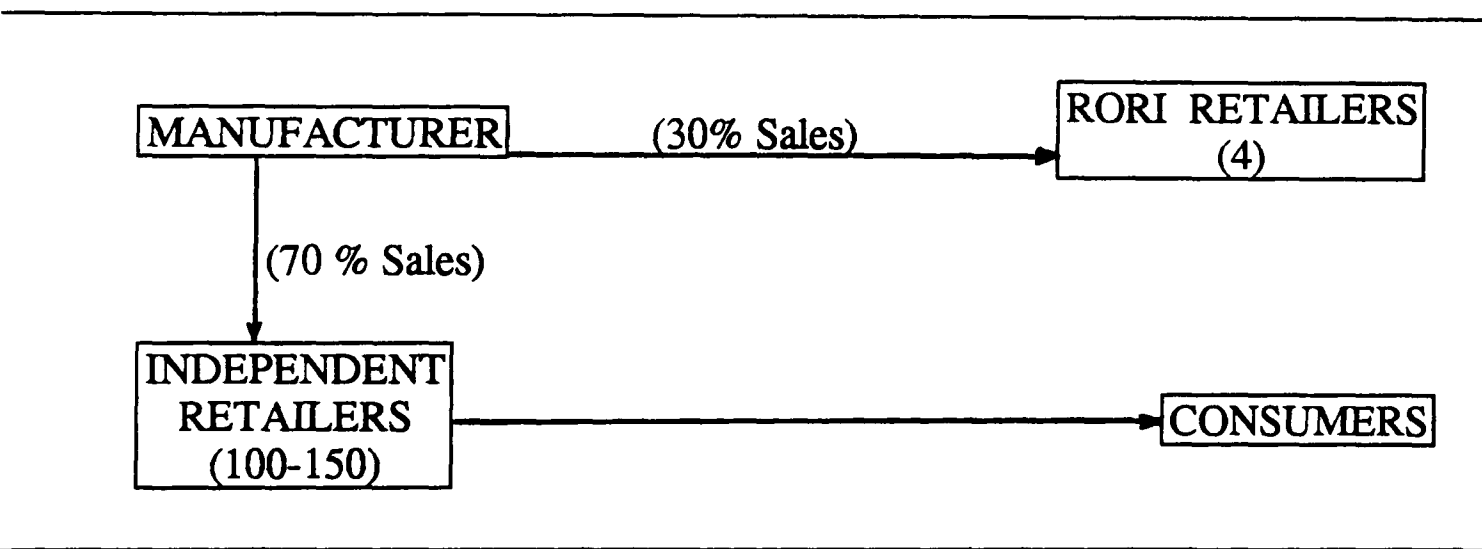


FIGURE 4
CHANNEL STRUCTURE AFTER 1985
RORI



5.1.4. Channel Functions: Who Performs What?

One interesting characteristic which stands out in this case is the close relationship which both manufacturers have maintained with retailers. MONTECRISTO has never used wholesalers, and RORI only sometimes, to reach very small retailers.

About this, MONTECRISTO's general manager stated:

"Only once we considered the possibility of selling to wholesalers. That was when we were thinking of opening one distributor of our own, only for tax purposes. We finally decided not to do it. We think that using wholesalers would imply an unnecessary price increase. Why should we pay somebody else to do what we can do better and cheaper?"

The wholesaling function, being highly "contestable"¹³ (Baumol, 1982) has always been controlled by manufacturers. Both companies interviewed expressed that, with little investment, they could reach retailers directly instead of having to rely on independent wholesalers. Before the wave of integration, they used a sales force of 5 to 10 salesmen, who visited, with an average frequency of 3 weeks, around 150 retailers located in the most important cities of the country.

"We have always preferred to have our own salesforce. Middlemen would increase needlessly the distribution costs...With inflation the middlemen is bound to disappear"

An analysis of who performs which function permits an evaluation of their relative strategic significance to the manufacturer. According to the information given by both companies, most functions have always been highly controlled by the manufacturer.

¹³ Markets with low entry and exit barriers which are vulnerable to occasional entrances of new competitors.

TABLE 3
WHO PERFORMED CHANNEL FUNCTIONS IN THE DISTRIBUTION OF
MEN'S SUITS BEFORE INTEGRATION.

FUNCTIONS	COMPANIES	
	RORI	MONTECRISTO
SALES TO:		
a)Retailers	MAN.	MAN.
b)Consumers	RET.	RET.
COLLECTION	MAN.	MAN.
TRANSPORTATION	MAN/I.T.C.	MAN/I.T.C.
FINANCING	MAN.	MAN.
MERCHANDISING	RET.	RET.
RISK BEARING	RET.	RET.
PROMOTION	MAN.	MAN.
INFORMATION	MAN.	MAN.
SERVICE	RET.	RET.
MAN.:Manufacturer		
RET.:Retailer		
I.T.C.:Independent Transportation Company.		

After integrating, all functions, except transportation, were assumed by MONTECRISTO for 100% of sales and by RORI for 30% of sales.

5.2. The Analysis

Some important variables about market and channel structure have been pointed out, as well as the strategies followed and decisions made by the companies interviewed. Now, we will present an analysis of channel structure evolution according to existing approaches and, while identifying the theoretical gaps, an alternative explanation will be given using the theoretical framework.

5.2.1. Existing Approaches

According to the theories analysed in the literature review, the following alternative structures should be expected as far as channel design is concerned.

According to Aspinwall's model -which is based in the evaluation of five product characteristics to determine the "optimal" channel structure- men's ready to wear suits are located between the red and orange products (Table 4). In other words,

they should have a rather long channel structure with the use of middlemen for smaller shops, and direct shipment from the factory to larger department stores.

TABLE 4
COLOUR CLASSIFICATION FOR MEN'S SUITS ACCORDING TO
ASPINWALL

PRODUCT			
CHARACTERISTICS	RED GOODS	ORANGE GOODS	MEN'S
SUITS			
REPLACEMENT RATE	HIGH	MED	MED
GROSS MARGIN	LOW	MED	MED
LEVEL OF ADJUSTMENT*	LOW	MED	LOW
TIME OF CONSUMPTION	LOW	MED	MED
SEARCHING TIME	LOW	MED	MED
TYPE OF CHANNEL	Long	Med.	Med.
* Number of services applied to goods in order to meet the exact needs of the consumer.			

Nevertheless, neither of the companies interviewed favoured the use of middlemen, as long channels may call for. They have always served retailers directly, and furthermore, contrary to what Stigler's functional theory would predict¹⁴, they have been re-orienting their strategy towards a more hierarchically controlled channel.

Also, according to Williamson's transaction cost theory, managers should be favouring less controlled channels. Furthermore according to the theory, retailers should not be totally integrated since there would be high losses in economies of scope, which would not be compensated by the gains in integration (Table 4).

¹⁴ Looser organisational forms as the industry matures.

TABLE 4
VARIABLES WHICH IMPACT VERTICAL INTEGRATION INTO DISTRIBUTION: A TRANSACTION COST APPROACH BY FUNCTIONS.

FUNCTIONS	ECONOMIES OF SCOPE* INTEGRATION	EXTERNALITIES	ASSET SPECIFICITY	VERTICAL
SALES TO:				
a) Consumers	++	0/+	0/+	Unfavourable
b) Retailers	+	0	0	Unfavourable
COLLECTION	+	0	0	Unfavourable
TRANSPORTATION	0	0	0	Unfavourable
STORAGE				
FINANCING TO:				
a) Retailers	?	0	0	?
MERCHANDISING	?	?	+	?
RISK BEARING	0	+	+	Favourable
PROMOTION	0	0	0	Unfavourable
INFORMATION	0	?	?	?
SERVICE**	++	+	+	Unclear
0 =negligible				
+ =some				
++=considerable				
? =difficult to assess with given variables.				
* or scale.				
** sale and post-sales services.				

The following quote from Oliver Williamson evaluating integration decisions reported by Alfred Chandler summarizes the transaction cost argument:

"...thus forward vertical integration is never observed if externalities and asset specificity are negligible, or if it does occur it is mistaken and will be eventually undone. There simply are no governance or measurement purposes to be served in those circumstances." (Williamson,O. 1985. p.113)

And in the next paragraph he specifically argues:

"Integration into final sales and service is mainly observed for consumer and producer durables where considerable knowledge is imparted at point of sale and specialized follow-up on service is required."

Neither of the characteristics mentioned by Williamson are met by the companies in this case but, in spite of that, they have both integrated into retailing. Could it then be argued, along the lines of Williamson (1985), that by vertically

integrating the companies have made a mistake¹⁵? The answer is may be, but as long as management believe (as they do) that it has been a successful strategic move and that they are much better-off now than before integrating, a deeper understanding of their behaviour is required. In the following sections an evaluation of the elements which have impacted management decisions will be presented.

5.2.2. Proposed Approach

We will now present an alternative view guided by the following questions which remain unanswered.

- * What are the determinants of management choice between "making" or "buying" a specific channel function?

- * Why did they integrate forward into retailing if, according to traditional marketing theory and transaction cost theory, looser forms of organisation should be found in this industry?

- * Why did MONTECRISTO and RORI not use wholesalers and always preferred to serve directly the client-retailer?

- * Why did manufacturers end up giving such lax credit terms?

- * Why competition among manufacturers was centered on longer credit terms instead of lower prices to retailers?

- * Why did they not spin-off the financing function?

- * Why could retailers extract monopoly rents from manufacturers?

- * Why, with the apparel industry reaching maturity, are MONTECRISTO and RORI integrating into retailing if, according to the industry life cycle theory, (Stigler,1957) (Mallen,1973) the opposite should be occurring?

¹⁵ See the concept of "mistaken integration" in Williamson, O. (1985), *The Economic Institutions of Capitalism*, First Paper Back Edition, Free Press, p.111.. Also in Chapter 1, see Williamson's model.

i) Barriers to Entry

One of the reasons for controlling distribution could be the decision to increase barriers to entry in order to deter competition. In fact, with the recent wave of forward integration, other manufacturers, which have not follow such strategy, feel that lacking totally owned stores is hampering their competitiveness. The general manager from Willson Athletics, a medium size apparel manufacturer for men's sports wear and underwear, believed that they had made a historical mistake not developing their own distribution network:

"Our lines do not sell well because retailers do not understand the concept. When we develop a beach *line*, it is because we have made the effort to design different garments which can be matched together. If retailers do not display the merchandise properly, or if they do not inform the consumer, all the effort is lost. *All the big manufacturers have their own stores* and we can not sell where the big sales are. Our distribution strategy has been a mistake."

Willson Athletics was sold to a Colombian apparel corporation after new economic policies were taken in 1989 and the apparel industry began to face foreign competition.

Some manufacturers believe that barriers to entry in distribution have been developing very fast since MONTECRISTO lead the vertical integration wave in 1985. Nevertheless, it could also be argued that drastic decisions such as MONTECRISTO's, by which it decided to stop selling to independent retailers regardless of the risk involved, looks more like a desperate response to a hostile environment than a strategic move to build barriers to entry.

But as it has been found in other industries,(Cases 3, 4 and 5), since organising distribution requires the harmonization of, usually conflicting objectives, to design an efficient channel may imply to build barriers to entry.

In the following sections some of this conflicting objectives will be discussed.

ii) Lack of Competitive Markets for Distribution Functions

For manufacturers the possibility to grow through mass production¹⁶ implied that they needed to set up a faster and denser distribution network for which they required more retail outlets than could be supplied by the market. Consequently both companies dedicated important resources to develop such a specialized market:

"During the 70's we decided that, in order to grow, we had to finance retailers. In those days RORI would take a client with potential and would finance him with an inventory which the client would never be able to buy himself. In this manner RORI penetrated the market."

"We used to convince shop owners to carry MONTECRISTO products, even if they were commercializing women's and children's clothes, the idea was to leave them the garments on consignment and wait until they sold them. In this manner we used to finance all their inventories with the hope that they would start carrying only our products¹⁷".

Therefore to take over the financing function was a strategic decision which both companies adopted in order to develop specialized markets for retailing. Following the same argument, one of the reasons why they did not use independent wholesalers was because manufacturers had better access to loan markets.

"In order to finance our clients we used to get the credit from the banks. We have always had a very good and healthy relationship with them."

The other reason was that the wholesalers market was highly inefficient, since according to manufacturers they could perform channel functions better and *cheaper* than specialists.

¹⁶ Mass production in this product line is possible due to its less dependability on fashion and fad.

¹⁷ This was the same strategy followed by POLAR (see the beer case) when they dedicated large resources to finance inventories for bars in order to develop specialized markets for retailing.

iii) Monopolistic Power Enjoyed by Existent Suppliers: A

Retailer's Market

For all practical purposes the retailer became the relevant client and all manufacturers efforts were aimed to please them. The reasons for this conduct are to be found in the relative scarcity of specialised stores¹⁸ usually small, family owned shops with very little managerial skills where the owner can influence the consumer buying decision.

The consumer was important to the manufacturer because he could buy more, but he would do it only if prices were lower, but, paradoxically, retailers' monopolistic behaviour frustrated manufacturers efforts in lowering prices. The longer the credit terms imposed by retailers, the higher the prices manufacturers had to set for their products in order to finance retailers.

MONTECRISTO's management decided to integrate forward because they were facing a difficult cash flow situation due to the previously mentioned lax credit policy. Their accounts receivables averaged over 360 days and still retailers thought that they deserved better treatment. Until the very last moment they expressed their discontent with MONTECRISTO's "pushy" attitude of trying to make them pay. MONTECRISTO on the other hand decided that they could not continue with the "ridiculous" credit terms they had been giving to their clients. This practice had started during the 70's when manufacturers pushed sales to increase market share and when the financing function became the most important competitive tool.

Retailers enjoyed their spatial monopoly and benefited highly by appropriating the production surplus as would be expected in a situation of a retailer's market¹⁹. Thus, even though MONTECRISTO had never thought of opening its own stores -and that is why they tried to grow by extending better credit terms to clients- they realized that it had become cheaper to integrate than to continue financing clients. The big question was if the benefits from integration could overweight the costs.

¹⁸ According to the companies interviewed there have never been more than 150 retailers in the whole country which would sell men's suits.

¹⁹ For the definition of a retailer's market see Chapter 3.

iv) Financial Market Imperfections

Imperfections in the loan market lead the distribution system to generate the financing it needs through an internal credit market (Chapters 1 and 4). These imperfections are the consequence of asymmetric information, moral hazard and adverse selection problems which determine that the loan market reaches equilibrium while in a situation of *credit rationing* (Stiglitz & Weiss, 1981). This rationing is what induces channel members to provide the financing internally, especially when they enjoy a cost advantage due to better access to information regarding business risk assessment. Since this is *intra-channel* financing -credit given among channel members and not to consumers- this can also result in a cost advantage for the channel member from better ex-post credit control.

In the case of RORI and MONTECRISTO, both companies decided to finance retailers as a strategy for growth. This is, more than likely, due to the fact that they enjoyed informational and control advantages when compared to banks in extending credit to retailers. They probably had a cost advantage which they would have been able to benefit from, nevertheless retailers, by exerting spatial monopoly, appropriated all the rents²⁰.

v) Losses in Economies of Scale And Scope

The costs generated by losses in economies of scale and scope was the major consideration made by managers in MONTECRISTO before deciding to integrate:

"We were trapped since we knew that we could not escape from the vicious circle we had started. They would not pay and they knew that we did not have any alternative, we were losing money, and the more we sold the more we lost. On the other hand we could not implement the low price strategy we had defined. By 1984 we evaluated the situation which had deteriorated so much that we realized that we could be better off by opening our own stores."

²⁰ See Chapter 3 Financing: the Forgotten Function in Distribution.

5.2.3. Final Comments

After having made the analysis in terms of the costs and benefits of integration for the companies interviewed, it seems that they have been generally successful. Nevertheless, the high costs of setting up stores and the high losses on economies of scale and scope are difficult to evaluate in the case of MONTECRISTO since the comparison is always made *only* with the desperate situation that existed before integrating. In fact, other less costly alternatives, such as franchise agreements; have not been evaluated by management, in spite of the fact they would allow them to have a higher presence in the market with considerably lower set-up costs.

An obsessive preoccupation with control and lack of confidence in contracts are the two factors which are mentioned by management as the main reasons not to open franchises. Nevertheless, it is not clear that it would be a better alternative for them.

CHAPTER 6

CASE 3. VERTICAL CONTROL IN THE BEER INDUSTRY: Building Channels May Imply Building Walls

Introduction

This case will deal with the evolution of distribution strategy in the beer industry in Venezuela. Forty years ago the two companies interviewed competed strongly for market leadership. The performance of these companies show a dramatically different evolution: POLAR, the success story, now controls 85% of the market, whereas CERVECERA NACIONAL, after almost facing bankruptcy, is now being taken over by POLAR.

The design and development of an efficient distribution network has been one of POLAR's most powerful competitive tools; and nowadays it is considered an important barrier to entry by local investors and foreign competition¹. The crucial element was to set up a network which would guarantee product freshness and availability.

These two objectives triggered a strategy of heavy reliance on the distribution system and required the development of an extensive network, which would keep the product in good condition. At the end of the day, the distribution system became synonymous to quality and competitive advantage.

Thus, what makes this case interesting is the analysis of how two companies in the same industry, facing equal market imperfections, adopted different strategies and how their behaviour has influenced the outcome. Moreover, it shows clearly how management objectives in terms of quality and competitiveness may imply building structures which in the end are perceived by others as barriers to entry, but which are in fact just the sunk costs of necessary investments.

¹ Heineken, the only foreign beer company which has set up local production and distribution in Venezuela, could not compete with Polar and decided to leave the country in 1968 after 15 years of operations. Anhausser Bush has expressed its reservations regarding the Venezuelan market after Heineken's experience.

6.1. The Description

6.1.1. The Industry

The beer industry is one of the oldest in the country. Venezuela ranks eighth in world beer consumption per head, showing an average annual rate of 80 litres². Before 1893, when Cervecera NACIONAL started operations, only imported beer was sold in the Country. By 1940, when Cerverceria POLAR entered the market and opened its first plant, there were over ten different brands competing for the ale market while Cervecera NACIONAL enjoyed leadership. Nowadays, the industry shows a radically different picture, where POLAR dominates the market within a highly concentrated structure (Table 1).

Table 1
INDUSTRY SALES VOLUME AND MARKET SHARE
1990

COMPANY	MARKET SHARE	SALES VOLUME
	%	(Millions lts.)
POLAR	83.00	954.5
NACIONAL	12.00	138.0
REGIONAL	5.00	57.5
TOTAL	100.00	1,150.0

In fact, in spite of the fierce competition both companies have experienced for over twenty years, they managed to maintain a very similar market share during the sixties and until the beginning of the 1970's.

During the second half of the 1970's, when the beer market expanded vigorously due to the first Venezuelan oil boom (Table 2), POLAR reacted very quickly and began an important expansion plan which was ready to meet demand increases by the second half of the seventies. NACIONAL, on the other hand, miscalculated the importance of the boom in demand, and when they finally decided to increase production capacity, POLAR was already controlling 82.1% of the market by boosting its sales by 500 million litres, (industry sales increased by the same

² In 1989 the average consumption per head fell to 63 litres due to the macroeconomic adjustment program adopted by the government which boosted inflation to 80% and induced a 10% drop in GNP.

amount during the same period). (Table 2). When NACIONAL started operating its new plant in 1982, it had to face a national economic depression and demand contraction. Heavily indebted in dollars, the company's interest payments increased with the successive local currency devaluations. Within this set of circumstances NACIONAL could not recuperate and its market share fell from 40% in 1965, to 3% in 1983.

TABLE 2
BEER INDUSTRY SALES IN MILLIONS OF LITRES AND LEADERS
MARKET SHARE

YEAR	INDUSTRY SALES	POLAR SALES	POLAR SHARE	NACIONAL SHARE
1965	450	190	42.2%	40.0%
1970	545	270	49.5%	31.0%
1975	600	395	65.8%	25.0%
1980	1120	920	82.1%	
1983*	1150	1080	93.9%	3.0%
1985	900	800	88.8%	
1988	1480	1220	82.4%	
1990	1210	1010	83.5%	12.0%

* Year in which the distribution agreement between POLAR and NACIONAL was signed.
Source: Asociation of Beer Manufacturers Report

Another issue which should be mentioned in order to understand the evolution of the competitive behaviour of both companies is that by 1983, and after loosing its market share, NACIONAL was facing a *positioning* problem which management failed to evaluate properly. Most consumers were favouring POLAR for its "better" quality and taste³. The challenge for NACIONAL's management was, therefore, to revise their marketing mix and strategy. Was there a market for two lagers? And if there was, what was NACIONAL's differentiation strategy? What was its competitive advantage? Should they segment the market and launch a different product? Should they keep the product unchanged but lower the price in order to increase demand? Why would they expect to sell a product at the same price as the competition when consumers thought its quality was lower?. Instead of trying to answer these questions management focussed its attention on the barriers to entry issue. They believed that "the only way" to recuperate market share, was to get into POLAR's distribution network. They stressed the fact that POLAR's sunk costs were immense, and that they

³ Market research studies showed that better quality was a function of good taste *plus* uniform flavour. POLAR spent important resources on water treatment in order to avoid the risk of any alterations in flavour produced by the composition of the water.

would never be able to match up POLAR's investments in distribution. This argument, though undisputable, was only partly true since it failed to question other strategic elements, like those mentioned above, which *could* be changed by management.

Nevertheless, they approached POLAR with the objective of reaching a distribution agreement. After long discussions they decided to found a new distribution company, 30% owned by NACIONAL and totally managed by POLAR, with the main objective of boosting NACIONAL's market share up to 25% in a period no longer than 10 years. Thus, since NACIONAL was facing bankruptcy, POLAR agreed to help them out of the crisis and avoid potential monopoly regulations⁴. Thus, since 1983, when POLAR's market share reached 93.9% (Table 2) while NACIONAL's plunged to 3%, both companies have been operating under an agreement by which all products are distributed through POLAR's distribution network.

Nevertheless, this agreement had negative consequences for both companies. On the one hand retailers and consumers were disappointed when POLAR's salesforce began to "push" strongly to sell NACIONAL. Since nobody wanted the product, salesmen asked for a minimum of "1 out of 12" -in other words one case of NACIONAL beer for any order of twelve cases of beer. This "pushy" behaviour was also adopted by retailers who forced consumers to buy NACIONAL, hiding the cases of POLAR. In this way, consumers felt betrayed by POLAR and retailers felt that for the first time, their interests were incompatible with those of the leader in the beer market.

As far as NACIONAL is concerned, the negative impact of the agreement had to do with the fact that they lost all freedom to decide what was best for their brand distribution. For example, even though management felt that they could use some promotions to increase sales in certain areas, POLAR would not accept it because it was against their "tradition" and that would "spoil" their salesforce.

Thus, after that 1983 agreement in Venezuela, to talk about channels in the beer industry, means to talk about POLAR's distribution network, as 95% of the beer

⁴ There is no current monopoly legislation in Venezuela. Nevertheless, for more than ten years different versions of Monopoly laws have been discussed, revised and changed in Congress, without reaching political consensus.

produced in the country reaches the consumer through their channels⁵. In December 1990, after a takeover attempt lead by a financial group, POLAR decided to buy NACIONAL shares, supposedly, fearing foreign competition. This acquisition has been possible due to the lack of local legislation on mergers, acquisitions and monopolistic behaviour.

6.1.2. The Companies Interviewed

Cerveceria POLAR C.A. started operations in 1939⁶, with a product that consumers found too bitter. Three years later, after changing the formula with the help of beer masters hired from Germany, the situation changed and the beer started selling. The first plant was situated in Antimano (near Caracas) and now the Company owns four breweries in different regions of the country: Caracas, Maracaibo, Puerto La Cruz and San Joaquin. It is now one of the biggest and most successful private companies in the country and remains family owned.

Cervecera NACIONAL, publicly owned, and recently acquired by POLAR is one of the oldest Venezuelan companies and is about to reach its 100 birthday. It started operations in 1893 with a production of 80,000 litres⁷ per month which was mainly distributed in barrels. This century many changes have taken place: brand

⁵ The other 5% is produced and distributed by REGIONAL, which only reaches the western region of the country.

⁶ Forty six years after CERVECERA NACIONAL was founded.

⁷ Today CERVECERA NACIONAL has a monthly production of 11.5 million litres.

name changes⁸, as well as mergers and acquisitions⁹. Nevertheless the most important decision had to be taken by management in 1983:

"In those days we were practically bankrupt and we had no other choice but to design, with POLAR, a rescue plan which was defined in the following terms: we kept our products but we had to delegate to POLAR their distribution in order to guarantee the recovery of this company in a period of 10 years. In other words this company had a sales department until 1982. From then on, POLAR took the responsibility for the distribution of our products. You see, they were as interested as we were since they did not want to become a monopoly."

This quotations from NACIONAL's management shows how their survival plan was based on getting into POLAR's distribution network. As it has been said above, using POLAR's distribution facilities did not solve the *positioning* problem which they were facing.

6.1.3. Channel Structure

Currently, 95% of the beer sold in the country is distributed through POLAR's sales network which reaches 111,355 points of sale (TABLE 3). This situation has

⁸ CARACAS, ZULIA, MAIQUETIA and NACIONAL are some of the different brand names used for their regular lager beer. They belong to companies which have merged over time in order to form what NACIONAL is today. This diversity of names, which correspond to different regions and cities, confused the consumer a little and POLAR, taking advantage of it, started advertising its beer with its famous slogan: "Each region has its name, but in Venezuela, the beer is POLAR".

⁹ Cerveceria Caracas, Cerveceria Zulia, Cerveceria Union are some of them. Even Cerveceria Heineken was bought by them when the Deutsche company decided to leave the country in 1968.

been the result of 43 years of fierce competition and 7 years of imposed cooperation¹⁰ in order to keep CERVECERA NACIONAL alive¹¹.

One of the most remarkable characteristics of this channel structure is that 42% of the beer sold in the country is through what has been called the *informal retailing chain*, which is by far the most important point of sale for the industry. (Bars come second with 20% of sales). The reason for such denomination is because they are *not* regular retail outlets, they only sell beer and they do *not* have a license to sell liquor. They consist of 35,105 family houses located in marginal, lower class areas, in which the owner of the house (usually a woman alone with her children) keeps cold beer in the refrigerator for sale. Through this mechanism, almost 500 million litres of beer are annually sold. The reason for the existence of this peculiar system is a combination of two factors: they offer much lower prices than bars (25% less since they do not have any overhead costs,) and they are highly convenient (availability) to consumers who live in marginal areas. The salesman does not visit them individually, he stops in a specific pre-established area and the informal retailer comes to buy a few cases each time and takes them to his/her home. (Visits are normally twice a week). It has been calculated that in each stop the salesman makes in these areas they serve approximately 10 houses.

¹⁰ The plan was to bring NACIONAL's market share from 3% to 15% in 10 years. In order to achieve this goal, POLAR's salesforce (owner drivers) were instructed by management to sell one case of NACIONAL beer for every six cases of beer demanded by clients. This provoked severe complaints from retailers who did not want the product, and an adverse reaction from consumers who were *forced* by retailers to buy it.

¹¹ Due to this fact it was easier to find information from POLAR where management was more willing to answer the questions in the interviews.

TABLE 3
NUMBER OF OUTLETS AND PERCENTAGE OF TOTAL SALES

TYPE OF OUTLET	No OF OUTLETS	% OF SALES
Supermarket Chains	126	2.00
Independent Supermkts.	1,400	1.00
Medium Grocery Shops	11,070	9.00
Small Grocery Shops	26,372	8.00
Bars	18,393	20.00
Family Houses	35,104	42.00
Liquor Stores	5,000	5.00
Other	13,890	13.00
TOTAL	111,355	100.00
SOURCE: POLAR's marketing department.		

The changes in channel design were always lead by POLAR, and usually NACIONAL would follow after POLAR had proven relative successful.

When NACIONAL began operating almost 100 years ago, they sold beer in barrels with a very restricted distribution coverage: mainly to Caracas, the capital city, and a few other major cities. Later they changed to bottles and started to use independent distributors.

POLAR entered into the industry scene in 1940 and decided to position its lager product in direct competition with NACIONAL's, who was the leader. In those days both companies had a mixed distribution system with an important percentage of sales channelled through exclusive independent distributors¹², while the rest was sold by a hierarchically controlled salesforce (Figure 1). There is no specific information available about the number of retailers that were visited by them but the following quote from a former POLAR salesman can give a flavour of how things were:

"Things were very different in those days, the company had to use independent distributors to cover as much area as possible. I used to work in sales, we worked very hard and we got paid on commission. You know, I remember how we felt in those days, it was like being in a war, we had to win, we had to get CERVECERA out, we had to gain as many retailers as we could. We used to go everywhere, to all the small towns and visit everybody, many times we had to pay mule owners to

¹² They could not sell competitive products.

deliver the beer to locations where we could not get with the truck. In those cases we used to put the beer bottles in big bags and hang them over the mules."

Road infrastructure was weak, transportation units were insufficient and licensed retail outlets were also scarce. The combination of these adverse elements for distributing products became an obstacle to growth and management understood that overcoming them somehow was a requirement for success. In the words of another former salesman:

"You would not believe this, but I remembered how we used to bring with us, a whole bunch of liquor licenses and give them to small unlicensed retail stores so that they could become our clients ."

During the 1950's POLAR decided to completely internalize the functions that were being performed by independent distributors (Figure 2). NACIONAL made the same move later on, but with a less aggressive strategy, it kept some independent distributors for certain areas.

FIGURE 1
DISTRIBUTION CHANNEL STRUCTURE IN THE 1940'S

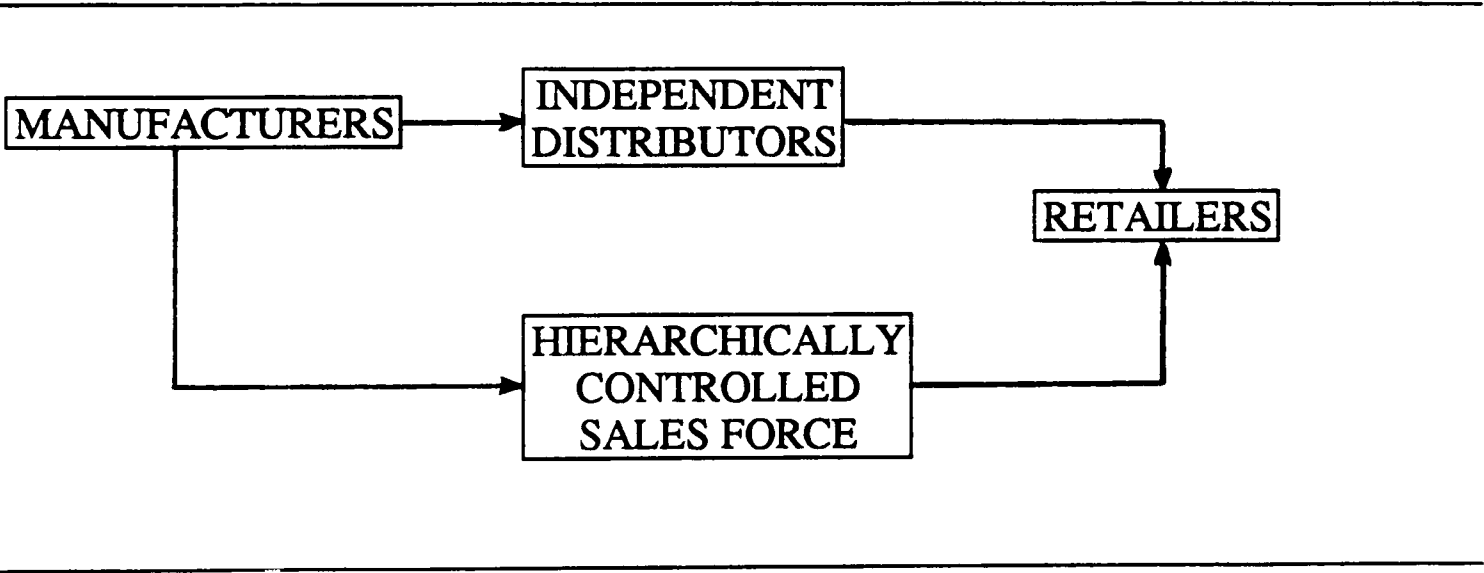
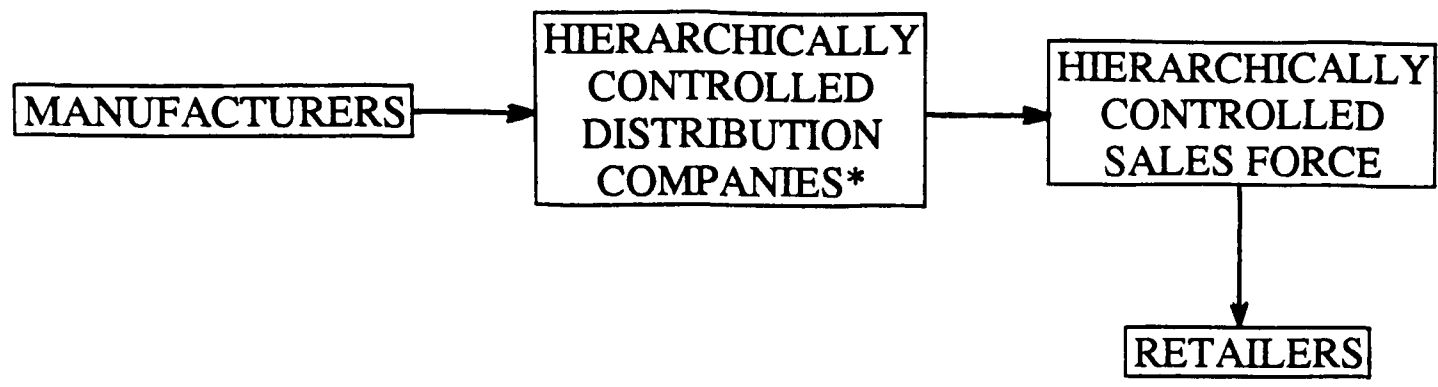


FIGURE 2
DISTRIBUTION CHANNEL STRUCTURE IN THE 1950'S

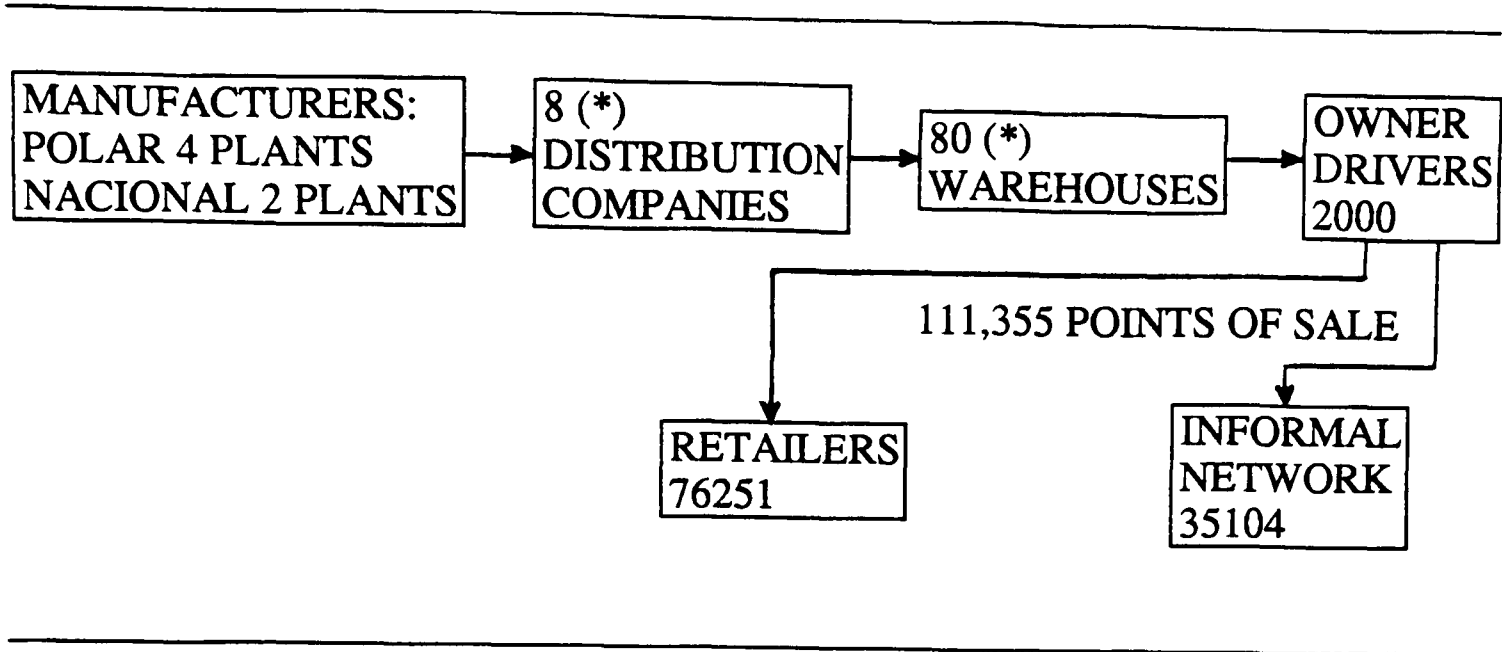


* NACIONAL kept independent distributors.

Later on, during the sixties, a new figure appeared in the structure: the owner driver. They are now almost 2000 independent salesmen who own their trucks¹³, work under a exclusivity contract with the manufacturers, and have assigned routes by the sales department. Even though they are independent salesmen, for all practical purposes, in POLAR's case, they are "company men". They attend regular sales meetings, they follow the company rules and they maintain a close relationship with the company.

¹³ POLAR financed all its owner drivers, NACIONAL did it only partially.

FIG 3
CURRENT DISTRIBUTION CHANNEL STRUCTURE



(*) Hierarchically controlled.

6.1.4. Channel Functions: Who Performs What?

Channel functions have been performed by different agents since the 1940's¹⁴. The assignment of channel responsibilities by manufacturers have been made according to their relative strategic importance in different periods.

Three periods have been identified (Table 4). During the first period functions were shared by manufacturers and independent distributors. Sales departments were not very well organized, and neither the routes nor the geographical areas were well specified for the salesforce. They were like two systems working in parallel. Independent distributors worked very much on their own and had little manufacturer control over their relationship with retailers. These independent distributors were like small wholesalers who also sold other products like canned food and nonalcoholic drinks to stores. The second period is characterized by a more hierarchically controlled channel in which manufacturers decided to reach retailers directly, assuming the responsibility of all functions. For POLAR, the integration was total, while NACIONAL decided to go direct for only a little over 50% of its sales. During the next period (Table 4) an effort to decentralized some functions was pursued and

¹⁴ Even though NACIONAL had been in the market long before this date, 1940 will be the starting date taken for comparative analysis since POLAR began operations that year.

most of them were spun-off to a new figure within the channel chain: the owner driver.

TABLE 4
CHANNEL FUNCTIONS: WHO PERFORMS WHAT?

FUNCTIONS	PERIOD I 1940-1950	PERIOD II* 1951-1961	PERIOD III 1961 on.
SALES TO:			
a)Retailer	I.D./MAN.	MAN.	O.D.
b)Consumer	RET.	RET.	RET.
COLLECTIONS	I.D./MAN.	MAN.	O.D.
TRANSPORTATION	I.D./MAN.	MAN./T.C.	O.D./T.C.
STORAGE	I.D./MAN.	MAN.	MAN.
FINANCING TO:			
a)Retailer.	I.D./MAN.	MAN.	O.D.
b)I.D OR O.D	MAN	MAN.	MAN(1)
RISK BEARING(2)	?	MAN./RET.	
	MAN/RET.		
PROMOTION	I.D./MAN.	MAN.	MAN(3)
INFORMATION	I.D./MAN.	MAN.	O.D.
* During this period NACIONAL maintained an important part of its distribution in the hands of independent distributors.			
(1) The financing given is to buy trucks and not for inventory accumulation. All sales are made in cash.			
(2) POLAR always has borne the risk of spoiled products, NACIONAL on the contrary did not control this function.			
(3) Only NACIONAL. But after the distribution agreement in 1983 no further promotions have been given.			
I.D.:Independent Distributor.			
MAN.: Manufacturer.(Hierarchically controlled personnel)			
O.D.: Owner Driver.			
RET.: Retailer.			
T.C.: Independent Transportation Company.			

It is important to stress the fact that during the third period, manufacturers do not provide financing to retailers (Table 4). All manufacturers sales are made at the 80 warehouses (Figure 2) where owner drivers load their trucks and pay in cash. In the same manner, owner drivers do not usually finance retailers. When they do it, they run the financial risk without any cooperation from the manufacturer. We shall see the reasons for this behaviour in the next section.

6.2. The Analysis

In the following section an analysis of management decisions will be presented. Firstly, we evaluate the existing theories and compare them with the data from the beer industry. Secondly, we offer an alternative explanation for management behaviour based upon the theoretical framework proposed in Chapter 3.

6.2.1. Existing Approaches

One of the first comments which can be made in the analysis is that the periods described in Table 4 fit very well with Stigler's description (industry life cycle), according to which firms are supposed to vertically integrate or disintegrate into different functions¹⁵. As Stigler predicts, the degree of integration of functions will depend on the size of the industry. When the beer industry was growing firms integrated forward into channel functions (Period 2) since, according to Stigler's view, most functions will have decreasing returns¹⁶. Later on, when the industry reached maturity, firms hived-off their functions and let specialists benefit from economies of scale. It should be pointed out though that, in this case, when companies decided to hive-off their functions, they tried, at the same time, to keep control over them. The way this problem was solved was with the introduction of the figure of the owner driver, who is free to decide when to finance retailers, but is heavily controlled for the functions which would conflict with corporate goals¹⁷. Beer is a consumer product with some degree of perishability which, according to traditional marketing theory, should be distributed through long

¹⁵ See Chapter 1,

¹⁶ According to Stigler, firms should be viewed as performing a set of functions. He breaks the Total Average Cost curve of the firm (TAC) into functions (purchasing, transforming, selling) instead of factors (capital, land, labour). Thus, TAC would be the sum of functional average cost curves: some of them with increasing returns (downward sloping), others with decreasing returns (upward sloping) while the TAC would present its conventional U-shape. According to this approach firms would tend to integrate those functions with decreasing returns, (usually in young industries), since nobody else would perform them. Those with increasing returns will be left to market specialists who can benefit from economies of scale.

¹⁷ POLAR owner drivers have well specified jobs. It is the responsibility of the sales manager to define for each of them the following: sales volumes, routes, prices and their participation in the special events which have been chosen by POLAR to enhance corporate image (e.g. sports events).

channels with a significant use of middlemen. According to Aspinwall's model (Table 5), beer characteristics are similar to those of red products. Long and indirect channels are most appropriate for "red" goods, since these goods have low margins, require intensive distribution and little customization.

Nevertheless, as it has been described, POLAR and NACIONAL have undertaken different channel design over the past 50 years and only at the beginning were independent wholesalers used for channel functions (Table 4, Period I). Since the 1950's onwards, manufacturers have been increasingly controlling functions.

TABLE 5			
COLOUR CLASSIFICATION FOR BEER ACCORDING TO ASPINWALL			
PRODUCT CHARACTERISTICS	RED GOODS	YELLOW GOODS	BEER
REPLACEMENT RATE	HIGH	LOW	HIGH
GROSS MARGIN	LOW	HIGH	LOW
LEVEL OF ADJUST.*	LOW	HIGH	LOW
TIME OF CONSUMP.	LOW	HIGH	LOW
SEARCHING TIME	LOW	HIGH	LOW
TYPE OF CHANNEL	LONG AND INDIRECT	SHORT AND DIRECT	
*Number of services applied to goods in order to meet the exact needs of the consumer.			

Venezuela is not a unique case, beer together with meat packing were reported by Chandler (1977) as industries which integrated into wholesaling in the early 1900s due to their refrigerating requirements. Nevertheless, integration into retailing was not very successful after new technologies induced the shift from kegs to bottled beer.

TABLE 6
VARIABLES WHICH IMPACT VERTICAL INTEGRATION: A
TRANSACTION COST APPROACH BY FUNCTIONS

FUNCTIONS	ECONOMIES OF SCOPE* INTEGRATION	EXTERNALITIES	ASSET SPECIFICITY	VERTICAL
SALES TO:				
a)Retailers	0	+	0	Favourable
b)Consumers	++	+	+	Unclear
TRANSPORTATION	0	0	0	Unfavourable
COLLECTION	+	0	0	Unfavourable
STORAGE	0	+	0	Favourable
FINANCING TO				
a)Retailers	?	0	0	?
b)I.D. or O.D.	?	0	0	?
RISK BEARING	0	++	+	Favourable
PROMOTION	0	?	0	Unclear
INFORMATION	0	?	?	?
*Or scale ? =difficult to asses with given variables. 0 =negligible + =Some ++=considerable				
SOURCE: based on the model presented by Oliver Williamson in "Economic Institutions of Capitalism", (1985) page 113.				

Transaction cost theory predicts shorter channels for beer since the presence of externalities due to product perishability and the need for refrigeration (asset specificity) would force management to exert more control over distribution. If channel functions are analysed according to the variables proposed by the transaction cost approach, (Table 6), vertical control into wholesaling is to be expected.

6.2.2. Proposed Approach

The following analysis will give a new interpretation to management decisions within our proposed theoretical framework. The analysis will be made by functions, and specifically, we will be led by the following questions which remained unanswered by existing approaches.

*What are the elements which determine management choice between "making" or "buying" a specific channel function?

* Why would manufacturers commit important resources to help retailers to set up and develop their businesses?

* Why did they not integrate all the way into retailing after spending so much in developing the market?

* Why did they decided to buy the independent distributors and perform their functions internally?

* Why did they decide afterwards to hive-off the transportation, finance and selling function? Why through owner drivers?

* Why would manufacturers finance owner drivers? Why would they give the financing at lower interest rates than market rates?

* Why did they keep the storage facilities under direct control after hiving-off most other functions?

i) Absence of Specialized Markets

An interesting element which stands out in this case is how management spent massive financial resources in developing specialized markets for retailing-specific functions. In fact, in the 1940's beer manufacturers had to face the problem of developing a distribution network because there were not enough retail outlets to sell beer in the country. Furthermore, most of those which were available, did not have enough refrigeration space.

Due to the elements mentioned above, retailer's spatial monopoly power was enhanced. Since POLAR and NACIONAL were competing ferociously for the scarce space available¹⁸ retailers benefited considerably from this situation. Very quickly both manufacturers realized that in order to grow they needed, more retailers to offer their products, and also to convince those who already existed to sell more of their

¹⁸ One of the most common practices was to collect the empty returnable bottles from the competition, pay the retailer for them and destroy them. In this manner the seller could occupy the space left by the empty bottles collected.

products. Thus, the existing retailer became for a while the *relevant client*¹⁹ due to a mixture of elements: the low brand loyalty which still existed in those days, the spatial monopoly they enjoyed and the desperate need manufacturers had for retailing functions. On the other hand new technology in beer production permitted higher economies of scale which were only to be realised with future increased sales.

Thus, developing a suppliers market for retailing functions²⁰ became one of the most important strategic issues for management. As it has already been mentioned one way of achieving this was by manufacturers assuming the responsibility of finding liquor licences for retailers. Nevertheless, manufacturers went much further than that in their efforts to develop suppliers markets and to please existing ones:

"We knew that the lack of refrigerators was a problem, potential retailers did not have them and our product needed it. Beer is perishable, if you kept it in the hot weather or in the sun for more than three months it will loose colour, flavour and in general it will taste terrible. Thus we had to maintain product quality and appeal to the consumer by selling it cold. We did not have any other choice but to spend the money and provide retailers with refrigerated space. We also painted their facade, got their store signs made with the name of the bar and of course our logo. We gave them the furniture, gave them tables, chairs, the domino game and sometimes we even supplied the music."

According to the information given by the president of one of the distributors, POLAR used to give retailers financing for redecorating the stores, amounts which could sometimes equal one year sales.

It should be stressed here that in order to achieve this, they had to internalize the financing function, the selling function and the promotion function. As it is shown in Table 4 manufacturers vertically integrated forward during this period²¹ and established strict control over those functions while developing direct contact

¹⁹ As defined in Chapter 3 a situation of *retailers markets* arises when manufacturers spend considerable amounts of resources, which do not reach the consumer, developing competitive tools to please retailers. In this case the retailer becomes *the relevant client*.

²⁰ Sales and post-sale service are specific channel functions for retail outlets.

²¹ POLAR totally and NACIONAL partially.

with retailers. The goal would have been very difficult to achieve if independent distributors were to be kept.

Furthermore both POLAR and NACIONAL also had to provide inventory financing.

"We asked the retail owner that what we wanted in return for all the facilities we were giving them was exclusivity. They could only sell POLAR, (the same conditions were asked by NACIONAL). Nevertheless, we realized that it was not enough and that we also had to give them huge inventory financing so that they would always be up to their ears in our product so that they would not have the space to keep inventory from competition."

In this manner, both companies ended up giving over 6 months financing. It is important to stress the fact that it was POLAR who started this strategy. Since it was the attacker, it was trying to appropriate some of NACIONAL's (the leader) market share. NACIONAL did not have other choice but to follow, though in a less aggressive way.

With such an aggressive financing strategy to develop suppliers of retailing functions, independent distributors could not live up to manufacturer's expectations. A POLAR manager stresses:

"We wanted to grow and we had our strategy: a good product and a strong distribution channel. Independent distributors did not have the financial strength to support retailers the way we wanted them to do. Thus we develop a strategy of buying them out, one by one in a very friendly agreement. Some of the former owners became our salesmen and some of them are still with us."

Thus the channel became more controlled and one of the links (the independent distributors) totally internalized.

As a NACIONAL manager puts it:

"Maybe we should have done the same thing as POLAR did, who knows now... but in those days we definitely did not have

the cash to buy out all the distributors, nor did we have the cash to assume all the retailers financing²²."

For POLAR this strategy was indeed very costly, according to one of the senior managers who actively participated in those days decisions, the policy of extending such lax financing terms made them lose large amounts of money in accounts receivables that they could never recuperate.

ii) Monopoly Power Enjoyed by Existing Suppliers of Channel

Functions

In this manner POLAR managed to control all functions, nevertheless, after a few years, as the network grew, some problems began:

"We were having too many problems handling the drivers, they were always pushing for something new: higher salaries, better conditions. They were unionized and strikes started to become a common practice".

Thus, suppliers of the transportation function started to develop monopolistic behaviour and extract monopolistic rents from manufacturers. When this happened, and after a few strikes POLAR decided that in some way they had to break up such conduct. They started encouraging their most reliable people in sales, to buy their trucks from the company and set up a small transportation company with an exclusive contract with POLAR. But unfortunately the salesmen who tried to buy their vehicles, could not find the financing to do it. This problem will be analysed in the following section.

iii) Saving Agency Costs: Solving Moral Hazard Problems

Parallel to the higher costs in distribution caused by drivers monopolistic conduct, moral hazard problems also arose with the careless way they handled the trucks.

²²

POLAR started as a business developed by the owners of a soap and candle manufacturer which had reached maturity. The shareholders knew it was a dying business and decided to fund POLAR with the cash coming from it. According to the Boston Consulting Group matrix. The soap and candle company was the "cash cow" financing a "question mark" which was POLAR.

"In those days the whole thing was becoming unmanageable, we were spending more and more money keeping the trucks in good shape and the drivers seemed to be less and less careful. The network was growing and we were finding it difficult to manage."

As a consequence of these elements POLAR decided to spin-off the function by selling the trucks to each driver. They specifically mentioned that they avoided spinning-off the function to a big independent transportation company since this would not permit them to keep the control they wanted over the quality of the product. They were also afraid of the risk of depending on only one company for transporting their products. They were trying to get away from the monopolistic behaviour shown by truck drivers, thus to depend on only one transportation company would obviously not solve the problem; on the other hand to deal with many could hamper their quality control efforts.

Thus the new system designed by POLAR aimed at avoid both moral hazard and monopolistic behaviour costs, while maintaining the control required to guarantee the quality of the product, was as follows:

First, they divided the Country into zones and assigned specific routes to salesmen²³. These routes have changed over the years but the logic stays the same. They calculate the volume of beer sold in different areas in order to divide them into routes. The division is made so owner drivers would have similar incomes. When the volume of beer sold increases significantly, the routes are divided up again.

Second, the distribution companies owned by manufacturers were organized in such way that each of them would be responsible for a specific region and for managing a specific number of warehouses also owned by the manufacturer.

Third, POLAR decided that the best system would be to have the drivers (who are also the salesmen) as owners of their trucks. The system was designed like this: each driver with his truck would set up an independent company under a separate legal entity. The assets of each of the newly established companies were the truck, the inventory and the value of the route which POLAR sold to each of them²⁴. Thus

²³ In 1960 there were 100 salesmen compared to 2000 in 1991.

²⁴ This mechanism also allows the manufacturers not to get "involved" in sales, which are made by owner drivers to illegal retailers, which as pointed out, represent 40% of beer sales.

today, there are 2000 drivers with their trucks who represent 2000 different companies²⁵. This system has been copied by companies from other industries (see chocolate industry) in order to brake monopolistic behaviour developed among the unionized truck drivers. It has worked for POLAR.

It is important to stress here that the figure of the owner driver is more efficient when the following elements are met:

- 1) When there is incentive compatibility between the company and the driver.
- 2) When output is relatively easy to measure.
- 3) When contracts can be well defined.
- 4) When products are mature.
- 5) When the environment is relatively stable and not many changes in strategy are required.

Now that POLAR has taken over NACIONAL, the use of owner drivers have become an impediment for launching new products and for creating the correct incentives to make owner drivers sell marginal products. It is interesting to contrast POLAR's historical success with the problems PERUGINA (See Case No 4) is facing with its owner drivers mainly because their products are not the leaders in the market.

iv) Financial Market Imperfections

Nevertheless bank financing was almost impossible to find for the salesmen who wanted to buy their own vehicles. This situation induced POLAR to establish a leasing agreement system by which the Company buys the truck²⁶ in the market and leases it for 7 years to the driver at a considerably lower interest rate than the market's. By the end of the seventh year the vehicle is passed to the driver.

As discussed in Chapter 3, imperfections in the loan markets can impact channel structure and make vertical integration of the finance function a more efficient solution since manufacturers could have a cost advantage, compared to the

²⁵ When margins are discussed with drivers the opportunity cost of the assets are also taken into consideration.

²⁶ The shelves on the back part of the truck are specifically designed for beer cases as they are made with an upward inclination in the outer edge for a perfect fit to the cases and to avoid spillage. This greater "asset specificity" guarantees less alternative uses for the truck and higher chances of the driver staying with the Company.

banks when extending credit to one of the channel members. This cost advantage would be the consequence of manufacturers having less asymmetric information than banks and less moral hazard problems due to a better knowledge of the borrower, of the business risk and also having lower ex-post loan control costs. Thus, in the presence of external loan rationing, an internally generated financial market, can efficiently cover the channel member credit needs.

One of the interesting things about this case is that, the intra-channel financing is serving as an instrument to aid the *spinning-off* of functions, (to the owner driver) as opposed to other cases like in the apparel industry (Case 2) in which intra-channel financing led to total vertical control.

The theoretical principle for lending is the same, and that is why POLAR has been able to give cheaper financing²⁷ to owner drivers.

"We have been able to develop a good system which does not cost us very much. We get the financing to buy the trucks from a financial institution and we sell it to the drivers at lower price (lower interest) because otherwise they would never be interested in buying the vehicles. Part of what costs us we can recuperate through tax deductions."

POLAR meets the three main conditions which were discussed in Chapter 3 as those needed to become the source of intra-channel financing: large sums of internally generated cash²⁸, important informational advantage and excellent access to loan markets.

v) Saving Agency Costs: Externalities

To solve agency problems, sometimes looser forms of organisation are needed. A good example of this has been discussed above when POLAR decided to eliminate the moral hazard problem of drivers with company owned trucks, by spinning -off the transportation function.

²⁷ The owner driver ends up paying 58% of the value of the loan, the rest is paid by POLAR. An important part of the 42% assumed by POLAR is covered through tax credits which are given by law to companies which engage in leasing agreements. There is a small percentage (around 7%) which can not be covered by tax exemption and is registered as a "benefit" for the driver.

²⁸ POLAR does not extend any credit terms, all its sales are made in cash.

On the contrary, another agency problem, the dangers of quality debasement of the beer in the channel, is a negative externality²⁹ which has been solved by maintaining vertical control over the storage and the risk bearing functions.

"One of our best decisions regarding distribution was to build the 80 warehouses we have. This permits us to keep good control of the service given to retailers and to keep the quality of the products. For years we have been collecting the beer that gets old on retailers shelves, bringing it to our warehouses and throwing it away"

Product decay is a negative externality since it is a cost that nobody in the channel pays, but which seriously affects brand image. Retailers do not suffer the consequences of a bad product being sold, but the consumer will probably change brands, affecting corporate profits in the long run. Manufacturers, in order to solve this agency problem, usually assume the risk function. NACIONAL lost control of it and its image was negatively affected. According to the information collected by their salesforce when they wanted to know why were they losing market share, they found out that one of the most important reasons was because consumers found that their beer had a "metallic" taste and that it had a terrible dark yellow colour. They found out too late that consumer's brand loyalty had been damaged by having bought old beer.

vi) Governance Costs

One of the obvious costs from integration is the increase in the cost of governing bigger corporate structures. POLAR and NACIONAL never considered integrating forward into retailers because:

"It would have been too costly to set up the retailers network we needed to *penetrate* the market the way we wanted to penetrate it. We have over 100,000 points of sale. Besides we did not want to compete with our owner drivers, they would think that we are trying to take a share of their cake."

It is obvious in this case that to develop a forward integration strategy into retailing would imply an increase in governance cost which would far outweigh the benefits of integration. This evaluation is even more obvious when considering the consumer patterns by which over 40% of the beer is sold in illegal retailers.

²⁹ A cost that nobody pays.

6.2.3. Final Comments

POLAR's distribution network has become an important barrier to entry for potential competition. Nevertheless, the process of building the channels looks more like an effort to deal with market imperfections and solving agency problems, than an aprioristic determination to build barriers in search of monopoly rents. As discussed in Chapter 3 this is a case in which building an efficient distribution channel has been so costly that it has become a barrier to entry. Building channels may imply building walls.

CHAPTER 7

CASE 4. THE CHOCOLATE INDUSTRY: Dealing With Externalities

Introduction.

When analysing management decisions regarding the distribution of chocolate products, one element stands out as guiding the design process: perishability. The fact that high negative externalities could damage the brand and corporate image if products are sold in a bad state has induced manufacturers to spend massive resources in keeping tight control over their distribution networks.

What makes this case interesting is that two successful companies, within the same industry, have chosen different ways of dealing with the same problems. In both cases perishability, frequent transactions, negative externalities and the need for control are some of the elements which management have had to face in different time periods.

It is also an intriguing fact that the leader of the industry, SAVOY, has been able to maintain the same channel design for almost 50 years without any changes except size. With a highly controlled distribution network, over 1200 company owned trucks, a hierarchically controlled sales-force, and directly visiting 100,000 retail outlets at least once a week, SAVOY is judged by the business community in Venezuela as having one of the most successful distribution networks in the country.

7.1. THE DESCRIPTION

7.1.1. The Industry

The chocolate industry in Venezuela is a mature sector which had been led for over 40 years, and until very recently, by two companies: Industrias SAVOY C.A., who now controls 75% of the market and its former main competitor, La India C.A. whose market share has dropped from 40% to less than 10% (Table 1). The new actor in the competition scene is PERUGINA which started operations in 1985 and had become by 1990, SAVOY's closest competitor with a 10% market share.

Two types of companies can be found in this industry: big manufacturers with a wide variety of products and extensive distribution networks (SAVOY, PERUGINA and LA INDIA), and small firms with craft based manufacturing processes and limited distribution systems.

TABLE 1
MARKET SHARE IN THE CHOCOLATE INDUSTRY

COMPANIES	MARKET SHARE
SAVOY	75%
PERUGINA	10%
LA INDIA	7%
OTHERS	8%
TOTAL	100%

7.1.2. The Companies Interviewed

SAVOY was founded in 1941 as a very small chocolate manufacturer. It operated from a house in Caracas and was the result of a joint venture between a Venezuelan businessman (who provided the capital) and an Austrian family who had just arrived in Venezuela the year before, and had previous experience working in the chocolate sector. Today, SAVOY is one of the largest companies in Venezuela, with over 300 products and four product lines: chocolates, sweets, snacks and cakes.

Between 1982 and 1988, the company suffered drastic changes in ownership and control, which have had an important impact on investment and personnel strategies¹. SAVOY was bought by Beatrice Foods, who in turn were taken over by KKR, neither of whom had a long term interest in SAVOY. Thus, in 1988, after numerous failed attempts to sell the company to different South American corporations, the POLAR² Group bought it. In doing so, POLAR sold to NESTLE

¹ There have been delays in capital investment which have been blamed for having a negative impact in product quality. Also, in distribution, the company-owned transportation units were poorly preserved and deteriorated heavily during those years. Also, top management, was almost totally replaced.

² The same POLAR group which was discussed in Case 3 for the distribution of beer. The acquisition was made through the Food Division of the Group which was also involved in the production of corn oil, corn flour and ice cream.

the chocolate manufacturing plant now called Chocoven C.A. while keeping the distribution company, Comercializadora Chocoven C.A. and the production processes for snacks, sweets and cakes.

"We decided to sell the chocolate manufacturer to NESTLE because they knew about chocolates and we didn't. It was the best way to guarantee that the quality of the products could be maintained."

Even though the company names have been changed the trademark SAVOY continues to be used for all products.

PERUGINA, on the other hand, is a younger company which began operations in October 1986. It was the result of market research by Venezuelan and Ecuadorian investors which in 1985 revealed that there was an important share of the market which was not being serviced: the premium, gift chocolate segment. With a franchise agreement from PERUGINA in Italy they got the name and the technology to produce Bacci and Bacetti, their world famous gift chocolates. After five years of successful operations, they have increased the number of their products to 17 different chocolate bars and wafers. In doing so, they have created a new product line, Melty's, outside of PERUGINA's franchise specifications, which is targeted at a cheaper, less demanding market. Thus, even though the initial intention was to serve only the premium segment, they are now threatening SAVOY by positioning some of their less expensive products in direct competition with SAVOY's.³

7.1.3. Channel Structure

The companies interviewed show channel structures with important differences (Figure 1 and Figure 2). When PERUGINA began operations it had the intention of pursuing a "follow the leader strategy" by copying SAVOY's channel design, nevertheless in dealing with its own circumstances it ended up with a different approach. The reasons for this will be discussed in Section 2.

³ PERUGINA, the parent company in Italy, has been recently (beginning 1991) taken over by NESTLE International. This is having important consequences on the strategy to be followed by PERUGINA in Venezuela since SAVOY may end up with PERUGINA's trade mark. One of the major changes has been to increase their efforts in developing the trade mark MELTY'S.

SAVOY's channel structure has changed very little since it started operations in 1941. The company's strategy has always been to keep *very tight* control over the distribution channel by having a sales-force with company employees driving company owned trucks. SAVOY now owns 1200 trucks and serves directly 100,000 retailers (Figure.1) who are visited at least once a week⁴:

" We have been visiting them once or twice a week for years and we have always insisted on only selling small quantities to ensure the product freshness,"

SAVOY employees have always maintained an excellent relationship with retailers and they have used the channel as a continuous source of information about consumer preferences, product acceptance and competition strategy.

The former president of SAVOY who worked in the company for 40 years emphasizes:

"We got all the information we needed through the channel, we have never made any kind of market research. We usually need less than 15 days to know if there is any problem with the product and we solve it immediately."

According to management, since they have never asked consumers about their preferences, product development has always been induced through internally generated ideas. This has been possible due to the highly flexible technology which characterizes chocolate manufacturing. Nevertheless, it could be argued that it was precisely because they never bothered to consult the consumer that PERUGINA found an untouched segment of the market. The counter-argument could be that the gift chocolate market left unattended by SAVOY could not have been so important since it did not take PERUGINA very long to start competing directly with SAVOY. According to some sales and market share data provided by PERUGINA's management, by 1985, the gift chocolate share was only 5% of the total chocolate and sweet market, and even though it was boosted by PERUGINA to 10% in 1988 with its main product BACCI, a few months later, when the "novelty" was over it went back to 5%. It was then that PERUGINA began a diversification strategy into chocolate bars and wafers which positioned them in direct competition with SAVOY.

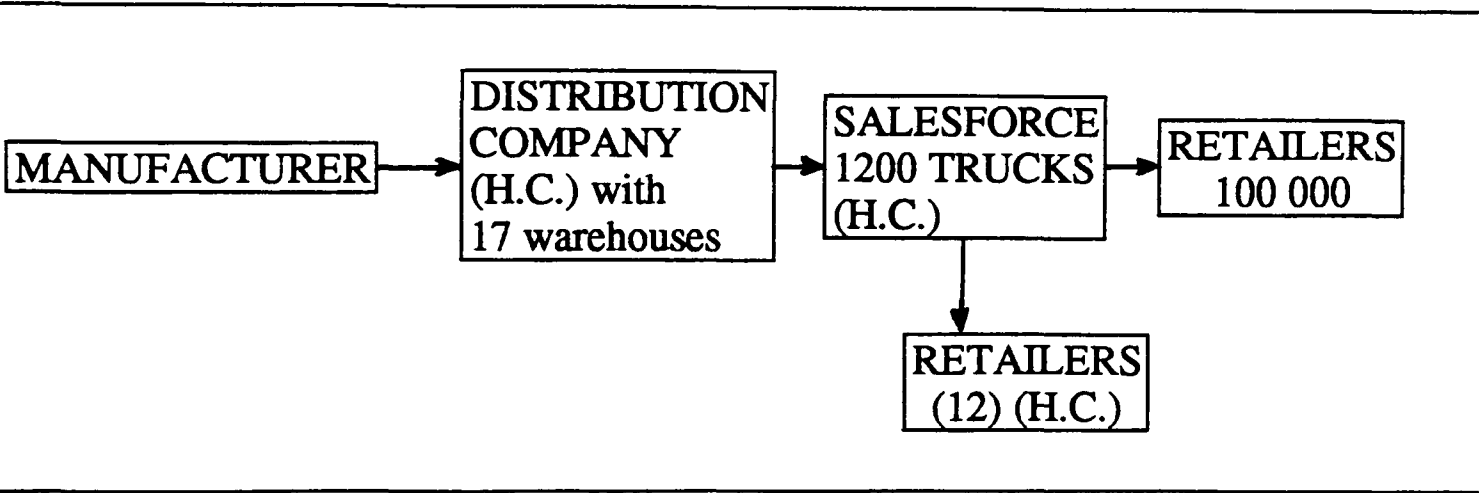
⁴ SAVOY has also opened totally owned retail outlets but with the only objective of promoting their own products and showing their complete line of products.

One of the questions which remains unanswered is whether PERUGINA overestimated the potentialities of the gift chocolate market within a depressed economy or, if after entering the market, they were unable to choose the correct strategy for developing it.

When SAVOY faced for the first time the problem of developing a distribution system, management's main concern was concentrated on avoiding product decay. In order to cope with this perishability problem they decided that the only alternative would be to perform the distribution themselves⁵. They felt that they could not trust anybody else with the handling of the product to retailers and they also wanted to make sure that product turnover would be high.

In order to achieve this objective they bought specific trucks with an insulation system to keep the products at appropriately low temperatures.

Figure 1
SAVOY'S CHANNEL STRUCTURE



H.C.= Hierarchically Controlled.

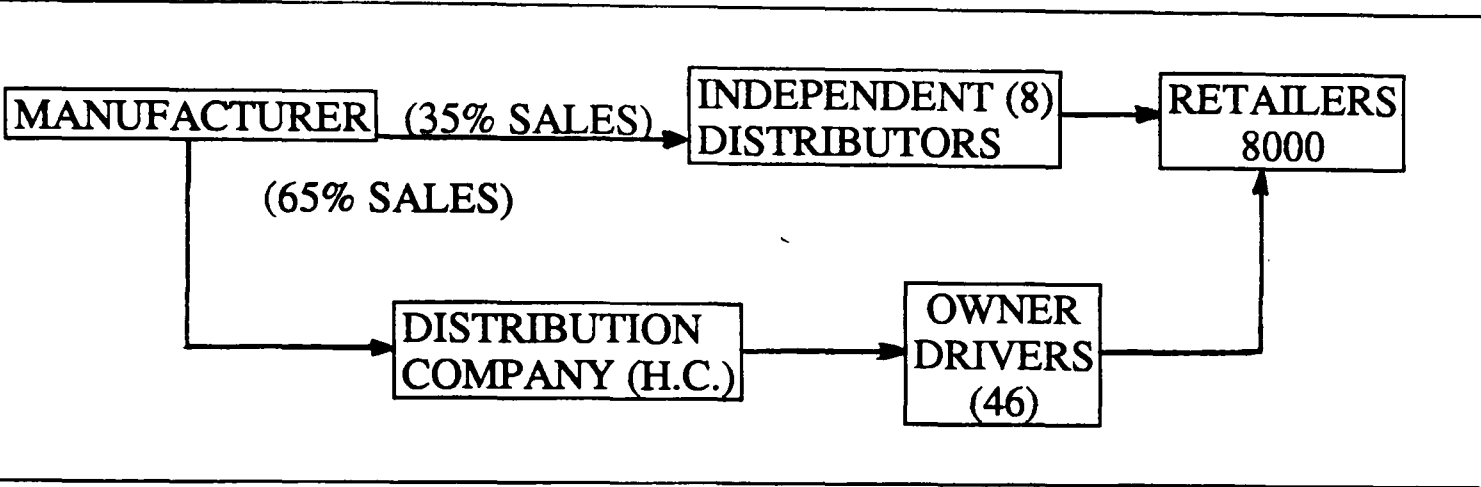
PERUGINA on the other hand, exhibits a more flexible structure with two alternative channels using independent distributors and owner drivers (Figure 2). It is interesting to note that while choosing a looser channel design, PERUGINA also aims to maintain a high level of control over channel functions.

⁵ Chocolate requires to be kept under certain temperatures: between 10 to 20 degrees. Drastic changes in temperature may cause a separation of ingredients and a crystallization process which gives the chocolate an unattractive white color.

They knew that if they wanted to succeed in the chocolate business they would have to fight with a giant in distribution:

"We studied the different channel structures and we decided that we had to imitate SAVOY, we had to try to serve retailers directly, because it had proven to be successful. We also realised that one of the reasons why La India had failed was because of its weakness in distribution."⁶

Figure 2
PERUGINA'S CHANNEL STRUCTURE



7.1.4. Channel Functions: Who Performs What?

The objective of this section is to go beyond the identification of the length of the channel shown above, and specify which agent is responsible for each channel function. The reason for doing this is because, as it has been stressed in Chapter 1, the choice between controlling hierarchically a distribution system or "buying" it in the suppliers market, is a decision management makes by analysing each function separately. Thus sometimes, as can seen in Table 2 below, management keeps control over some functions (financing, risk bearing, merchandising and promotion in the case of PERUGINA) regardless of the number of intermediaries which can be found in the chain.

⁶ La India uses independent distributors for most of its sales and has never placed too much emphasis on controlling distribution.

TABLE 2
CHANNEL FUNCTIONS: WHO PERFORMS WHAT?

FUNCTIONS	SAVOY	PERUGINA
SALES		
a) To retailers	MAN.	I.D./O.D.
b) To consumers	RET/MAN*.	RET.
COLLECTION	MAN.	I.D./O.D.
TRANSPORTATION	MAN.	I.D./O.D.
STORAGE	MAN.	I.D./O.D.
FINANCING		
a) To Retailers	MAN.	I.D./O.D.
b) TO O.D.	---	MAN.
MERCHANDISING	MAN.	MAN.
RISK BEARING	MAN.	MAN
PROMOTION	MAN.	MAN.
INFORMATION	MAN.	MAN./I.D./O.D.
MAN.= Manufacturer. (Hierarchically controlled personnel.)		
I.D.= Independent Distributors.		
O.D.= Owner Driver.		
* SAVOY has 5 totally owned stores with the only purpose of showing consumers their product variety.		

The designing of distribution channels has been approached differently by the companies interviewed. There are some dissimilarities on the problems they confront but the objectives they pursue are very much the same. In the next section an analysis of their decisions will be presented.

7.2. THE ANALYSIS

The following section will explain management decisions regarding channel design. In doing so, we will present an evaluation of the existing approaches in order to assess their predictive value. Later, in order to explain issues which remain unanswered, alternative views will be expressed based upon the proposed framework.

7.2.1. Existing Approaches

According to the traditional marketing theory (Aspinwall, 1958) (Rosenbloom, 1987) the distribution channels for chocolates and sweet should tend to be indirect since they would need an *extensive* (longer) and *intensive* (wider) network in order to be able to reach consumers accordingly with their buying patterns which are: impulsive and frequent. Longer and wider networks would require, the argument

follows, the participation of more agents and/or organisations in the process of making products available to consumers.

As far as Aspinwall's theory is concerned, (Chapter 1) and as it is shown in the table below, chocolates would belong to the *red* product category and would thus call for longer channels which would also imply changes in *ownership*.

" A long channel is one in which the product moves through several stages of location and ownership as from the factory to a regional warehouse, to a wholesaler's warehouse, to a retail store, and finally to the consumer." (Aspinwall, 1958. Mallen, ed. 1967. page 89)

TABLE 3
COLOUR CLASSIFICATION FOR CHOCOLATES AND SWEETS
ACCORDING TO ASPINWALL'S THEORY.

CHARACTERISTICS	RED GOODS	YELLOW CHOCOLATES GOODS	
REPLACEMENT RATE	HIGH	LOW	HIGH
GROSS MARGIN	LOW	HIGH	LOW
ADJUSTMENT*	LOW	HIGH	LOW
TIME OF CONSUMPTION	LOW	HIGH	LOW
SEARCHING TIME	LOW	HIGH	LOW
TYPE OF CHANNEL	LONG & INDIRECT	SHORT & DIRECT	LONG & INDIRECT
* Number of services applied to goods in order to meet the exact needs of the consumer.			

In this case, even though PERUGINA shows a longer channel than SAVOY, both companies have developed relatively short structures with direct contact with retailers. Thus, Aspinwall's classification fails to explain the reasons for management choice.

On the other hand if a comparison is made between what management has done as far as channel design is concerned and what is to be expected according to different marketing variables (Rosenbloom, 1987), some contradictory results arise. According to the summary of these variables presented in Chapter 1, shorter channel structures can be expected since, due to the *perishability* of the product, manufacturer's need a high level of control over distribution. On the other hand, long channels are bound to be found in this industry due to the following elements:

- 1) high market density (high number of points of contact with consumers) required for these products,
- 2) frequent purchases made by consumers,
- 3) light weight of the product and,
- 4) its low technical development.

Transaction cost theories have stressed the fact that vertical control would tend to be greater and channels shorter when:

- externalities are present,
- highly specific assets are required for channel functions and,
- economies of scope and scale are not significant. (Williamson, 1987).

Thus, according to this theory, highly controlled distribution channels should be expected in the chocolate industry. Manufacturers would tend to integrate forward until the losses in economies of scope or scale would make the costs of integrating greater than its benefits. This theory explains the behaviour of both companies in trying to control functions without integrating into retailing which is where most economies of scope and scale can be achieved.

Furthermore, if an analysis of the functions is made based on this model, it clearly explains the reasons for management to internalize transportation and storage. (Table 4)

TABLE 4

VARIABLES WHICH IMPACT VERTICAL INTEGRATION INTO
DISTRIBUTION: A TRANSACTIONAL COST APPROACH BY
FUNCTIONS.

FUNCTIONS	ECONOMIES OF SCALE* INTEGRATION	EXTERNALITIES	ASSET SPECIFICITY	VERTICAL
TRANSPORT	+	++	++	Favourable
STORAGE	+	++	++	Favourable
PROMOTION	0	0	+	Unclear
MERCHANDISING	?	+	0	?
INFORMATION	0	0	?	?
SALES TO RET.	+	0	0	Unfavourable
FINANC.TO O.D.	?	0	0	?
? =difficult to assess with given variables.				
0 =negligible				
+ =some				
++=considerable				
* or scope.				
SOURCE: based on the model presented by Oliver Williamson in "Economic Institutions of Capitalism", (1985) page 113.				

Nevertheless it fails to explain, with the same set of variables, the integration of other functions like merchandising, sales and financing, (Table 2). Furthermore it becomes even more difficult to understand why there should be differences at all between the two companies if the same levels of asset specificity, externalities and economies of scale/scope are to be expected in the same industry. In the following sections these problems will be analysed and alternative interpretations for management behaviour presented based upon the theoretical framework.

The industry life cycle approach (Stigler, 1951) (Mallen, 1973) predicts that companies will tend to separate or spin-off functions as the industry matures. Under this paradigm there is no explanation for SAVOY's tight control over channel functions for more than fifty years.

7.2.2. Proposed Approach

We will now analyse management decisions using the theoretical framework proposed in Chapter 3. Special interest will be given to the following questions which remained unanswered when evaluated with the existing approaches.

* What determines management choice between "making" or "buying" a specific channel function?

* Why did SAVOY integrate forward if, according to the traditional marketing theory, channels for chocolates should be long and loose?

* Why do they not use large independent distributors?

* Why did PERUGINA decide to spin-off functions to be performed by the owner driver? Why does the company give them financing?

* Why does PERUGINA keep control over the merchandising and the promotion function if it has assigned all the others to be performed by external agents?

* Does hierarchical control necessarily mean better control or vice versa, and do looser forms of organisation necessary mean less control?

i) Development of Barriers to Entry

The barriers to entry argument has been very popular when analysing the behaviour of big and traditional companies with high market shares and strong distribution channels. POLAR (Beer, Case 3), SAVOY and INDULAC (Milk, Case 2) are some of the most common examples.

In fact, SAVOY's behaviour could be interpreted as a strategic move with the objective of setting up a distribution network as a barrier to entry for new competitors. According to the results (75% of market share) one could conclude that the strategy had been successful and that in fact SAVOY has achieved market leadership by building barriers to entry and deterring competition.

Of course, it can not be proved that market leadership was in fact a direct consequence of their historical decisions in designing distribution channels. What can be said is that the company has spent immense resources in setting up a highly controlled distribution network which turned out to be efficient. Furthermore, the barriers to entry argument does not explain the successful entrance of PERUGINA into the market. In the following sections, alternative explanations will be presented.

ii) Lack of Competitive Markets for Distribution Functions. Total Absence

As it has been discussed in Chapter 3 the choice between "buying" or "making" a distribution function can be assessed by management through a cost/benefit approach. *Total absence of specialised markets*, according to the framework presented, is one of the situations in which management can derive benefits from integration since there exists nobody else to do it. In this case, according to Stigler, functions would have diminishing returns and thus specialist markets would not have developed yet.

When in 1941 SAVOY had to start distributing products to make them available to consumers, management could not find, in the market, enough suppliers of transportation. More specifically, there was a total absence of the insulated trucks they needed to protect the chocolate from drastic temperature changes. The choice for them was very simple, they had to perform the function internally. They decided to buy the insulated trucks and to train a hierarchically controlled salesforce which would visit retailers with the frequency they considered adequate in order to guarantee freshness and availability of products:

"We had to buy special trucks with insulation in order to guarantee the quality of our products. We also decided to visit retailers very often, once a week, to *rotate* the products and make sure that they would always be fresh when reaching the consumers... We knew retailers would not care for these things, so we had to do it."

There were not too many choices for management. They even decided to set up their own mechanic shop where their trucks would be repaired. They say they had no other choice since they could not find any "reliable" mechanic to deal with. Furthermore, since they decided that they had to maintain frequent visits to retailers, they opened up warehouses in different regions in order to respond quickly to clients demands. They still keep the same structure today (Figure 1).

This is an obvious case of *a lack of specialists* which characterizes early stages of the industry life cycle. The question which remains unanswered is why SAVOY keeps all functions vertically integrated after 50 years during which time suppliers markets have developed and are now available to perform such functions.

When management was asked this question the answer was:

"Well, this company has always done it like this, I suppose that it is because they thought⁷ that they wanted control over the distribution system. We think that it is the appropriate strategy and we also believe in control. For consumer products, you have to have control⁸. As far as your specific question is concerned; no, if we had to do it now, we would probably have to find cheaper ways of doing it, but since the investment has already been made we are happy with the way it is."

There seems to be some confusion about the cost/benefit assessment of SAVOY's distribution channels *today*. It was found that even though they consider that they are very efficient, since distribution costs are 12% of the sales price compared to the 25% charged by independent distributors, the accounting is done at historical costs and depreciation is made accordingly. Some rough adjustments for inflation and devaluation would increase their costs of distribution to 20%-22% of selling price.

Of course the argument expressed above is only true from a classical point of view in which firms are supposed to be maximizing by reducing production costs regardless of the transactions costs involved (transaction costs and agency cost theory). The argument here would be that total control of the salesforce is more efficient since it is probably difficult to design a contract which would make compatible the objectives of the principal, in this case the manufacturer, with those of the agent, the salesman. But is it really true? Why has PERUGINA reached an apparently efficient but less integrated design? In the next section, where the issues of financial market imperfections are discussed, some of the problems with PERUGINA's channel design will be analysed.

Also, moral hazard problems with truck drivers are often mentioned but very seldom considered to be a solvable problem by SAVOY:

" We have so many conflicts with our drivers about the way they take care of the trucks, and since we have so many of them, sometimes we do not know if we are a chocolate and sweet company or a car repairing shop. You see, that is why we have to do the repairing of the trucks ourselves."

⁷ Current top managers have been there only since the take over.

⁸ It is interesting that management would think like this since control over the distribution of consumer products is very costly. From a pure theoretical standpoint, consumer products are bound to have long and loose distribution channels.

It is obviously not clear that they are better off like this than by spinning off the transportation function. PERUGINA, coming into the market later in 1985, found a different way of approaching this problem. This will be discussed in the next section.

iii) Financial Market Imperfections

Neither SAVOY nor PERUGINA have financed large inventories to retailers as has been the normal practice in the beer and apparel industries analysed in Case 2 and Case 3. One of the reasons might be the fact that chocolate products are more perishable and thus require higher turnover and more frequent visits to retailers⁹. Nevertheless, the problem of imperfections in the financial markets has had a different impact in channel design for PERUGINA:

"Refrigerated transportation was a must in order to guarantee the quality of our products. Remember that we are positioned as a premium, high quality product and competing with a giant. We are more expensive than SAVOY in most of our products... we can not afford any mistakes in the quality."

PERUGINA then decided to copy POLAR (Beer industry, Case 3) and finance drivers to buy their own trucks through leasing agreements:

"We needed an extensive distribution through refrigerated¹⁰ trucks and we did not know where to find them. On the other hand we wanted to keep good control over the network"

There was not a suppliers market for such functions. One of the reasons for this is that imperfections in the financial markets make it almost impossible for some individuals (in this case the truck drivers) to find credit financing. The problem has

⁹ SAVOY's account receivables have an average of 7 days. This has led management to express: "this company is a fantastic cash machine". PERUGINA, on the other hand, has used financing as a competitive tool against SAVOY and has a policy of 15 or 30 day financing.

¹⁰ SAVOY does not have refrigerated transportation units, they use insulated trucks to deliver their products.

been solved by PERUGINA by buying the trucks and leasing them to drivers who become owner drivers after 8 years¹¹.

Nevertheless, the financial problem has reverted to PERUGINA since the owner drivers engaged with the Company in this type of leasing agreement have had great difficulties in meeting the financial payments. Low sales volume and high competition with the leader, SAVOY, has undermined the expected returns for the salesforce. In interesting contrast with POLAR, the leader of the beer industry for which the leasing agreements have worked very well, PERUGINA is currently facing important financial problems. The owner drivers have not been able to reach the sales volume which would allow them to repay banks for the loans made to buy the trucks. Therefore, PERUGINA has been assuming the payments.

It could be argued that the figure of the owner driver and the leasing agreement are good only in cases where the products are mature leaders within a stable market. As it has been discussed for POLAR, in this situation there is incentive compatibility between the manufacturer and the owner driver. Furthermore, market leadership guarantees a sales volume to cover leasing payments. If products are new with smaller market share, a hierarchically controlled salesforce offer better incentive mechanisms. Owner drivers prefer to work for the market leader since it offers what they are looking for: higher sales volumes with less selling effort.

PERUGINA seems to be facing both problems with a wide range of products in the early stages of their life cycle, while controlling a small percentage of the market.

Leasing transactions have been a relatively new phenomena in Venezuela. It became a common practice only 20 years ago when investment bankers began developing deals to alleviate capital investment expenditures for different business deals. This may have been one of the reasons why SAVOY, having designed a highly successful distribution channel with corporate controlled employees almost 50 years ago, has found it difficult to find a good reason to switch to a system which may include leasing agreements as PERUGINA has done.

¹¹ According to Article 39 from the Income Tax Law, "all payments made for the leasing of goods used to produce income are deductible from the taxable rent." This is one of the reasons why leasing agreements with owner drivers have become so popular.

iv) Facing Agency Costs: Externalities

Two agency problems with opposite impacts on vertical control have to be faced by management. On the one hand, externalities and risk-bearing, which are discussed here, drive management to search for more control over the functions, and moral hazard (discussed below) inducing managers to choose looser organisational forms.

Distribution channel externalities appear when products are subject to quality debasement. When *brand* products are perishable, special care must be taken by manufacturers in order to guarantee that they arrive to consumers in a good condition. If not, a channel member can sell a spoiled product damaging the reputation of the brand name. It is a negative externality because it is a cost which nobody pays for; prices do not change in the short run but future sales may be affected. This has also been described as the "free-riding" effect, where people performing a marketing function can "free ride" on the efforts of others. (Anderson and Weitz, 1986). In this case the retailer would be "riding" on the brand reputation by selling large volumes of the branded good, and spending very little on service and quality. Nevertheless, the sales for other retailers and especially the manufacturer can be negatively impacted by such careless behaviour.

The manufacturer's objective is to internalize the externality by making the channel member's remuneration reflect the effort of avoiding the externality.

Since it is in the manufacturers best interests to keep brand loyalty, but not necessarily in the best interests of independent distributors or independent retailers, they usually devote important corporate resources to avoiding product decay along the distribution channel.

This is what induces SAVOY to maintain a vertically integrated structure and also why PERUGINA keeps hierarchical control of the merchandising function while leaving others to owner drivers (Table 2). In the words of PERUGINA's marketing manager:

"The retailer would not care less if the product is in a good condition or not, we do. We also try to make the owner driver and the independent distributor feel responsible for it...but it is not enough and so we have to have our own supervisors."

PERUGINA has also deliberately chosen small distribution companies in order to have more power to negotiate agreements which would guarantee a

convenient handling of the products. Nevertheless the supervisors visit all retail outlets and make sure that the merchandise is well displayed and never beyond the expiry date.

v) Facing Agency Costs: Moral Hazard Problems

In Case 1 and Case 2 we discussed the issue of truck drivers developing undesirable behaviour with company owned trucks which negatively impacts on their maintenance costs and operating life. Some companies deal with this problem by spinning-off the function to an external agent, such as an independent transportation company.

PERUGINA has solved the problem the same way POLAR did, by leasing the trucks to drivers. In this manner the contract reflects an incentive for the driver to do what is also in the best interests of the manufacturer.

In the words of the PERUGINA general manager:

"Well, they know that this is the only way (the leasing arrangement) they would ever own a truck. Therefore if it is in their best interests to take good care of them. Furthermore, it is established within the contract that every night they have to leave their trucks in our depots where we have the opportunity to check if they are being as careful as we required. If they are not, we immediately break the contract."

vi) Governance Costs

Increasing governance costs explain why vertical integration into retailing has not been seen as an efficient solution for the companies interviewed. Chocolates and sweets are sold in over 100,000 retail outlets throughout the country, and even though perishability has been determinant in channel design for functions, integrating into retailing would imply costs which would outweigh the benefits of integration. The atomic structure of the retailing network with small, low capital, family owned shops and with little centralized purchasing power, increases the governance costs of integration. Nevertheless, in this case SAVOY, as opposed to other manufacturers of consumer products (Case 1) sell directly to all retailers.

7.2.3. Final Comments.

It is interesting to see how two companies, which have entered the same market in different periods have adopted different channel structures guided by relative market imperfections and product characteristics. Now they are facing new challenges mainly due to new competitive forces within the industry.

CHAPTER 8

CASE 5. ELECTRICAL APPLIANCES: Consumer Service Impacts Channel Structure

Introduction

Distribution channel design in the electrical appliance industry has been significantly influenced by one channel function: after sales service. This has historically been one of the most important competitive tools used by management in order to increase brand loyalty and corporate image. The decision of who gives this service, and how or where it is provided, has stimulated vertical control by manufacturers.

This case is an interesting comparative analysis of two companies which are competing in the same market and have developed small, but important strategic differences. The leader MADOSA, (formerly General Electric) integrated into retailing in order to control sales and post-sale service. The strategy followed by FRIGILUX could be defined as one of, *follow the leader...but watch your step*. When integration is not feasible, controlling strategic functions may be a more viable alternative.

This case also shows the complexity of the financing problem. The appearance of independent retailers offering consumer credit through part-exchange deals is putting strong pressures towards functional spin-off.

8.1. THE DESCRIPTION

8.1.1. The Industry

The electrical appliances sector has become increasingly concentrated due to the continuous process of mergers and acquisitions which changed the structure of the industry during the 1970's and 1980's. The three biggest companies who presently compete in the market are the result of the consolidation of eight former independent firms which manufactured white line products (i.e. refrigerators, washing machines and dryers) and small electrical appliances (e.g. toasters, mixers, blenders). It is interesting to note that one of the objectives for merging has been to acquire new technologies and diversify into other product lines (Table 1).

One of the two hypothesis which will be discussed is that the product diversification strategy followed by firms has been partly induced by channel constraints (i.e. the need to develop totally controlled retailers or exclusive dealers) in order to offer the required variety of products and benefit from economies of scope. The other explanation for the product diversification strategy is that new entrants (FRIGILUX) need to offer a high variety of products which are different from the competition in order to penetrate *exclusive* distribution channels. That would explain why INSANOVA, as opposed to MADOSA and FRIGILUX, does not get involved in any distribution functions while concentrating on economies of scale by producing only a narrow line of no-brand stoves, refrigerators and washing machines. In the words of INSANOVA's general manager:

" We think that as manufacturers we can defend ourselves very well, but that is not the story when the task is to distribute products. You see, there are people who know how to sell to consumers, we prefer to use them and join with them in order to bring the product to the consumer in the most efficient manner."

MADOSA and FRIGILUX, on the other hand, have diversified into new product lines, absorbing new technologies and developing different distribution strategies for their products. These are the two companies which will be analysed.

TABLE 1
MAIN COMPETITORS, CONSOLIDATING COMPANIES AND PRODUCT LINES

CONSOLIDATED COMPANY	CONSOLIDATING COMPANIES		
MADOSA: (1984)	GENERAL ELECTRIC Refrigerators Washing Machines Dryers Vacuum Cleaners Toasters, OSEA*	SIADCA Refrigerators Air Conditioners	MADOSA Gas Stoves
* OSEA: Other Small Electrical Appliances			
FRIGILUX: (1980)	WESTINGHOUSE Refrigerators OSEA	FRIGILUX Water Cooling systems Freezers Display Refrigerators**	
** For retail outlets.			
INSANOVA: (1974)	INSA Washing Machines Refrigerators Stoves Air Conditioners.	CORPORACION CORESMAL DE METALES Gas Stoves	Refrigerators

Thus, in this industry, two main manufacturers strategies are found. The first is to produce and distribute a wide variety of products with several brand names aimed to different consumer segments. The second to focus on manufacturing large quantities of few no-brand products and selling them, in the plant, to original equipment manufacturers (O.E.M.s).

Another characteristic of this industry is the high level of backward vertical integration. In the three companies interviewed, it was found that management has devoted important resources to the objective of achieving total control of their input markets. As the general manager from FRIGILUX stressed:

"In this business if you want to survive you need quality, which means that you need technology and you need to have the right type of inputs at the right time. If you don't control this, you are out."

This behaviour can be explained in transaction costs terms by saying that firms tend to integrate backwards due a combination of the following elements:

- 1) Highly specific assets required in their production process,
- 2) Lack of competitive input markets,
- 3) High degrees of uncertainty on future prices of inputs, quality of the input and availability of price/quantity combinations¹. (Blair and Kaserman, 1983)

It must be pointed out that while backward vertical integration has become an increasingly important strategy in the industry, forward vertical integration has decreased and companies are trying to get out of retailing and wholesaling by leaving distribution functions to be performed by specialists. We shall discuss this development in Section 2.

There has also been an increasing proportion of local investors in the business. The less dependant the industry has become on imported goods, the less the competitive advantages shown by multinationals which have left the country and sold their assets to national investors. One of the arguments stressed by FRIGILUX and INSANOVA was that their main strength was based on the high *flexibility* they enjoy in responding to environmental uncertainties. They were much faster than multinationals in responding to competition, government policies and consumers preferences:

" Westinghouse and General Electric could not compete with us because they had to ask for permission for everything. If we lowered our prices they could not respond until it was too late. Here, we are just three people, we get together every morning and we decide fast."

Specific market shares in this case can only be defined by product lines. In the refrigerators business MADOSA and INSANOVA are competing with around 40% of the market each, whereas in the air conditioning market, FRIGILUX claims to have over 35% of the market with MADOSA 30% and CARRIER 25%.

8.1.2. The Companies Interviewed

Even though three companies were interviewed MADOSA, FRIGILUX and INSANOVA, the following analysis will concentrate on the strategies chosen by MADOSA and FRIGILUX since INSANOVA sells mainly (80%) to OEMs.

¹ All three companies expressed their worries about their former high dependency on imported goods and the negative impact which successive devaluations of the currency had on the price/quality combinations which could be suitable for the local market.

INSANOVA decided only in 1990 to develop a brand name (Comet) which they distribute through independent wholesalers and retailers.

MADOSA (Manufacturera de Aparatos Domesticos S.A.) reached its present status in 1984 after the fusion of General Electric de Venezuela S.A. (consumers division operating since 1951), Sociedad Industrial de Electrodomesticos de Venezuela, S.A. (SIADCA) and MADOSA, who had been operating since 1967.

MADOSA has three different product lines aimed at different market segments.(Table 2).

TABLE 2
MADOSAS'S BRAND NAMES AND TARGETS

PRODUCT BRANDS	TARGETED MARKETS
GENERAL ELECTRIC	Higher Income Consumer
ADMIRAL	Middle Income Consumer
CONDESA	Lower Income Consumer

No-brand products (20% of production) are also manufactured by MADOSA who sells them to OEMs. These OEMs, brand and distribute products according to their own marketing strategy. The brand names which are used to label these MADOSA products are: Luferca, Venerama and Regina. All of the brands are targeted to the *lower* end of the consumers market. Thus, only General Electric products are targeted at the higher income consumer.

Even though some of their products still demand some imported components (such as luxury refrigerators which require imported ice and water dispensers), the company has followed a backward vertical integration strategy with the objective of freeing themselves from external suppliers:

"Who make costs very variable²"

MADOSA claims to control around 30% of the market in most product lines. The following are some of the numbers given by management.

² Input price uncertainty.

Refrigerators	: 36%
Washing Machines	: 32%
Dryers	: 33%
Stoves	: 29%
Air Conditioners	: 30%

FRIGILUX started operations in 1965 with the objective of entering the market for "cooling" systems. They began by producing cooling systems for drinking water, freezers and refrigerated shelves for different types of retailers.

By 1976, Westinghouse from Venezuela was up for sale and FRIGILUX management saw a good opportunity to acquire new technologies and enter new markets. Thus, they acquired the company and entered the market for air conditioners, refrigerators and stoves.

8.1.3. Channel Structure

The channel structure in the industry shows a variety of organisational forms:

- 1) In one extreme, highly controlled distribution networks, with retail outlets owned by manufacturers.
- 2) Exclusive dealers, which operate almost like franchises, with specified controls and service qualifications.
- 3) Authorized dealers, which do not have to be exclusive but are authorized by manufacturers to sell and to offer post-sale service to consumers.
- 4) Independent retailer chains, with no exclusivity arrangements, which usually give financing to consumers and with higher negotiating power with manufacturers.

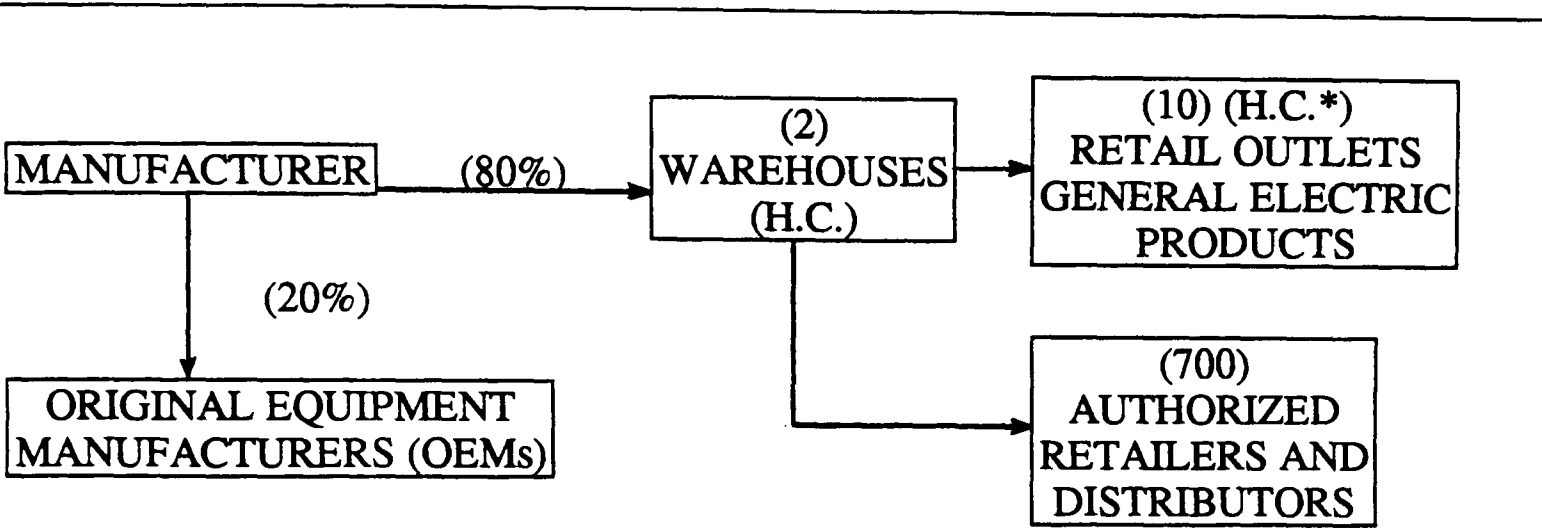
The companies interviewed show some important differences in their distribution pattern. In the 1940's, when General Electric begun operations, they had hierarchically controlled retailers and authorized dealer. MADOSA (formerly G.E.) presents now a mixed structure by which products are distributed through two parallel systems. One, only for General Electric products is totally controlled with 10 G.E. retail outlets³. MADOSA's management has expressed concern about the possibility of maintaining these outlets since they are not being profitable:

³ These outlets are managed as profit centers. This can be explained by the fact that in this case, as opposed to the others like the strategy followed by MONTECRISTO (Case 2), the reason for hierarchically controlled retailers is *not* to compete with price but to beat competitors in service

"We are seriously thinking of selling them to specialist retailers chains⁴ like IMGEVE, especially now that the small line⁵ is having problems with imported competition."

The other is for Admiral and Condesa lines which are distributed through two hierarchically controlled warehouses to 700 independent retailers and small distributors with whom MADOSA has specific exclusivity agreements⁶.

FIGURE 1
MADOSA'S DISTRIBUTION CHANNEL STRUCTURE



H.C.*= Hierarchically Controlled until 1990. Now they are exclusive dealers.

MADOSA sells around 20% of their production to original equipment manufacturers (OEMs) . In this case the sales are made in the plant and it is the OEM's responsibility to develop its own distribution and marketing strategy. (Figure 1)

FRIGILUX on the other hand, has chosen a design by which all their sales to consumers are made through independent retailers. They have total control of the warehouses and they also have supervisors who visit retailers and guarantee customer service. (Figure 2)

⁴ By the beginning of 1991 they sold them to "authorized retailers".

⁵ Home appliances like toasters, blenders, mixers, etc..

⁶ They are allowed to sell products from competition only if they are not manufactured by MADOSA.

FIGURE 2
FRIGILUX'S DISTRIBUTION CHANNEL STRUCTURE



Nevertheless as far as controlling retailers is concerned, they have developed an interesting strategy in order to sell their products through MADOSA's exclusive distributors and retail shops.

They consider that one of their major strengths is the manufacturing flexibility they enjoy. Thus they produce a large variety of products within the same line and penetrate MADOSA's *exclusive* distributors by offering them *slightly* different products in terms of size and power. Since the exclusivity contract permits selling products from competition only "when they are not produced by MADOSA" it can always be argued that, in fact, the product is different. FRIGILUX general manager describes it very graphically:

" What we try to do is to *help* them (the retailers) to act unfaithfully...contracts are to be broken and just like in marriage you can be unfaithful but you have to have a good excuse. We give the retailers the excuse."

FRIGILUX management has found a strategic window derived from contract incompleteness (Williamson, 1975). Since it impossible to write a contract with all the specification and characteristics for actual and potential products, channel members argue that in this case, they are indeed *different* products and therefore they are *not* breaking the contract.

8.1.4. Channel Functions: Who Performs What?

In this section the channel will be divided into functions with the purpose of being able to analyse vertical integration and control with a functional approach. In other words, in order to understand the strategic value manufacturers give to each function and therefore to understand the reasons for selecting different agents to perform them.

TABLE 3
CHANNEL FUNCTIONS: WHO PERFORMS WHAT?

FUNCTIONS	FRIGILUX	MADOSA
SALES TO:		
a)Retailers	MAN.	MAN./I.D.
b)Consumers	RET.	MAN.(1)/RET.
COLLECTION	MAN	MAN
TRANSPORTATION	I.T.C.(2)	I.T.C.(2)
STORAGE	MAN.	MAN.
FINANCING TO:		
a) Retailers	---	MAN.
b) Consumers	RET.	RET.
RISK BEARING(3)	MAN.	MAN.
PROMOTION	MAN./RET.	MAN./RET.
INFORMATION	MAN.	MAN.
POST SALE SERVICE	MAN.	MAN.
MAN.= Manufacturer		
I.D.= Independent Distributor		
RET.= Retailers		
I.T.C.= Independent Transportation Company		
(1) Only in General Electric Shops. MADOSA is trying to sell them.		
(2) Paid by Retailers.		
(3) He who bears the risk of returned merchandise.		

Functions in both companies are highly controlled by manufacturers. Only the transportation function has been spun-off, by both, to independent transportation companies. The explanation for this can be found, according to the theoretical framework, in the fact that for these products, the selling and the transportation functions can be separated (structural separation of the channel) and performed by different agents. The opposite situation exists for perishable products (See Cases 1, 3 and 4). For them this separation is usually inefficient, since very frequent visits are needed to a large number of retailers in order to maintain the freshness of the products.

It is an interesting element in the financing and promotion functions that retailers are increasingly using part-exchanges deals⁷ as competitive tools in order to be able to sell more expensive products.

It is important to stress that FRIGILUX has stopped financing retailers⁸ while MADOSA gives up to 90 days financing. According to FRIGILUX management this has

⁷ The consumer brings an old product as part of the payment.

been possible for them because they have developed a "pull" strategy by advertising their products heavily and making consumers ask for their specific brand:

"We decided to spend in advertising the money that we would otherwise had spent in financing".

The reasons for the specific allocation of responsibility for channel functions displayed in Table 4 will be discussed in the following section.

8.2. THE ANALYSIS

In this section an analysis of management decisions regarding distribution channel design will be presented. In doing this analysis we use the theories evaluated in the literature review and the theoretical framework.

8.2.1. *Existing Approaches*

According to established marketing theories (Aspinwall, 1958) (Rosenbloom, 1987) discussed in Chapter 1, distribution channels for electrical appliances and specially for white line products should be short and with relatively high control from manufacturers.

In fact, the colour classification provided by Aspinwall predicts for electrical appliances short and direct distribution channels since product characteristics match almost perfectly with those defined for yellow goods (Table 4).

TABLE 4
COLOUR CLASSIFICATION FOR WHITE LINE AND ELECTRICAL
APPLIANCES ACCORDING TO ASPINWALL.

PRODUCT CHARACTERISTICS	RED GOODS	YELLOW GOODS	ELECTRICAL APPLIANCES
REPLACEMENT RATE	HIGH	LOW	MED
GROSS MARGIN	LOW	HIGH	HIGH
ADJUSTMENT*	LOW	HIGH	LOW
TIME OF CONSUMPTION	LOW	HIGH	HIGH
SEARCHING TIME	LOW	HIGH	HIGH
* Number of services applied to goods in order to meet the exact needs of the consumer.			
TYPE OF CHANNEL	LONG AND INDIRECT	SHORT AND DIRECT	

Only the *adjustment* element is not congruent with the other variables since electrical appliances are in fact mass produced and do not go through a specific adjustment process in order to please a particular consumer. Nevertheless if the product concept is broadened, and post sale services are included as expected product attributes (Levitt, 1980) it could be said that there is some adjustment of the product to consumer needs, i.e. specific guarantee services and small installation modifications.

On the other hand, according to variables presented in Chapter 1 for market and product characteristics, (Rosenbloom, 1987) what the marketing theory anticipates fits very well with decisions taken by management among the two companies interviewed. According to these variables the channel should be shorter since:

- 1) the frequency of purchase is low,
- 2) the products are relatively heavy and bulky which increases transportation costs,
- 3) the price of the products is high and also their income/price relationship, and
- 4) because the products have a higher level of technical development.

Nevertheless, again, in the check list for market and product variables, standardization is considered as a variable which encourages longer channels.

These theories, although accurate in this case for predicting channel structure, fail to explain "why" it is that a company chooses a specific channel design. Sometimes the answers seem to be too obvious, like: "due to the information required by the consumer, products with a high degrees of technological development will tend to have shorter, more controlled channels". To which it could be asked again: "yes, but why?".

It is also difficult to explain within this framework, why did both companies spin-off the transportation function and leave it to be performed by an independent company. (Table 3).

Transaction costs economics (Williamson, 1987) also predicts that in this case vertical integration will tend to be preferred over looser forms of organisations since:

- 1) Externalities are high: negative externalities may develop if customer sale and post sale service does not meet consumers expectations. In this case brand image is damaged and *future*⁹ sales negatively impacted.
- 2) Important levels of human asset specificity are present since the sales-force has to be trained in order to give customers the information and service required to make the buying decision.
- 3) Economies of scope are not as important as for other goods such as consumer products. Thus losses in economies of scope at retail level are not as high, thus permitting vertical integration into retailing. Furthermore, this could also explain the diversification strategy followed by the companies interviewed.

According to the three conditions described above, manufacturers would tend to integrate vertically forward into retailing. Nevertheless this has not been the case for the companies interviewed which have been increasingly using independent or "authorized retailers". A functional analysis helps to evaluate management strategy behind channel design; if a transaction cost approach is followed in order to evaluate vertical integration of channel *functions*, sales to retailers, to consumers, post-sale service and risk bearing show favourable characteristics for vertical integration. (Table 5). Nevertheless it fails to explain why some companies would tend to be more integrated than others. Furthermore, some functions can not be evaluated properly (financing, information and promotion) with the three variables proposed by Williamson in his model.

⁹ A negative *externality* is a cost which is not paid during the *present* transaction, but it affects future behaviour.

TABLE 5

VARIABLES WHICH IMPACT VERTICAL INTEGRATION INTO
DISTRIBUTION: A TRANSACTION COST APPROACH BY FUNCTIONS.

FUNCTIONS	ECONOMIES OF SCOPE*	EXTERNALITIES	ASSET SPECIFICITY	VERTICAL INTEGRATION
SALES TO:				
a)retailers	0	+	+	Favourable
b)consumers	+	++	+	Favourable
TRANSPORT.	+	0	0	Unfavourable
STORAGE	+	0	0	Unfavourable
POST-SALE-				
SERVICE	+	++	++	Favourable
RISK BEARING**	0	++	++	Favourable
FINANCE TO:				
a)retailers	?	?	0	?
b)consumers	?	?	0	?
INFORMATION	0	?	?	?
PROMOTION	0	?	+	?
* Or Economies of Scale				
** of returned merchandise				
? = difficult to assess with given variables.				
0 = negligible				
+ = some				
++= considerable				
SOURCE: Based on the model presented by Oliver Williamson in "Economic Institutions of Capitalism". 1987.p. 31.				

On the other hand, Stigler's functional approach explains that as the industry matured, specialists for channel functions emerged. This has been the case for sales to consumers and transportation (Table 4). This framework though, does not explain why other functions, like post-sale service and risk bearing have not developed specialists markets.

8.2.2. *Proposed Approach*

We will now analyse by functions, management decisions on channel structure. In order to do so the proposed theoretical framework will be used. The following questions, which remained unanswered within the existing frameworks, are put forward in order to guide the analysis:

* What determines management choice between "making" or "buying" a specific channel function?

* Why have manufacturers spun off the transportation function?

* Why did General Electric decided to integrate vertically into retailing?

* Why is MADOSA thinking of selling their retail outlets and in general why are manufacturers spinning-off retailing-specific functions?

* Why have manufacturers kept the storage, servicing and risk bearing functions?

i) Lack of Competitive Markets: Total Absence

When General Electric began operating in the country during the 1950's, they could not find suppliers of channel functions in the market. As with other pioneer companies like SAVOY (Chocolate), INDULAC, (Milk) and POLAR/NACIONAL (Beer), the decision between "buying" or "making" the functions was obvious -either they made them or nobody else would.

The difference between this case and the others is that General Electric (G.E.) integrated forward *including* retailing functions since they required product-specific services at retail level which they could not find in the market. They needed a trained sales force¹⁰ which would know how to explain to consumers about product properties and alternatives. In this market, consumers buying behaviour is not impulsive, they invest time (in searching) gathering the necessary information before making the final decision. Customer service at the retail level plays a very important role in providing this information.

There was also another important element pointed out by a former G.E. manager:

"The fact that those were, and are General Electric shops, gives the consumer *confidence*".

This is even more important considering the brand image for high quality products which is the MADOSA strategy for their G.E. line.

ii) Facing Agency Costs: Externalities and Risk Bearing

Avoiding negative externalities as a result of product quality debasement, would induce companies to have more control over their channels. As the theoretical framework indicates, product quality debasement is not only a consequence of perishability, product decay or fashion. In fact, negative externalities can also be the result of client dissatisfaction with the actual service received when compared with that expected or promised by the manufacturer.

This has been the reason why MADOSA has kept hierarchical control over the retailers they bought from General Electric:

"General Electric has always had its own retailers because it was the *only way* of guaranteeing a *General Electric* service...this means good quality service and information, spare parts supply, and to comply with guarantee provisions."

It also explains why MADOSA keep totally owned retailers for their expensive brands which they have targeted at the high income consumer.

Apart from investing in retailing, MADOSA has devoted important resources in order to avoid externality problems. They have totally owned repair shops for post-sale service, they do delivery repair service for customers and they have designed a strict supervision system by hierarchically controlled personnel. These supervisors are in charge of visiting retailers to check the merchandise display and sales service to customers.

Also, FRIGILUX has had to face this problem, and even though they decided not to integrate vertically into retailing they have developed important control mechanisms through supervision and a combination of totally owned and contracted repair shops. To deal with externalities they have chosen to control hierarchically the following functions:

- 1) storage,
- 2) post sale service,
- 3) risk bearing,
- 4) information.

By controlling these functions, the company has faced the externality problem and defended brand image without integrating into retailing. Once more, a functional view of the channel permits us to understand why management would strategically decide to keep some functions while spinning-off others.

iii) Facing Agency Costs: Moral Hazard Problems

We have discussed in Cases 1, 2 and 4 how moral hazard problems may have induced firms to spin-off functions in order to solve the problem of information asymmetry between the principal (manufacturer) and the agent. In the previous cases usually what happened is that the manufacturer decided to leave the transportation function to an independent company since drivers usually handled company owned transportation units very carelessly. This could be one of the reasons why MADOSA and FRIGILUX have done the same.

Nevertheless, this case presents an interesting situation of moral hazard behaviour which may be the explanation¹¹ for the manufacturers tendency to get out from retailing. There is one retailing-specific function which deserves special attention since it has become an important competitive tool: consumer financing. This has been particularly developed by specialised retailing chains when selling white line products, televisions and other appliances which represent a high price/income relationship.

What is that these specialist retailers have developed, among other financial mechanisms, part-exchange deals in order to improve unit sales. The part-exchange deal introduces a problem of asymmetric information in the transaction: the owner of the old appliance possesses information which is impossible for the retailer to know. Thus the transaction becomes subject to moral hazard behaviour from the customer who is bringing an old appliance to be exchanged for the new one¹². Specialised retailers have information advantages, if compared with manufacturers, to deal with these moral hazard problems.

8.2.3. Final Comments

We have analysed the evolution of distribution channels in three leading companies in the electrical appliances industry. This has been a particularly interesting case to evaluate how competitive forces impact managerial decisions on the way

¹¹ Besides the development of specialised suppliers markets as is predicted by the industry cycle theory. (Stigler, 1951).

¹² The same phenomenon has been identified as "market for lemons" by (Akerlof, 1984) when analysing information asymmetries in used car markets.

distribution functions are organised, and how channel dynamics induce product diversification strategies in firms.

CHAPTER 9

CASE 6. THE PHARMACEUTICAL INDUSTRY: Bilateral Monopoly and Integration

Introduction.

The analysis of the pharmaceutical industry considers the behaviour of manufacturing firms within a highly atomistic and competitive market structure. Nevertheless, important degrees of concentration at distribution level, combined with the impact of government regulations- which increase entry barriers- set up an interesting dynamic of market power and monopolistic conduct among agents. One of the impacts on channel structure has been vertical integration between wholesalers and chemist shops.

Furthermore, channel design is strongly affected by the fact that the physician¹ often makes the buying decision while the consumer remains passive. Manufacturers develop a parallel channel to sales, only for the functions of promotion and information, in order to reach the decision maker directly. Two elements guide marketing managers in the industry: product development and a "push" strategy concentrating on direct access to medical doctors².

Product perishability, and the need for highly specific assets in order to perform certain channel functions are also key elements in defining "buying" or "making" decisions for vertical control.

¹ The other agent who influences the decision is the chemist who can recommend an alternative product to the patient. In Venezuela, where prescriptions are very seldom required by law, the local chemist recommends, and sells, medication for different illness. As household income level decreases, the influence of the chemist increases and the chemist tends to totally substitute the doctor.

² These promotion activities are aimed to inform and get information from medical doctors and are called *detailling*.

9.1. THE DESCRIPTION

9.1.1. *The Industry*

The pharmaceutical industry in Venezuela is highly atomistic. A total of 75 laboratories, with less than 3% of market share each³, compete in the production of drugs and medicines. They are called *laboratories* because their manufacturing process is focused on the production of drugs with imported chemicals, patented by large multinationals. These local companies are usually subsidiaries who pay royalties for the use of these patents.

This lack of concentration within the manufacturing process makes it possible to gain important economies of scope in wholesaling and retailing. The need to offer *variety* becomes one of the most important elements in distribution due to:

- 1) the existence of a wide variety of goods produced by a large number of manufacturers,
- 2) the fact that consumption patterns are highly specific with a low substitution rate among products,
- 3) the fact that it is usually the medical doctor, and not the consumer, who makes the decision for most products (and for all prescribed medicines).
- 4) the existence of informational asymmetries about drug benefits which refrain consumers from using alternative products.

The influence of the chemist in the consumers buying decision has the opposite effect by inducing product substitution.

The distribution system shows a totally different structure to that of the manufacturers' market. Only two wholesalers control almost 60% of sales (Table 1) and they are vertically integrated with more than 100 chemist shops. It will be argued in Section 2 that vertical integration has been the result of a bilateral monopoly developed between wholesalers (high market power) and chemist shops (spatial monopolies).

³ There is one exception, LABORATORIOS VARGAS, a corporate group who owns four different companies and controls around 9% of the market.

TABLE 1
MARKET STRUCTURE IN DRUG WHOLESALING

COMPANIES.	MARKET SHARE
FARVENCA	34%
COVECA	25%
DRONACA	10%
OTHERS	31%

The industry is also highly controlled by government agencies who set:

- 1) quality standards,
- 2) prices,
- 3) margins at retail level: 30%,
- 4) margins at wholesale level: 14.5%,
- 5) the number of chemist shops within a specific geographic area⁴.

In this case government controls hamper competition while *increasing spatial monopoly* at retail level by limiting the number of chemist shops.

On the other hand the evolution towards standardization has impacted industry structure. Before standardized products were developed, chemists "manufactured" drugs with the chemicals they bought from sales representatives of big multinationals. As technology changed and markets developed, products became increasingly standardized and laboratory-subsidaries began to manufacture them on a large scale with specific brand names. (Figure 1 and Figure. 2)

When the manufacturing process was shifted from the chemist to the laboratory, the middlemen emerged to perform the following functions:

- 1) Reduce the transactions between the laboratories and the chemists.
- 2) Reduce the discrepancies between production (high scale) and consumption and
- 3) Provide the required variety at the chemist level.

Also the perishability problem was reduced since new technologies permitted laboratories to improve sterilization by packaging. Nevertheless, adequate storage and transportation is required in order to insure the quality of products (asset specificity).

⁴ Barrier to entry developed by government policies.

Figure 1
EVOLUTION OF AGENTS IN THE INDUSTRY AND CHANNEL CHAIN:
First Period.



Figure 2
EVOLUTION OF AGENTS IN THE INDUSTRY AND CHANNEL CHAIN:
Second Period.



* These wholesalers are called drug distributors.

Another element which is important to stress is that prescribed and over-the-counter products require totally different marketing and distribution strategies. The latter are considered consumer products with similar distribution and advertising strategies. This analysis focuses on the former.

TABLE 2
MARKET STRUCTURE OF THE DISTRIBUTION CHAIN.

AGENTS	No. OF AGENTS	% OF MARKET SHARE CONTROLLED BY THE 2 LARGEST AGENTS.
MANUFACTURERS	75	5.25
WHOLESALERS	50	59.00
CHEMIST SHOPS	4000(1)	?

(1) Location of chemist shops are under municipal regulations which determine a maximum number of outlets for specific areas.

9.1.2. The Companies Interviewed

Two companies were interviewed: LABORATORIOS FARMA C.A. (2.95% market share) which started operations in 1937 and LABORATORIOS HOECHST (2.25% market share) which was founded in 1962. Two managers from FARVENCA,

the biggest distributor, were also interviewed in order to incorporate their views about the distribution process.

Both manufacturing companies began their operations in Venezuela as sales representatives for multinationals. During the 1960's the Venezuelan government developed aggressive incentive policies to induce multinationals to change their strategy and, as a result, sales representative offices were substituted by local manufacturing. Both companies interviewed have been the result of such policies.

9.1.3. Channel Structure

FARMA and HOECHST present identical channel structures mainly characterized by the use of independent wholesalers who visit chemist shops. One interesting element is that wholesalers buy from all manufacturers. This enables them to offer the chemist the total range of products available in the market⁵.

This has two important implications:

- 1) The economies of scope achieved at wholesaling and retailing level are equal.
- 2) Chemists do not need to use more than one supplier to offer the required variety at retail level. Another supplier is, however, a new source of financing and/or a means to increase relative negotiating power over suppliers in general.

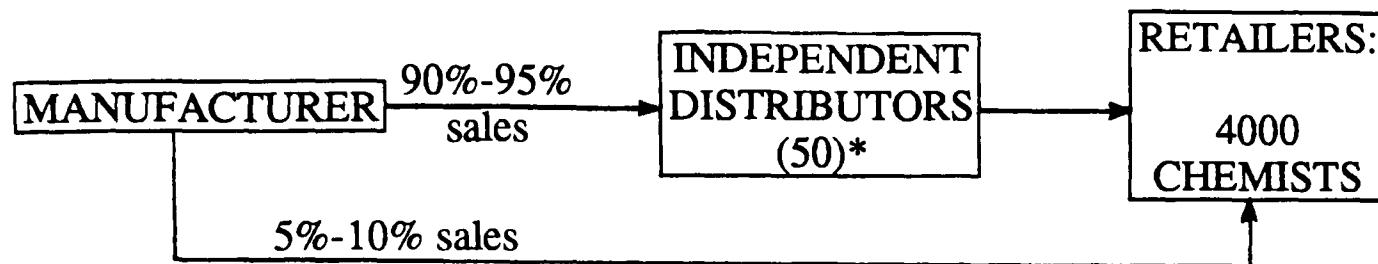
This could explain the relatively higher levels of concentration in the wholesaling market when compared to the manufacturers and/or retailers (Table 2). There are important gains in economies of scope at the wholesaling level since variety becomes one of the most important issues in distribution. An average chemist shop carries around 5000 products of which 50% are medicines and the rest are "miscellaneous"⁶. According to FARVENCA's management, as far as medicines are concerned the variety of products offered by them is equal to those at chemist level:

⁵ The major difference with the industries analysed in the other five cases is that, in the pharmaceutical industry, *exclusivity* contracts in distribution are totally absent. Low market power enjoyed by manufacturers is the main reason.

⁶ A wide range of products e.g. cosmetics, baby care and sanitary products.

"We carry 2500 different medicines. You can usually find the same variety in any chemist shop. Besides that we carry around 2600 miscellaneous products."

Figure. 3
CHANNEL STRUCTURE FOR HOECHST AND FARMA



* 2 distributors control 50% of sales to chemists.

9.1.4. Channel Functions: Who Performs What?

The two companies show identical channel structures and responsibility allocation for channel functions (Table 3). The agents have reached the same design in which the most powerful link is the wholesaler. More than 90% of sales to chemists are made through them, nevertheless the *risk bearing*, *promotion* and *information* functions are hierarchically controlled by both manufacturers.

It is also interesting to note that the *financing* function has been assumed by the wholesalers who, in spite of being the most powerful agents in the chain have accepted the responsibility for such a risky function. An explanation for this apparently paradoxical behaviour will be given in Section 2.

When the general manager from one of the companies was asked why they were not selling directly to chemists, he argued the following⁷:

"To be efficient we have to specialize. Our philosophy is to manufacture not to distribute. We would need a lot more capital investment in *transportation*, in *storage* capacity and especially we would need a lot of patience, experience and money to *finance* chemists since they do not like to pay."

7

Managers from both companies asked for discretion. They did not mind being quoted as long as neither their names nor their company's were attached to a specific quote.

TABLE 3
CHANNEL FUNCTIONS: WHO PERFORMS WHAT?

FUNCTIONS	LABORATORIES	
	HOECHST	PHARMA
SALES:		
a) To chemist	I.D./MAN.(1)	I.D./MAN.(1)
b) To consumers	CHEMISTS	CHEMISTS
STORAGE	I.D.	I.D.
TRANSPORTATION	I.T.C./I.D.	I.T.C./I.D.
COLLECTION	I.D/MAN	I.D/MAN
FINANCING		
a) To I.D.	MAN.	MAN.
b) To Retailers	I.D.	I.D.
PROMOTION(2)	MAN.	MAN.
RISK BEARING(3)	MAN.	MAN.
INFORMATION.	MAN.	MAN.
MAN. = Manufacturer		
I.D. = Independent Distributor		
I.T.C.= Independent Transportation Company		
(1) Only 5%-10% of sales.		
(2) Detailing usually through a "promotion force" who often visit medical doctors (who make the buying decision for patients).		
(3) Agent who bears the risk for returned products.		

Transportation from the manufacturer to wholesalers is made through an independent transportation company but is paid for by the manufacturer. The wholesaler assumes the transportation function to chemists.

The storage function is controlled mainly by the wholesalers⁸ who are responsible for the stability of the supply between manufacturers and chemists.

The promotion and information functions are performed by manufacturers with a hierarchically controlled and highly trained personnel, who constantly visit medical doctors and chemists in order to provide them with information and free samples of drugs, while asking doctors their opinion and experience on different products (information). Manufacturers are willing to spend important resources in these functions especially in the case of new products. On the other hand, independent distributors dedicate resources to exchange information with the chemist.

⁸ Manufacturers also do some storage.

9.2. THE ANALYSIS

In the following section an analysis of management decisions will be presented. First, we will discuss the existing theories and we will compare them with the empirical data collected for the case. Second, an alternative view will be presented where the proposed framework will be used to give a functional perspective and to explain the issues which can not be understood within the existing frameworks. As with the rest of the cases, the discussion will be centered on the competitive dynamics facing management.

9.2.1. Existing Approaches

There are a wide variety of products within the pharmaceutical industry; some more perishable than others and with different replacement rates. Nevertheless, an evaluation according to Aspinwall's framework would predict longer channels and looser organisational structures than those shown in this case. Vertical integration between wholesalers and chemist shops could not be explained under this framework.(Table 4)

TABLE 4
COLOUR CLASSIFICATION FOR PHARMACEUTICAL PRODUCTS
ACCORDING TO ASPINWALL

CHARACTERISTICS	RED GOODS	YELLOW GOODS	PHARMACEUTICAL
REPLACEMENT RATE	HIGH	LOW	?
GROSS MARGIN	LOW	HIGH	LOW
ADJUSTMENT*	LOW	HIGH	LOW
TIME OF CONSUMPTION	LOW	HIGH	LOW
SEARCHING TIME	LOW	HIGH	MED
TYPE OF CHANNEL	LONG AND INDIRECT	SHORT AND DIRECT	
* Number of services applied to goods in order to meet the exact needs of the consumer.			

According to other marketing theories which consider *market, product, firm* and *environmental variables* as determining channel structure (Rosenbloom, 1987), pharmaceutical products should tend to have longer and looser channels. Low density of the market, small market share, product standardization, and low price income relationship are variables which are present in these type of products and, according to this approach call for longer channels. Only the perishability of some products would be considered as an element in favour of integration or control. Integration between wholesaler and chemist is thus not explained through this scheme.

On the other hand, transaction cost economics predicts vertical control when:

- 1) externalities are present,
- 2) high specific assets are required to perform channel functions and
- 3) losses in economies of scope and scale do not outweigh the gains from integration.

Thus, according to the transaction costs approach, the pharmaceutical industry should have highly controlled channels if there were not high losses in economies of scope or scale. In fact, some degree of asset specificity is required for the sales⁹, storage, promotion and transportation functions. Also externalities are present since products are subject to quality debasement with an important impact on consumer well-being. Nevertheless, manufacturers distribute over 90% of their sales volume through independent wholesalers (Figure. 3).

We would expect to find vertical integration into wholesaling, while integration into retailing would be less likely since losses in economies of scope are high.

If the transaction cost analysis is made by functions, as it has been proposed before, a clearer picture emerges (compare Table 3 with Table 5). In fact, the promotion and risk bearing functions show *favourable* conditions to vertical integration according to the parameters given by Williamson (Table 5). Nevertheless, information which is also vertically controlled can not be explained within the same framework. Neither can the financing and transportation functions be explained. Also, an explanation is needed to understand why the transportation function has not been spun-off. In the following sections a discussion of these issues will be presented.

⁹ At the retailing level the degree of human asset specificity is greater since it is required by law, that there is at least one pharmacologist per chemist shop.

TABLE 5

VARIABLES WHICH IMPACT VERTICAL INTEGRATION INTO
DISTRIBUTION: A TRANSACTIONAL COST APPROACH BY FUNCTIONS.

FUNCTIONS	ECONOMIES OF SCOPE(1)	EXTERNALITIES SPECIFICITY	ASSET INTEGRATION	VERTICAL
SALES TO:				
a)Chemists	+	+	+	Unclear
b)Consumers	++	+	+	Unfavourable
COLLECTION				
TRANSPORT.	+	+	+	favourable
STORAGE	+	+	+	Favourable
FINANCING TO:				
a)I.D.	?	?	?	?
b)Retailers	?	?	?	?
RISK BEARING(3)	0	++	+	Favourable
PROMOTION(2)	0	+	+	Favourable
INFORMATION	0	?	++	Unclear
?=difficult to assess with given variables				
0=negligible				
+=some				
++=considerable				
(1) Or scale				
(2) Detailing				
(3) Agent who bears the risk of returned products.				

Stigler's functional theory explains why the transportation function is not vertically controlled, the reason is that in *mature* markets specialists emerge to benefit from economies of scale and scope for required channel functions. In this case, transportation can be more efficiently performed by specialists. Nevertheless it fails to explain why the market has not developed specialists for other channel functions which continue to be vertically controlled by the manufacturer.

9.2.2. Proposed Approach

In this section we will analyse the data with the proposed framework. In doing so the following questions will guide the discussion:

- * Why has management decided to "buy" or "make" specific channel functions?
- * Why have manufacturers not integrated into distribution?

* Why do manufacturers keep vertical control of the promotion, risk bearing and information function?

* Why, if financing retailers has been considered risky, the most powerful agent in the channel chain, the wholesaler, ends up performing it?

* Why have retailers integrated backwards into wholesaling?

i) Lack of Competitive Markets for Distribution Functions. Bilateral Monopoly

Bilateral monopolies (Bowley, 1928) (Morgan, 1949) are characterized by situations in which a monopolist sells to a monopsonist. The core of the argument is that since each agent has a market power over the other, bargaining costs tend to be very high, transactions very costly¹⁰ and therefore, vertical integration socially desirable¹¹ (Chapter 1). From the firms point of view, vertical integration can also be beneficial when such a strategic move implies higher net present profits: a better price/output relationship with less bargaining costs.

In the pharmaceutical industry, high degrees of vertical integration are found among wholesalers and chemists. The first move came from a group who owned a chain of chemist shops and decided to integrate vertically backwards into wholesaling:

" We knew we could get better conditions from wholesalers and they would not give in. We got tired of it and we decided to have our own wholesaling company ... you see, we thought it would be better to negotiate with the laboratories than with independent wholesalers...and we were right."

In distribution channels, different members can engage in bilateral monopoly relationships when:

¹⁰ Bilateral monopoly has been widely used defending vertical integration against monopoly accusations. Even though neo-classics tend to ignore transaction costs economics, in this model high bargaining costs are formalized and considered the main cause of integration.

¹¹ Since the output is higher after vertical integration and prices for the good sold would be, on average, lower.

- 1) manufacturers enjoy some kind of monopoly power due to high degrees of concentration or brand loyalty,
- 2) high asset specificity is required to perform distribution functions.
- 3) the spatial monopoly power of retailers is exacerbated due to consumer buying patterns, government regulations or monopolistic behaviour.

The following elements made possible the development of bilateral monopoly relations with increased bargaining costs between wholesalers and retailers:

- 1) Market concentration in wholesaling.
- 2) Increased spatial monopoly in retailing due to government regulations and the emergence of chemist chains.
- 3) Since most economies of scope are achieved at wholesaling level¹², independent distributors push for orders with wide variety of products. Chemists on the other hand, conscious of their spatial monopoly, insist on getting better deals for bigger orders by threatening to buy from competition.
- 4) Also consumer prices are controlled by government. This sets a price ceiling at the retail level which stimulates price bargaining in input markets.

Some authors have argued that the reason for the vertical integration trend in the distribution of pharmaceutical products is to be found in the profit margin differential allowed by government regulations between chemist (30%) and drug wholesalers (14.5%). According to this argument, wholesalers would integrate forward, searching for higher margins at retail level. Nevertheless, this would not explain backward vertical integration where chemist shops buy drug distributors, which has been in fact the most common case. This behaviour, as it has been explained, can be better understood within a bilateral monopoly framework.

ii) Lack of Competitive Markets for Distribution Functions. Financial

Market Imperfections

Financing to retailers is only given by wholesalers (30 days) since manufacturers consider it as a high risk function. Wholesalers in turn enjoy up to 90 days financing from manufacturers.

¹² To provide variety has been one of the most important competitive tools for independent distributors. It is considered that the same variety can be found at wholesale and retail level.

When a sales manager from one of the companies was asked specifically about the financing function he stressed:

"We give the wholesalers up to 90 days financing, it is impossible to achieve any reasonable arrangement with chemists, they pay when they feel like it... it is good that we only sell directly to them for a very small percentage of sales."

Intra-channel financing in this case can be explained by the concept of *financial cost advantage* developed in the theoretical framework. Wholesalers extend credit to chemist shops because they enjoy cost advantages in doing so when compared to manufacturers and banks. As is reflected in the above quotation, manufacturers do not have the power to exert any ex-post control over retailers which in turn induces moral hazard problems, which can end up being very costly for the lender. As one of the managers expressed when explaining why they had stopped given them financing.

"We were not very happy with the chemists behaviour, they manage their business as a small family shop: if the money is in the cash register they take it home, spend it and then tell you that they can not pay you".

When financial market imperfections are high, as is the case for Venezuela, intra-channel financing is more likely to appear since it would be more difficult for some channel agents to get financing in the loan market, in this case chemist shops. Thus, when there is a cost advantage when compared to banks, the financing function is usually assumed by the most powerful member of the channel. In those cases in which it is more expensive for channel members to extend the loan, the financing function is usually imposed to the weaker agent (Chapter 1). In this case the most powerful agent is the wholesaler, he imposes credit conditions on the manufacturer who, in fact, gives him up to three months credit. And, since ex-post control to chemists is cheaper for him than it is for manufacturers and/or banks he is willing to perform the function. These control abilities solve the informational asymmetries and the moral hazard costs which could be present if either the bank or the manufacturer extended credit to retailers.

iii) Facing Agency Costs. Externalities

One of the functions which is vertically controlled by manufacturers is risk bearing, to avoid negative externalities as a consequence of product debasement or damage (Chapter 3). A quotation from one of the managers illustrates:

" We have to assume the risk, we are the only ones who care, besides you are dealing with people's health here, you can not play around with it, one mistake and we are finished."

In other words, the agency problem arises because it is in the best interest of the manufacturer (the principal) to maintain brand loyalty through excellent quality. This is not necessarily the case for independent distributors or chemists (the agents) who can always buy from other suppliers. The negative externality, future reduction of sales volume due to changes in consumer choice, (buying a different brand) is a cost that only the manufacturer pays in the long run. To "internalize" the externality, manufacturers assume the risk of damaged products. This is probably the result of the inability to design a contract which would permit the manufacturer to share the risk with other channel members.

Manufacturers use detailing to visit medical doctors but also to control the turnover of products at chemist shops and hospitals. Thus even though sales have been almost totally spun-off to wholesalers, manufacturers keep tight control over a function, in this case *risk bearing* which they consider strategically important for brand loyalty and corporate image.

iv) Governance Costs and Losses in Economies of Scale and Scope

It could be argued that one of the reasons why manufacturers have not integrated forward into wholesaling is because high governance costs would outweigh the benefits of integration. Nevertheless, 4000 outlets is not a large number to serve, especially when compared to other industries where manufacturers serve directly 7000 retailers (Dairy, Case 1) or 100,000 retailers (Chocolates, Case 4). However, in those cases, the industry was highly concentrated so that a large proportion of the whole market was supplied by each manufacturer. At the same time, products were very standardized. By contrast, the pharmaceutical industry is very atomistic and product variety is much larger. When deliveries are made, specific items are demanded out of a large list of possibilities, thus requiring much more logistical effort. This tends to generate important economies of scale in distribution which are not outweighed by the benefits from control.

9.2.3. Final Comments

This case has permitted the evaluation of bilateral monopoly relations and their impact on channel structure. The forces towards integration, as predicted by the seminal papers in the field seem to be present, even though the way they actually appear in the world has significant complexities. This case is also interesting in noting how the manufacturers can control certain strategic functions even when they have very little market power.

CHAPTER 10. CONCLUSIONS

Theoretical and Empirical Findings

Introduction

In this Chapter, we present a summary of the empirical findings and their relationship to existing theories and to the proposed framework. In Section 10.1, we explain the research questions and study propositions. In Section 10.2, a summary of the existing applied theories and empirical research is given in order to identify the gaps which inspired the research and the theoretical framework proposed in Chapter 3. Finally, in section 10.3, we carry out a cross case analysis in order to identify common patterns, differences and surprises among the six cases and fifteen companies analysed in Chapters 4 through 9. Finally, we consider agreements and conflicts between the empirical findings and the theory.

10.1. Research Questions and Study Propositions.

Two specific questions guided the research design :

- R_1 : How are distribution channels perceived by management¹.
 R_2 : Why do managers choose more complicated forms of transactions when designing channel structure (e.g. vertical integration and contracts) instead of keeping to the classic market exchange.

The research interest was to find out how important channel design was considered within corporate strategy and what were the factors which determined the alternative types of organisational forms chosen by management.

Given the objectives of the research, a case study method was chosen:

"The form of the question -in terms of "what", "who", "where", "how" and "why"- provides an important clue regarding the most relevant research strategy to be used. The case study strategy is most likely to be appropriate for "how" and "why"

¹ Only from the point of view of the manufacturer. The perspective of retailers and wholesalers is analysed only in so far as it affects the strategic decisions of manufacturers.

questions, so your initial task is to clarify precisely the nature of your study questions in this regard" (Yin, 1989, p. 29)

A list of study propositions was defined for each question. The way in which these propositions contrast with the empirical results is presented in Section 10.3.

10.1.1. The Research Questions: a Justification.

In the managerial literature, strategic decisions regarding distribution channels are often analysed as part of the "marketing mix". In this context, the emphasis is placed on the development of products which "satisfy consumer needs" while channel design is often regarded as a complementary process. Managers are supposed to "choose" the best alternative, based on product characteristics², to make goods available to the targeted consumer. The specific impact which channel decisions have on the firm's competitiveness is very seldom mentioned.

In spite of this, as the empirical evidence presented indicates, manufacturers are willing to spend substantial resources, which often do not reach the consumer, in order to achieve *control* of the channel. Furthermore, strategic decisions for channel design, as it was found later in the empirical work, have been far more complex than "choosing" among available alternatives. Sometimes managers have had to create and/or develop the markets for channel functions. In other circumstances they have dealt with imperfections in the existing markets, which have had important consequences in channel design and on the firms' competitive advantage. Old and traditionally successful firms³ have strong distribution channels which are seen as important barriers to entry by local and foreign competition. We also wanted to know what variables affected management decisions to integrate vertically into distribution and, why other forms of transactions were preferred over the traditional market exchange.

² For example, Aspinwall (1958) suggests that high quality products should have short and exclusive channels, standardized consumer products should have long and dense networks.

³ By successful we mean firms with high market share.

10.1.2. The Study Propositions.

The elements mentioned above inspired the following *study propositions*⁴.

i) For question R₁:

- 1) *Distribution channels are viewed by management as a particularly important competitive tool.*

In other words it is not only important to make the product with attributes the consumer wants. It may be of greater strategic importance to decide how the product reaches the consumer.

- 2) *The length and width of the channel is not the issue but who performs which functions and why.*

The strategic decision does not rely only on how long the channel should be (e.g. number of wholesalers and retailers, as in Frazier, 1991), nor on which type of wholesalers or retailers to use. The channel is seen by management as a set of functions, e.g. transportation, storage and financing, which have to be performed efficiently within different markets. Strong market imperfections in less developed economies exacerbate this fact. Thus the problem of channel design is not only how long, wide, or exclusive the channel should be, but which agent should undertake which function.

ii) For question R₂

In the search for study propositions for this question, different theories were found in the literature. A summary of them is presented below.

A multi-disciplinary approach was followed combining economic and managerial theories in order to formulate a list of the elements which would induce manufacturers to integrate forward or to control marketing channels (see Table 1).

4

Study propositions direct the attention to issues which should be analysed in an attempt to answer the research questions. They can be compared to the role which hypothesis have in surveys.

In the economic literature, special attention was given to those which related to the causes of vertical integration and to the limits of the firm. Scattered concepts and theories were found, but no comprehensive framework in which to understand the specific issues of vertical integration into distribution channels.

Table 1

Theoretical Approach	Firms would tend to integrate forward:
Bilateral Monopoly	In the presence of bilateral monopoly with suppliers of channel functions
Functional Theory	When industries are new When markets are too small to obtain economies of scale
Transaction Cost Theory	When there are high degrees of uncertainty When there is high asset specificity When externalities are high When transactions markets are small and frequent When losses in economies of scope and scale are not large When post-contractual opportunistic behaviour may be costly
Strategic Approach	To increase barriers of entry To avoid market rationing To avoid price and tax regulations
Marketing and managerial theories	When the replacement rate is low When gross margins are high When the level of adjustment is high When the time of consumption is high When searching time is high When markets are small and dense When firms are large When products are complex and custom made When products are perishable
Elements not found in the literature	When there are imperfections in the credit markets When there is a total absence of suppliers for channel functions

The *study propositions* derived from the literature review are presented in Table 1. The degree to which the empirical results contrast with these study propositions will be discussed in the Section 10.3.

10.2. The Theory

10.2.1. Existing Empirical Research and Applied Theories.

Different strategic issues are often mentioned in the literature regarding distribution channels. Nevertheless, very little emphasis has been given to the *impact and role of distribution design on corporate strategy and performance*. Among the strategic decisions which are commonly accepted, the following have been summarized by Frazier's survey article (1991, p.256-7):

- 1) What is the required intensity of distribution (i.e. width or breadth of the channel.
- 2) Which functions (e.g. merchandising, storage, delivery) need to be performed in the channel and what are their relative importance.
- 3) Should the firm go direct, indirect or use a combination approach in terms of its distribution channels? If indirect, what type of inter-firm linkage (i.e., market linkage, leadership linkage, contractual linkage) should be utilized? Finally, how many channel levels (i.e. depth of the channel) are desirable?
- 4) Which parties should perform the necessary channel functions (i.e. specification of channel roles) ?
- 5) What type of organisational structure in terms of centralization and formalization is necessary?
- 6) How many territories are needed and what are their nature?

In the literature, we found theoretical and empirical research regarding intensity of distribution and vertical control. A summary of these works is presented below. Little has been done in the other areas (numbers 2, 4, 5 and 6 above). Frazier concludes:

"Unfortunately, little in the way of systematic research has been conducted on the nature of necessary functions in the distribution channel, ... To this point, most attention given to channel functions in the literature has been directed towards developing lists of potentially relevant functions ". (p. 267)

More specifically Frazier stresses in defining future research needs:

"Theory must be developed to explain (1) why and how given functions need to be performed by members of the channel, (2) what the exact specification of each channel

function should be, (3) how functions will vary across different channel contexts, and (4) what drives the relative importance of functions across different channel contexts... Empirical research should follow the development of improved theory about channel functions. The contributions of such research would be major considering that, except perhaps for the intensity of distribution decision, all the other design decisions are likely to be influenced by the nature of the functions that must be performed within the channel". (Frazier,1991 p.268).

We believe that this work is a contribution in this area while it also helps to unveil some of the *strategic implications* of channel design and its impact on corporate competitiveness.

The following is a summary of the theoretical approaches from which most of the study propositions were derived. Empirical research has also been found in some of them:

1) *The marketing approach* where theories are based on product attributes, firms characteristics and consumer buying patterns (Aspinwall,1957) (Buckling,1966) (Rosenbloom,1987). Empirical research has established that channels tend to be direct when: purchase frequency is low, searching time is high (Lilien,1979), and when products are custom made and highly differentiated (Anderson,1985) (Coughlan,1985), (Anderson and Coughlan, 1987). Empirical research supports the marketing approach prediction that channels will tend to be direct when firms are large and sales are high (Lilien,1979) and (Klein,1987).

2) *The functional, spin-off approach* (Stigler,1951) (Mallen,1973) which also includes what has been called the "scale economies approach" (Frazier,1988) according to which companies will hive off functions where middlemen can benefit from economies of scale. No empirical research checking this theory has been reported. Nevertheless, research by Lilien (1979), who found that direct channels are preferred during early stages of product life cycles, can be considered as a partial test for this theory.

3) *The transaction cost approach* (Williamson,1985). Empirical work has been done by Dwyer and Welsh (1985) Anderson(1985) Anderson and Coughlan (1987) and Klein(1987). According to them, direct channels correlate with higher

degrees of asset specificity in performing channel functions and also higher levels of volatility⁵ in the environment.

4) *The strategic view* (Scherer,1980) (Porter,1980). This approach has stressed the fact that managers vertically integrate to discourage potential competitors from entering the market. Empirical work by Karakaya and Stahl (1990) found that vertical integration into distribution was graded by management as a less important strategic issue than other sources of entry barriers (e.g. economies of scale, product differentiation, capital requirements and customer switching costs.)

10.2.2. Theoretical Gaps:

After conducting the literature review (Chapter 1) and identifying the study propositions, it was surprising to find that management decisions about distribution strategy in the cases studied could not be fully explained by those theories. Several gaps were found, and a considerable number of questions would have remained unanswered in each case study, unless an alternative theoretical framework was developed.

For example, in Case 1, we found results conflicting with transaction cost theory since distribution channels with higher asset specificity requirements (e.g. refrigeration), present looser and less vertically integrated organisational forms than products which do not require any specific assets for distribution. Also, results conflicting with Aspinwall's predictions and other managerial theories were found, since channels for juices and dairy products are expected to be long and with a considerable number of middlemen while in the dairy and fruit juice case, high degrees of vertical integration are found. Stigler's and Mallen's functional spin-off approach also fails to explain why firms in mature industries decided to go direct after using independent distributors for over 20 years.

In Case 2 (men's wear), the theories were particularly ineffective in explaining the strategy followed by manufacturers. Channel design could not be understood by

⁵ *Volatility* is a specific type of uncertainty. It has to do with environments where outcomes are difficult to predict. This, it has been found (Klein,1988) encourages vertical integration. On the other hand uncertainty due to environmental *diversity*, calls for more flexible forms of organisation and thus discourages vertical integration.

using the approaches suggested by Aspinwall, Stigler or Williamson. None of them could explain total⁶ vertical integration into retailing.

In Case 3 (beer), channel design contradicts some the theoretical predictions. We found that channels were much shorter than expected and that manufacturers have spent considerable resources in financing retailers directly. Furthermore, contradicting what Stigler and Mallen, independent wholesalers have disappeared from the market

In Case 4 (chocolate) product perishability induces the leader of the industry to have a highly integrated channel. Aspinwall, and other marketing "check list" theories, are unclear in their predictions. Perishability should induce shorter channels to guarantee more control⁷. Nevertheless, according to other product characteristics (e.g. margins, time of consumption and level of adjustment), longer channels should be more appropriate. Transaction cost theory, though useful to understand vertical integration, fails to explain the differences shown by the two companies analysed.

Case 5 (electrical appliances) shows that even though channel design is largely explained by existing theories, it remains unclear why, if forward vertical integration should be expected, companies are hiving-off retail functions. Also, important differences between the strategies followed by the two companies studied are not explained.

In Case 6 (pharmaceuticals), long channels were found, as would be predicted by marketing and managerial theories. However, transaction costs theory would predict more vertical control by manufacturers into wholesaling than was found. Instead, we encountered that most integration was actually taking place between wholesalers and chemists.

In spite of these shortcomings, each approach has important theoretical elements which can be combined to explain channel design. Furthermore, it was

⁶ Only selling through totally owned retail shops.

⁷ In the literature, shorter channels are always considered equivalent to more control. The empirical results show that this is not necessarily true.

found that when the theories are applied by channel-function separately, instead of to the system as a whole, their predictive power increases⁸.

We consider the following elements to be responsible for the limitations of the theoretical approaches considered to account for the facts observed in the cases:

- 1) Theories are highly industry⁹ and/ or product¹⁰ specific, leaving very little room for management discretion. Thus, differences in strategies followed by companies in the same industry can not be explained.
- 2) When theories try to take account of strategic behaviour¹¹, they only seem to consider the desire to set up barriers to entry. Instead, the menu of strategic objectives followed by firms seems much broader. (See Section 10.3.10)
- 3) The different *objectives* for channel control are also ignored. This leaves out other important strategic considerations (e.g. quality control or sales promotion, see Section 10.3.8)
- 4) Market dynamics are ignored and thus monopolistic behaviour¹² by channel members are ignored. This leave out crucial elements affecting the strategies followed by manufacturers (See items 2,5,6 and 7 in section 10.3).

In order to reach a better understanding of the cases, other elements had to be incorporated into the analysis. Agency theory, discussed below, is one of them.

⁸ See, in the cases presented the application of Williamson's model by channel function.

⁹ Transaction costs and Stigler's approach.

¹⁰ Aspinwall and other managerial theories.

¹¹ Structure-conduct-performance paradigm and Porter's analytical framework.

¹² For a theoretical differentiation between "monopolistic" and "opportunistic" behaviour developed in transaction costs economics, see Chapter 3.

10.2.3. *The Absent But Useful Theory: Agency Costs.*

The elements of agency theory incorporated in the proposed framework (section 10.2.4.) proved to have high explanatory and predictive value.

Distribution channels are complex systems where individuals and organisations participate in making products or services available to the consumer. Two important characteristics are to be stressed in order to understand the way such a system works: first, the channel has to be viewed as a set of functions¹³ which have to be performed by different individuals or organisations. It is possible to eliminate or change the agents involved, but the functions can only be shifted backwards or forward, never eliminated¹⁴.

The second characteristic is that the agents may *cooperate or conflict* in the process. In other words, objectives of individuals usually differ along the channel and the systemic expression of the distribution function can be difficult to achieve.

Within this dynamic set of elements, the distribution channel is an active organisational structure which can show important changes over time. The task for the manufacturer, (or for the most influential agent who usually has the systemic view of distribution), is to design contracts where individual objectives are harmonized with those of the system as a whole.

Principal and agent theory or agency cost theory has formalized this problem. The gist of the argument is that an agency problem emerges in a situation of delegated choice among two self-interested individuals and the solution rests in finding the optimal contract which would induce the agent, with the right incentives, to successfully complete the delegated action according to the principal's best interest. (Chapter 3).

Finding self-enforcing contracts for channel members to reduce conflict is of significant strategic value since it induces agents to conform with corporate objectives with the lowest monitoring costs.

¹³ E.g. sales, transportation, collection, storage, promotion, information and service.

¹⁴ This is called in the literature "the shifting principle".

For example, for the manufacturer of a brand product, it is strategically important to maintain the optimal quality standards for his products. However, this interest may not coincide with the objectives of other channel members, who would be willing to reduce the effort spent in of keeping brand quality standards (it is not *their* brand) so as to obtain higher margins.

No theoretical or empirical research was found which used the agency theory approach to explain channel design. Yet we found it to be very useful and with great potential for understanding management behaviour.

10.2.4. Proposed Approach.

The framework proposed in Chapter 3 is the result of combining some elements from the theories mentioned above (Section 10.2.1), with some concepts from agency theory and some insights derived from the interviews. The framework emerged as a more comprehensive scheme to explain the main issues related to our research, which had received unsatisfactory answers.

i) Elements Which Induce Vertical Control.

The proposed approach has the following list of determinants which would generally *stimulate* vertical control.

- 1) Lack of competitive markets:
 - 1.a) Absolute absence of specialized markets.
 - 1.b) Monopolistic power enjoyed by existing suppliers of channel functions.
 - 1.c) Retailers spatial monopoly¹⁵.
 - 1.d) Bilateral monopoly.
 - 1.e) Financial Market imperfections¹⁶.
- 2) Development of barriers to entry
- 3) Avoiding post-contractual opportunistic behaviour

¹⁵ When vertical integration is not possible due to high administrative and governance costs, or losses on economies of scale and scope, the solution is to spin-off channel functions to independent agents.

¹⁶ In some cases financial market imperfections may also induce vertical spin-offs.

- 3.a) Appropriation of specialized quasi-rents.
- 3.b) Contract reinterpretation.
- 4) Solving agency problems:
 - 4.a) Externalities.

ii) Elements Which Stimulate Vertical Spin-Off.

In the proposed approach the following elements are considered to induce *more flexible* forms of organisations or vertical spin-off.

- 1) Agency problems:
 - 1.a) Moral hazard.
- 2) Governance costs:
 - 2.a) Administrative and informational costs.
 - 2.b) Scattered, low capital retail shops networks with no centralized purchasing power.
- 3) Losses in economies of scale and scope.

In the following section the empirical findings will be presented.

10.3. Empirical Findings:

Empirical findings show that channel design can only be explained if market structure for each channel function is incorporated in the analysis¹⁷. Usually, research on channel *design* and *structure* has been carried out separately and with different theoretical tools from those used to study channel *functions*. Such an approach has the following misleading theoretical consequences:

- 1) The two elements used for the design: number of middlemen¹⁸ and the type of organisational structure are only evaluated for the totality of the distribution process instead of by channel function. This approach fails to explain the case of highly integrated firms which buy one or more functions, or those who may decide to have vertically integrated functions within a very loose organisational structure.

¹⁷ This result goes beyond what was expressed in the study propositions.

¹⁸ Considering "middlemen" the number of organisations or individuals which participate in the distribution process performing different functions between the producer and the consumer.

- 2) Imperfections in the markets for channel functions (e.g. transportation, storage, financing and customer service) are usually neglected, as is their impact on channel structure.
- 3) There is a tendency to consider *control* as positively related to the degree of vertical integration and inversely related to the number of middlemen. This ignores two facts: that control can also be achieved through vertical integration of specific functions and/or that agency problems within the same organisation may be difficult to solve making it more efficient to spin-off some functions.

A cross case evaluation is carried out in the next section.

10.3.1. Channel Control is not the Issue, But the Control of Specific Functions

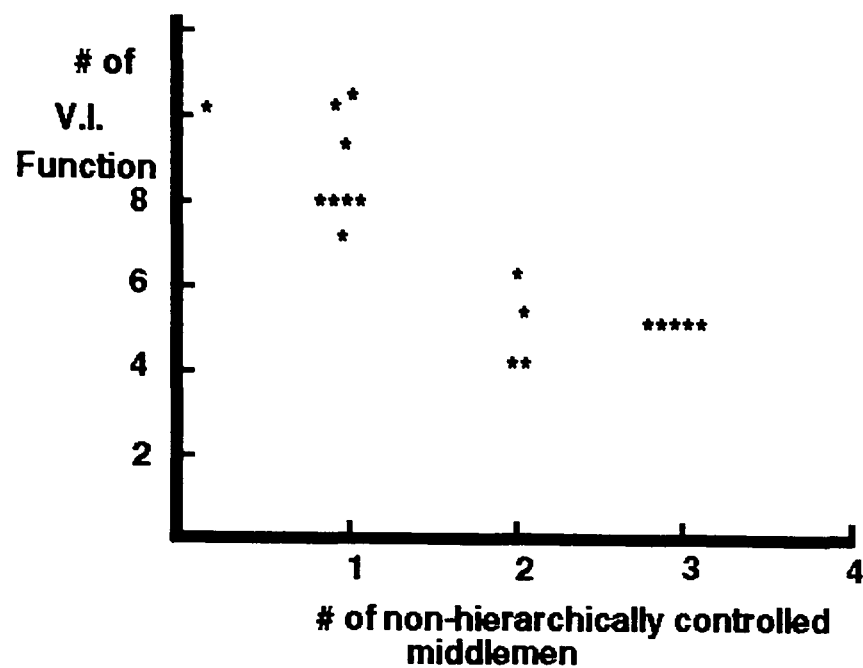
To understand the evolution of organisational structures in distribution and the elements which influence management decisions about the type of transaction (e.g. market, contractual, hierarchical) which best fulfills corporate goals, distribution channels have to be analysed by function (e.g. transportation, storage, financing, merchandising) and not as a monolithic vertical structure.

A distribution channel is a set of complex and interrelated functions: imposing a characterization to the whole set (e.g. length and width of the channel) may hide specific features of how each function operates. In other words, distribution channels are not to be seen as "channels" but as systems where functions can be organised and controlled in different ways.

Usually, in the literature, channel control is associated with channel length. The shorter the channel and the more vertically integrated (less number of middlemen), the higher the control. (Aspinwall,1958) (Rosenbloom 1987) (Williamson,1975,1985) (Frazier,1991).

In fact, the empirical results do show that channels are shorter (less number of middlemen) as the number of vertically integrated functions increase. (Fig. No 1)

FIGURE 1
THE RELATIONSHIP BETWEEN THE CURRENT NUMBER OF INTEGRATED FUNCTIONS AND THE USE OF INDEPENDENT MIDDLEMEN



V.I.= Vertically Integrated.
Source: Table 2

Nevertheless, there are other interesting results. Regardless of the number of middlemen, there are functions which are *always* controlled by the manufacturer: promotion, risk bearing, information and merchandising when applicable (Table 1). For example, the five companies which in the sample produce highly perishable pasteurized products (Cold line in Case 1) use a long channel with three middlemen. However, they perform five functions with hierarchically controlled personnel: the risk bearing function¹⁹, promotion, information and financing to distributors. Four of these functions imply supervision of retailers. In other words, manufacturers have to visit shops with hierarchically controlled personnel.

¹⁹ The risk of accepting merchandise returns.

TABLE 1
NUMBER OF COMPANIES IN EACH CASE WHICH DIRECTLY
CONTROL SPECIFIC FUNCTIONS

CONTROL SPECIFIC FUNCTIONS							
FUNCTIONS	CASES(1)						No.6 PH.H.
	No.1 H C		No.2 R.M.	No.3 P.N.	No.4 S.P.	No.5 F.M.	
SALES TO:							
a)Retailers	4	0	2	0	1/0	1/1	2
b)Consumers	0	0	2*	0	1*/0	0/1	0
COLLECTION	0	0	2	0	1/0	1/1	2
TRANSPORTATION	0	0	2*	0	1/0	0	0
STORAGE	4	0	2	2	1/1	1/1	0
FINANCING TO							
a)Retailers	4		2		1/0	0/1	0
b)Wholesalers	4	5	0	0	1/0		2
MERCHANDISING	4	5	2	0	1/1	0	0
RISK BEARING	4	5	2	2	1/1	1/1	2
PROMOTION	4	5	2	2	1/1	1/1	2
INFORMATION	4	5	2	2	1/1	1/1	2
POST SALE SERV.						1/1	

(1) Fifteen companies were analysed in six cases. Letters H. and C. above, stand for channels in "hot" and "cold" lines for 5 companies. The letters below ases No.2 through No.6, are the initials of the two companies interviewed in each case.

* Functions which the manufacturer shares with other agents.

TABLE 2
NUMBER OF VERTICALLY INTEGRATED FUNCTIONS AND NON-
CONTROLLED MIDDLEMEN BY COMPANIES

CASES	FUNCTIONS	MIDDLEMEN
No.1:		
Hot Line(4 Companies)	8	1
Cold Line(5 Companies)	5	3
No.2:		
Montecristo	10	0
Rori	10	1
No.3:		
Polar	4	2
Nacional	4	2
No.4:		
Savoy	10	1
Perugina	5	2
No.5:		
Frigilux	7	1
Madosa	9	1
No.6:		
Farma	6	2
Hoecht	6	2

On the other hand, there are functions such as transportation which are very seldom performed by manufacturers²⁰. Moral hazard problems with employees driving company owned vehicles (see Section 10.3.9) makes it more efficient for manufacturers to leave that function to be performed by the market.

The internalization of other functions depends on product characteristics and on the evolution of relative imperfections in markets for channel functions.

10.3.2. Market Structure Affects Channel Structure

Market imperfections in each function affect management decisions about channel structure. Each function is purchased in a different market with a different structure, and thus, may have a very different impact on channel design. For example, manufacturers may find, as the empirical results show, that supplier markets for transportation, collection and sales are more competitive than for financing, merchandising or service. The more competitive the market, the more efficient it is for manufacturer to "buy" the function instead of "making" it internally.

This also has important effects on control. Sometimes, manufacturers *would like* to exert more control since product characteristics may demand it, e.g. perishability, sale and post sale service, required information, or in Williamson's terms, when more specific assets are required for channel functions. Nevertheless, the market structure for these functions may stand in the way of achieving these objectives and managers may have to settle for other alternatives.

10.3.3. Imperfections in the Loan Market May Induce Vertical Integration or Functional Spin-Off

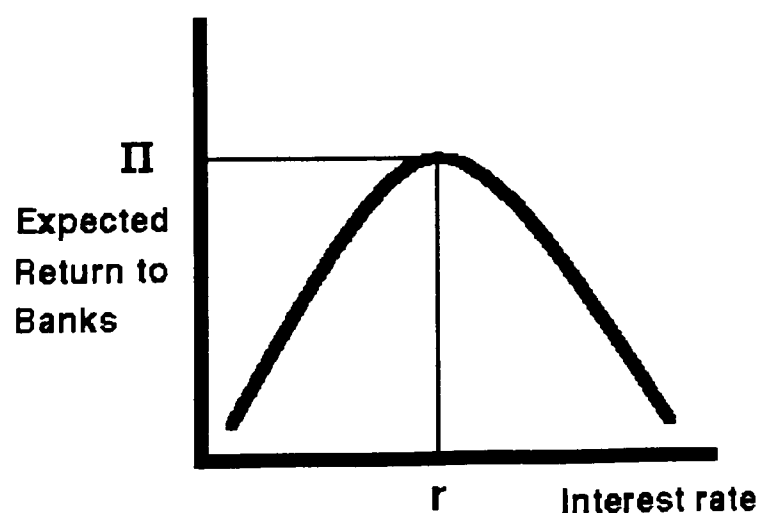
Imperfections in the loan market have important implications in channel design. The existing literature has concentrated on the issue of consumer credit while intra-channel financing has been totally ignored in theoretical and empirical research. However, we found that financing *between* channel members has an important impact on channel structure.

²⁰ Only Savoy (chocolate) performs this function without using independent transportation companies (See Table No 1).

In fact, structural imperfections in the loan market forces the emergence of an internal credit market. Even when they are equilibrium, loan markets are characterized by credit rationing. In this case rationing has to do with other elements different from price rigidity such as moral hazard and adverse selection problems derived from informational asymmetries. When a bank gives a loan, what it obtains in exchange is a promise of repayment of the principal plus a fixed amount of interest. The banker has no way of evaluating with certainty, the quality of the promise nor can he costlessly monitor the behaviour of the borrower (moral hazard). Furthermore, if the bank decides to increase borrowing rates, it may have a contradictory effect: it attracts riskier projects. Higher interest rates induce firms to undertake projects with a lower probability of success but a higher payoff when successful.

There is an interest rate r (Figure 2) which is the bank optimal rate, and maximizes the expected return to the bank Π (Stiglitz as Weiss, 1981). Hence by charging this profit maximizing rate, there is excess demand in the credit market (Figure 3).

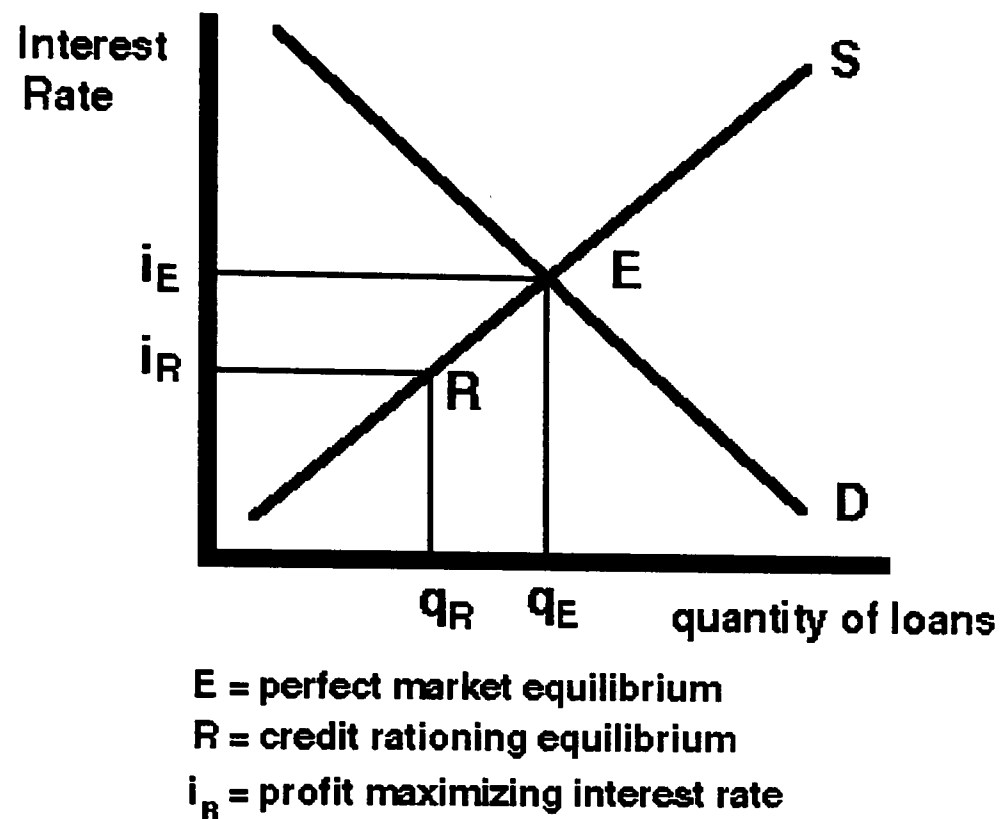
FIG. 2
BANK'S INTEREST RATES AND EXPECTED RETURN IN THE PRESENCE
OF ADVERSE SELECTION



Thus, because of the adverse selection effect, borrowing rates do not increase until the market clears and the financial market reaches equilibrium in a situation of credit rationing. As a consequence, channel members generate their requirements through an internal credit market. If financial markets were perfect, the distribution channel would not perform any credit operation since it would be unable to compete

with banks in the provision of funds, so that nobody would be better off. These imperfections in the credit market, though structural, tend to be exacerbated in underdeveloped economies.

FIGURE 3
MARKET EQUILIBRIUM WITH CREDIT RATIONING.



Internal financing impacts channel structure in three different ways. First, the non-financial agent may find some loans profitable which banks do not. The channel agent usually has better ex-post control, better information about the business and about the borrower, easing the asymmetric information problem and the moral hazard effect. In other words, the channel member sees the same financing function with less risk than the bank²¹.

The empirical research shows that some companies have been able to spin-off channel functions by lending important resources to channel agents. This is the case for POLAR and PERUGINA who have been able to spin-off the transportation function to owner-drivers through leasing. In this manner the driver buys a truck when it would have been impossible for him to obtain financing at a bank. These two companies were able to design a more efficient channel since they could avoid

²¹ For the theoretical discussion of these issues, see Chapter 3.

agency problems and moral hazard issues which arise when employees drive company owned vehicles. (See section 10.3.9.)

Second, high inventory financing to retailers in order to develop the market has been one the most common strategies for industries and products in the early stages of their life cycle²². When wholesalers did not have the financial strength to develop suppliers of retailing functions, manufacturers integrated into wholesaling. Thus, imperfections in the financial market in this case caused the vertical integration into wholesaling, since retailers could not find financing in the loan market and the manufacturers had to internalize the function.

POLAR and NACIONAL in the beer industry, had to integrate the financing function to retailers and to do so were forced to buy-out the wholesalers they were using during the 1950's. Thus, finance to retailers impacted channel structure inducing vertical integration.

In Case 1 the opposite is true. YUKERY, FRICA, INDULAC and ILAPECA use small wholesalers for the distribution of their products to smaller shops (about 15% of total sales) because they perceive these outlets as representing a higher financial risk. Two issues should be stressed in order to explain this difference. First, the beer industry is highly concentrated whereas the juice industry is much more competitive. This affects the ability of retailers to play one supplier against the other, by accumulating debts with all of them, as in the case of men's wear. Second, the brewers needed to develop retail services (i.e. bars) in order to expand demand for their product, while this was not a strategic objective in the dairy or fruit juice industry, where consumption is done mostly at home.

Even if cost advantages are not present because neither the asymmetry of information nor the moral hazard problem can be improved by internalizing the financial function, some channel members may be able to impose non-profitable financing on others. To avoid this, the latter may decide to integrate vertically. In the case of MONTECRISTO and RORI, both companies integrated forward into retailing because competition with other suppliers made it difficult to recover loans, causing them to realize that it was becoming more expensive to finance retailers than to set up their own shops.

²² Inventory financing to develop retail functions was present in all cases except for those where highly perishable products were distributed.

In the pharmaceutical industry intra-channel financing is given by the wholesalers (the strongest in the chain) to chemists, while manufacturers insist on not selling directly to chemists because they "pay when they feel like it". Wholesalers in this case extend credit to chemists because they enjoy a cost advantage in doing so when compared to manufacturers and banks. Manufacturers do not have the power to exert the ex-post control which wholesalers have.

10.3.4. Moral Hazard Behaviour in Consumer Financing May Induce Retailing Spin-Off

In the electrical appliance industry, firms are getting out of retailing and selling outlets to specialists. Even though this behaviour supports industry cycle theories, it is important to stress that according to other approaches (transaction costs and marketing), vertical integration into retailing should be expected given the need to have trained sales personnel and post-sale service.

It was found in this case, that due to the general slowdown in the economy, consumer financing became an important competitive tool. This is to be expected for electrical appliances (e.g., televisions, refrigerators) given their high price/income ratios. However, independent retail outlets began to offer part-exchange deals. This financing mechanism introduces an element of asymmetric information into the transaction: the owner of the old appliance possesses information which would be too costly for the retailer to discover. As a result, the part-exchange transaction becomes subject to moral hazard behaviour from the owner of the used appliance²³. Specialized retailer chains may be able to deal with this problem more effectively than the manufacturer. Given this form of consumer financing, it may be more efficient to leave all retail-related functions (e.g. sales and post-sale service) under the responsibility of specialists.

10.3.5. Lack of Specialists May Induce Vertical Integration and/or Suppliers Development: An Explanation for the Absence of Wholesalers

Another element which came out strongly in the empirical research as impacting channel structure is the lack of market alternatives (suppliers) which would

²³ Akerlof (1984) identifies the same phenomenon in his famous article "market for lemons" when analysing information asymmetries in markets for used cars.

permit to "buy" functions in the market. There is little choice for companies which may prefer not to perform channel functions when there is *a lack of specialized markets*. In this situation, the manufacturer is forced into vertical integration.

The oldest companies which began operations in the 1940's and 1950's controlled hierarchically almost all channel functions. This can be explained through different approaches. The industry life cycle theory (Stigler,1951) stresses that lack of specialists is the consequence of diseconomies of scale in certain firm functions when markets are too small or when industries are new. According to this theory, as markets grow, economies of scale and scope develop and specialists emerge in order to benefit from them.

All industries analysed in the empirical research have reached maturity. Hence, we would have expected to identify a trend towards less integrated structures, but this result was not found. Instead, some companies had spun-off some functions, but also that others had become even more integrated.

According to the functional (Mallen, 1973) and life cycle (Lilien,1979) theories, products would tend to have more integrated distribution channels during early stages of development and, as markets grow and mature, they would tend to leave the functions to be performed by specialists who can accumulate the economies of scope and scale that individual manufacturers can not.

It is true that when NESTLE (non-pasteurized dairy products and juices, now called INDULAC) began operating in the 1940's, it carried out almost all functions (e.g. sales to retailers, collection, transportation, storage, financing, merchandising, promotion and information) and sold directly to retailers. However, in contrast with life-cycle theories, 50 years later, INDULAC still keeps hierarchical control over all functions except transportation, as do all other firms in the industry²⁴.

When SAVOY (the leader in the chocolate and sweets industry) could not find markets for the required distribution functions when it started operations in 1941 it integrated vertically and directly served retailers. The key element was product perishability and the lack of insulated transportation units needed to maintain product quality. Fifty years later, SAVOY still keeps a fleet of 1000 trucks and serves directly

²⁴ This is true for 85% of sales. The rest is distributed through very small wholesalers to very small retailers.

100,000 retailers. It is the only company in the sample which keeps hierarchical control of all functions including transportation. (See section 3.9.)

The alternative explanation could be that markets are structurally small and that no important economies of scale or scope can be achieved by specialists. Nevertheless, large independent wholesalers have been operating in the country for over 50 years, distributing consumer products. Most of them started with the distribution of imported liquor, incorporating later other imported products and finally locally manufactured goods. The shared criticism among managers is that these distributors have been extracting monopoly profits from their clients by constantly increasing prices without improving service. They have been showing this *monopolistic behaviour* by increasing margins at higher levels than it would cost manufacturers to perform the functions themselves. According to managers from one of the fruit juice companies interviewed, they had to cancel the agreement they had with their distributor since they were charging them 15% of sales while after integrating, distribution is only costing them 8% of sales.

Managers expect independent distribution companies to perform other functions besides transportation. On the other hand, independent distributors do not see themselves as promoting sales and they expect manufacturers to spend more in advertising to increase demand.

In recent years, the merchandising function, for example, has become an important tool since markets have become more competitive. Due to policy changes oriented to open the economy to foreign competition, the seller market conditions enjoyed by most firms for many years has changed. Independent distributors have never wanted to perform merchandising, thus leaving it to manufacturers. Manufacturers have also traditionally controlled other functions such as customer service, risk bearing for returned merchandise, storage and financing.

Thus, from the manufacturers point of view, distributors are "expensive transportation companies". A more efficient solution has been to vertically integrate all other functions including sales and collection, which were performed by independent distributors, and subcontract the transportation to independent transportation companies.

It has been argued in the cases that the reasons for manufacturers to have maintained vertical control over the functions, contradicting life cycle theories, are:

- 1) that monopolistic behaviour shown by independent distributors has made vertical integration profitable for manufacturers and

- 2) that agency costs make the spin-off of functions like merchandising, risk bearing or sales to retailers too expensive for the manufacturer.

In these cases, hierarchical organisations offer a more efficient solution because:

- 1) they generate better incentive scheme and
- 2) they lower monitoring costs.

MONTECRISTO and RORI in the apparel industry as well as POLAR and NACIONAL in the beer industry also had to face lack of specialized markets, but in their case, they had to invest important resources *developing* retailing specific functions²⁵ (e.g. fitting, alterations, amenities).

Aggressive campaigns to develop retailers had to be launched. POLAR and NACIONAL needed to increase the number of bars, which they did by financing inventories, improving facades, giving away refrigerated space, furniture and liquor licences. On the other hand, MONTECRISTO and RORI wanted to grow through mass production. They needed a faster and denser retail network and hence more outlets. They left the merchandise on consignment until retailers had no more inventory space, until they could sell it.

With such an aggressive strategy to develop suppliers of retailing functions, existing independent distributors could not perform up to manufacturers expectations. In the beer industry, manufacturers, and specifically POLAR, integrated vertically into wholesaling by buying-out all independent distributors²⁶. In the apparel industry, both companies interviewed never used wholesalers²⁷.

²⁵ Manufacturers invest important resources in order to develop retailers, and very often, due to their oligopolistic structure and to the absence of wholesalers, manufacturers and retailers evolve into bilateral monopoly relationships.

²⁶ As opposed to what could be predicted by the life cycle theories, they became more integrated with time.

²⁷ It is important to establish the differences between the wholesaling function in the beer business and the apparel industry. There are approximately 250 retail outlets in the beer industry for each retailer in the men's heavy line wear. Also, the price/weight ratio is much lower which makes the transportation function more expensive.

For the same reasons, in the electrical appliance industry, General Electric integrated forward into retailing when they started business in Venezuela during the 1940's. In this case, specialists markets have evolved and G.E. is now selling their retail outlets to them.

One of the issues which has hampered the development of independent wholesalers in Venezuela is the highly oligopolistic nature of many industries. This gives manufacturers important market power which they can use to demand exclusivity contracts with wholesalers. In other words, wholesalers cannot distribute products from other competitors. This has hampered wholesalers from benefiting from economies of scale and scope. The opposite case was found in the pharmaceutical industry, where manufacturers, being highly atomistic, do not demand exclusivity and big wholesaling companies have developed.

10.3.6. Retailers Monopolistic Behaviour May Induce Vertical Integration or Functional Spin-Off

Individual retailers can enjoy important market power by being spatial monopolies. This monopoly power according to the empirical results is enhanced when:

- 1) The transactions are over the counter. This element gives the salesman more power to influence consumer choice and to have more control over sales. We found that in many retail outlets, consumers do not have direct access to the merchandise (e.g. bakeries, small supermarkets, chemist shops, bars, men's clothes shops and some electrical appliances stores).
- 2) Economies of scope are large. Especially when, according to consumers buying patterns, a specific variety of goods permits them to save searching time. e.g. complementary goods like suits, shirts and ties, or fresh bread, milk and juice which consumers buy in bakeries every day.
- 3) The asset specificity required for selling functions is high: e.g. refrigerated space, highly trained personnel, and physical facilities (store design).
- 4) Brand loyalty is low, thus consumer searching time is also low.
- 5) Consumers have limited means of transportation.
- 6) When government regulations restrict the supply of retailing functions. (e.g. regulating the number of bars or of chemists within a specific area).

Retailers use such power to extract monopoly rents from manufacturers or independent distributors. The strategies followed by manufacturers or wholesalers have been mixed. Some of them have integrated forward into retailing (MONTECRISTO in men's wear) whereas others, such as the producers of pasteurized goods, have preferred market transactions or even to spin-off functions to another agent in the chain: the independent wholesaler.

Analysing the problem in agency theory terms, the *incentive incompatibility* between the principal and the retailer (the agent) may be addressed in two contrasting ways. In some cases, the principal decides to use a hierarchy (See Case 2, Apparel) to eliminate the problem and undertakes forward vertical integration into retailing in spite of the losses in economies of scope. Nevertheless, it is important to stress that MONTECRISTO, who assumed the most drastic strategy, (selling only in totally owned stores) had to develop a product diversification plan which included subcontracting complementary lines in order to offer consumers the variety they expected.

The opposite strategy has been to design a more flexible structure where transactions with retailers are left totally to the market (Case 1, Pasteurized Products). Since manufacturers could not develop incentives within a hierarchy to make their employees negotiate successfully every day with retailers, they decided to spin off some functions²⁸ (e.g. transportation, sales to retailers, storage, collections and financing) to independent agents. For other reasons (quality control) which we will discuss below, they decided to keep other functions under direct control.

Differences in strategy are a consequence of relative losses in economies of scope and/or scale; and of differences in set up costs for retail chains which are much higher for companies who chose the second alternative. Nevertheless, "partial" efforts in the direction of vertical integration have been made by some of them; INLACA gives refrigerators without cost to retailers as long as only sell their products.

28

It is also a highly competitive market with very low brand loyalty.

10.3.7. Bargaining Costs Within a Bilateral Monopoly Relation, Affects Channel Structure

As a specific case of lack of specialized markets in the theoretical framework, the impact of bilateral monopoly on channel structure deserves special attention. The core of the argument is that, since each agent has market power over the other, bargaining costs tend to be very high and transactions very expensive. Moreover, output is lower and the price higher than under competition. In these cases, vertical integration is privately and socially desirable (Chapter 1). For the individual firm, it is beneficial when such a strategy implies higher net present profits: a better price/output relationship with less bargaining costs.

We found in the pharmaceutical industry that wholesalers and retailers have engaged in bilateral monopoly negotiations which have in turn induced vertical integration (Case 6). The spatial monopoly of chemist shops has been exacerbated by government regulations setting a maximum number of chemist shops per geographical area, and bilateral monopoly negotiations have also been increased due to government regulations which set maximum margins at retail and wholesale levels.

We did not find vertical control from manufacturers to wholesalers as predicted by other theories (e.g. the transaction cost approach).

10.3.8. The Objectives of Control Affect Channel Structure: the Presence of Externalities Force Manufacturers to Perform Key Functions Internally

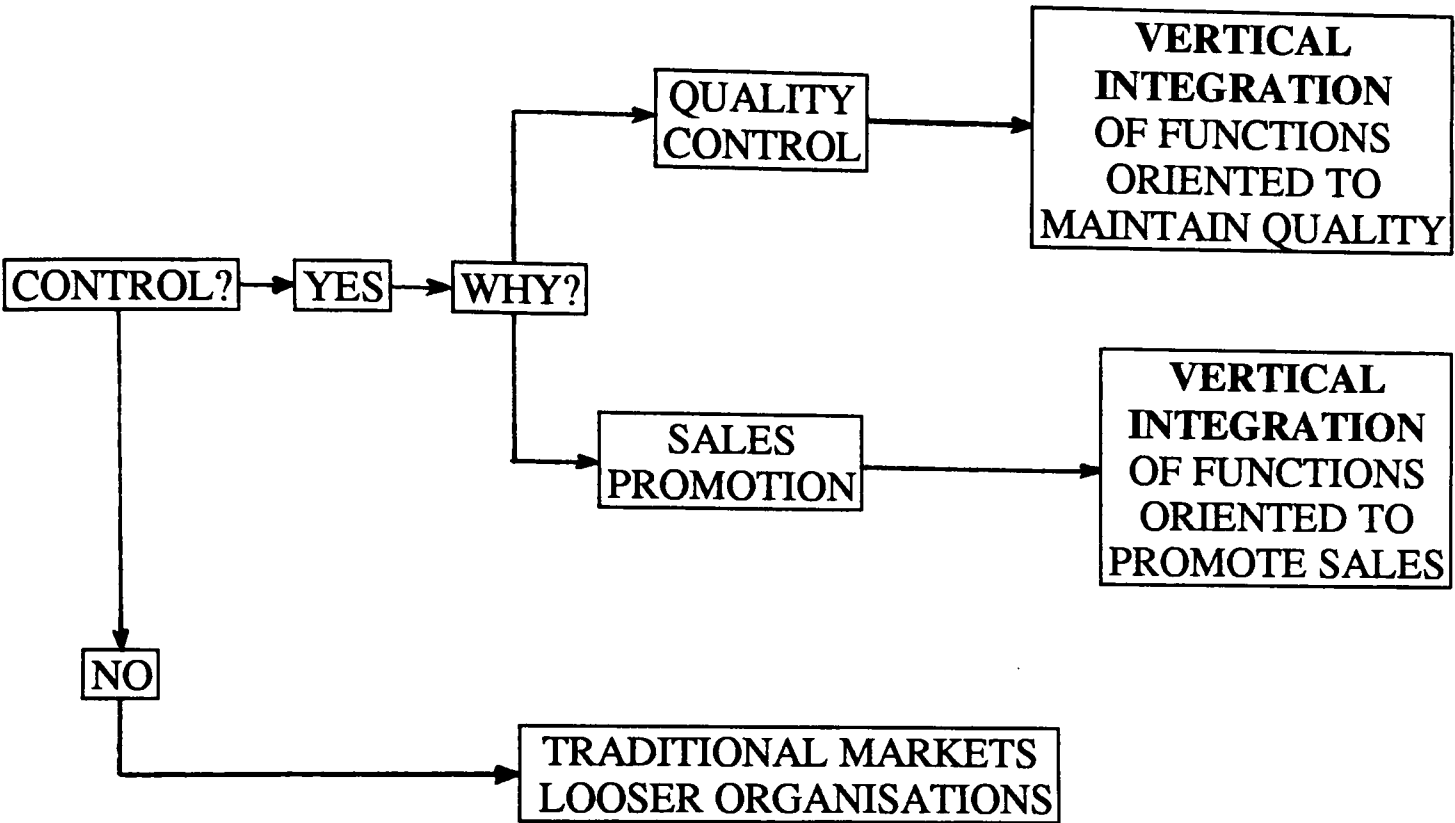
Manufacturers who produce *branded* products, always want to control the channel. In the empirical research only one company expressed unwillingness to participate in any distribution activity. The company, INSANOVA, is an electrical appliance manufacturer who produces unbranded white line goods and sells them to other original equipment manufacturers (OEMs) who then perform all marketing activities²⁹.

Thus, in some cases, the need for channel control comes from the fact that there is a brand name to protect. This makes the brand keeper the agent with the

²⁹ INSANOVA has recently changed its strategy since they have started to develop its own brand which now represents 8% of total sales.

FIGURE 4

THE OBJECTIVE OF MANUFACTURER'S CONTROL IMPACTS CHANNEL STRUCTURE



highest interest in keeping product quality and avoiding negative externalities along the channel³⁰.

We will define *channel control* the *possibility* which brand keepers have to:

- a) Maintain *quality* and avoid negative externalities and to
- b) *Stimulate demand*³¹ through sales promotion.

³⁰ Externalities arise when there are costs which are not paid (negative) or benefits which are not charged (positive). Negative externalities arise when a spoiled product is sold or a guarantee is not respected by the dealer, damaging the reputation of the *brand* name. (Chapter 3)

³¹ The alternative way of stimulating demand is through advertising, creating brand awareness and brand loyalty with the objective of making consumers search for the product. This strategy has been defined in the literature as a "pull" strategy as opposed to the "push" strategy which stimulates demand through the distribution channel.

Nevertheless it is important to stress that even though both objectives are strategically important, stimulating demand can be achieved by other means, (e.g. advertising) whereas quality standards, avoiding negative externalities and "free-riders" on the company's brand name, is only achievable through channel control.

Depending on the strategic value which the company attaches to either objective (product quality and/or sales promotion) the impact on structure *will* be different since the functions to be controlled differ.

1) If *quality* is the main reason behind the need to control, the functions which would tend to be vertically integrated are:

- a) risk bearing,
- b) merchandising,
- c) storage and
- d) post-sale service.

2) If alternatively, *promoting sales* is the dominant objective, functions like the following will tend to be vertically integrated:

- a) sales to retailers,
- b) sales to consumers and consumer service,
- c) promotion,
- d) information,
- e) financing to retailers and
- f) financing to consumers.

The integration of the transportation function will depend on whether or not it can be separated from sales.

The empirical research shows that the companies that produced brand products had vertically integrated functions which impact quality control with the objective of avoiding negative externalities. FRIGILUX (electrical appliances) does not own retailers and does not have, as its competitor does, exclusive dealers. Nevertheless it does exert control: it provides post-sale service through vertically controlled units. Pharmaceutical laboratories, which sell over 90% of their products to independent distributors, vertically control the risk-bearing function and company supervisors visit chemist to check expiry dates and storage conditions. The same happens in pasteurized products, where manufacturers may find it difficult to use the channel in order to promote sales but do control vertically the risk-bearing function and have supervisors visiting retailers in order to check the products, their expiry

dates and the way they are displayed. POLAR decided to have vertically controlled warehouses in order to guarantee quality and rapid delivery.

On the other hand, the objective of promoting sales is more difficult to achieve and usually more costly. This can be concluded by just looking at the list of functions which would have to be controlled. The investment required to open retailers, or to buy the transportation units in order to sell directly to retailers can be too high if compared to the potential sales increase. In the next section the problems associated with transportation will be analysed.

10.3.9. Agency Costs in Transportation Impact Channel Structure

Transportation costs are usually very high, and empirical results show that companies tend to spin-off transportation when possible. The different elements which influence such possibility will be evaluated.

Financial costs associated with the price of trucks may be important depending on product characteristics (e.g. bulk, weight and perishability). Nevertheless, what stands out in the research is that *agency costs* are perceived by management as the determinant issue for functional spin-off. In fact, moral hazard problems associated with careless behaviour by drivers in company owned vehicles induce companies to leave the transportation function to an external agent. This element, though absent from the literature, has shown to be an important factor in channel design and was thus incorporated in the theoretical framework.

There are different issues in transportation which impact channel structure:

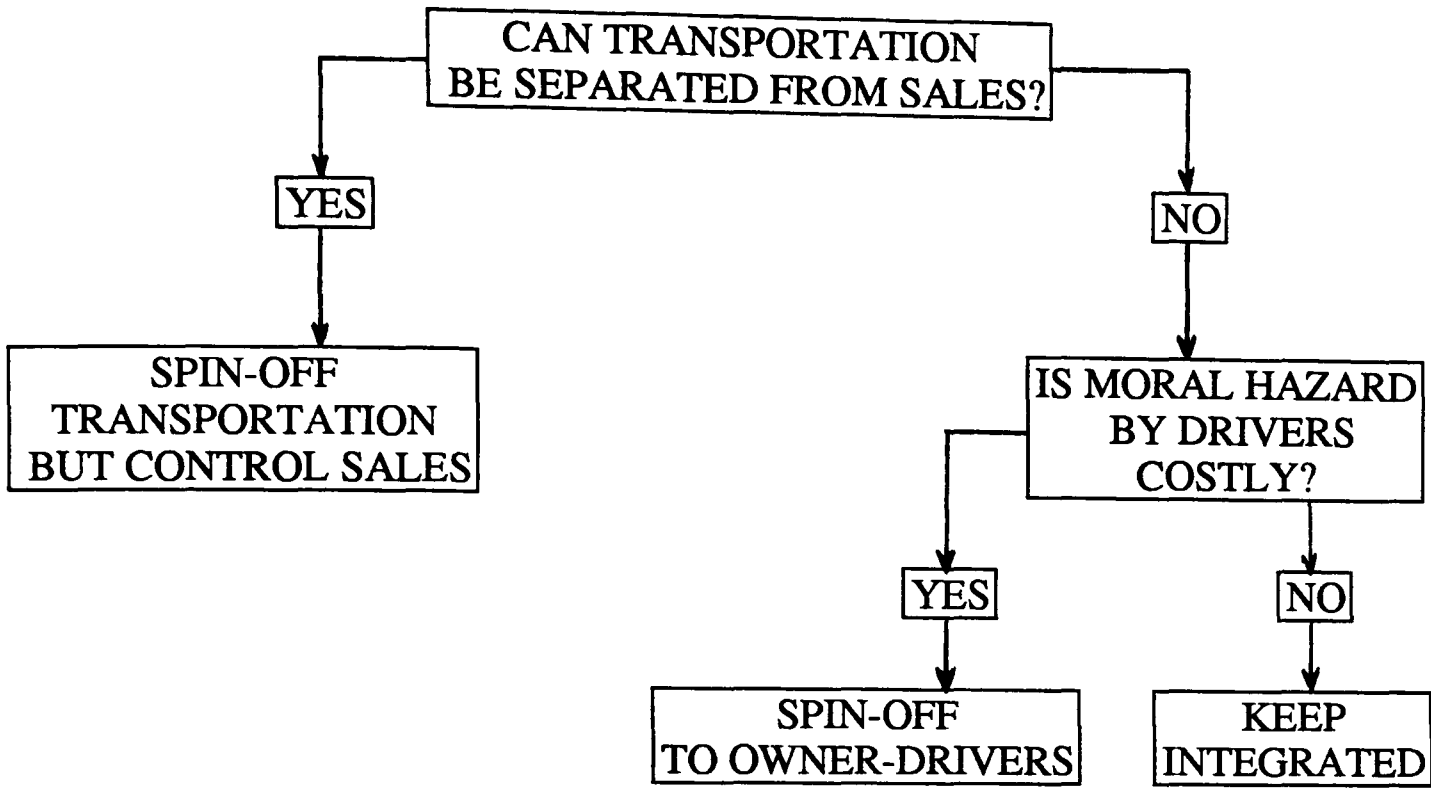
- a) The possibility of separating the transportation function from other functions.
- b) The financial costs of transportation,
- c) The agency costs of transportation.

Usually transportation and sales *cannot* be separated when the number of transactions is high (numerous retailers and frequent visits) because it is more efficient to concentrate in one person, the driver, the sales, transportation and collection functions.

This is particularly true when the distribution network is characterized by small, family owned and low capital retail shops. As opposed to environments dominated by big retail chains, these scattered outlets have very little centralized

FIGURE 5

MORAL HAZARD IN TRANSPORTATION IMPACTS CHANNEL STRUCTURE



purchasing power and storage capacity³². These characteristics make visits more numerous (to each retail outlet) and more frequent (small inventories); and thus, transportation and sales become more difficult to separate since all functions collapse under the responsibility of the driver.

If transportation *can* be separated from sales, then companies spin-off transportation to specialized third parties, while they keep hierarchical control of sales to retailers (Fig.No 5).

The reasons for spinning-off the function are two: the costs of buying and maintaining the transportation units and the agency costs due to moral hazard behaviour displayed by truck drivers with company owned vehicles.

The owner driver has become an efficient alternative for dealing with both problems: less agency and financial costs but with individual drivers with whom sales agreements can be negotiated.

³² For a discussion on the impact of the transportation function in less developed economies, see Chapter 3.

According to the empirical results, owner drivers are an efficient solution when:

- a) transport costs are relatively high (bulk and weight of products),
- b) when the need to promote sales is low.

Manufacturers with mature products, longer life cycles and with leadership power, usually have less need to promote sales through the channel. These elements reduce incentive compatibility problems between the company and the owner driver, since these usually arise when merchandising and sales promotion are important tasks. If manufacturers have to launch frequently new products with short life cycles, the incentive scheme is more difficult to design and company controlled employees are a more efficient solution.

POLAR, SAVOY and PERUGINA illustrate these elements very well. POLAR beer began to use owner drivers after they had achieved market leadership. Before that, they completely controlled sales and transportation. Now, they are having important problems trying to make owner drivers promote sales of new products. POLAR has a strong distribution network to sell mature products but cannot control the channel enough to promote sales for products in the early stages of their life-cycle.

On the other hand SAVOY, in the chocolate industry has smaller transportation costs, shorter life cycles for their products, and more need to push sales for new products. For them, a hierarchically controlled sales force has worked very well and that is probably the reason why they have not changed to an owner drivers system, in spite of what many theories would predict. PERUGINA, SAVOY's new competitor, imitated POLAR's distribution system with owner-drivers, but since they need to push new products, with shorter life cycles and without leadership power, they are facing difficulties with owner drivers who are not happy with the arrangement.

10.3.10. Barriers to Entry are the Result of Dealing with Different Market Imperfections and Agency Problems. Ex-Post, Building Channels May Imply Building Walls

According to the strategic approach, distribution channels can be important barriers to entry, designed by firms to deter competition. Theoretical frameworks like the structure-conduct-performance paradigm and competitive advantage theories, have stressed that distribution channels are important strategic elements for corporate

performance. Threatened by a new entrant, incumbents may decide to hamper their access to channels. To be able to do so, companies may spend important resources needed to control the channel so as to be in a position of imposing the restriction.

According to the empirical results, many of the older companies have strong distribution networks which are seen by potential competitors as important barriers to entry (SAVOY, POLAR, INDULAC, MADOSA and MONTECRISTO). Nevertheless, what the specific cases show is that, in these companies, management never made a strategic ex-ante decision to build barriers to entry with the objective of deterring competition.

What emerges from the cases is that these companies have been making decisions on channel design by facing a wide variety of problems: imperfections in the financial markets, retailer markets, absence of specialized markets for distribution functions, monopolistic behaviour by some suppliers, and agency problems.

The theoretical argument and study proposition that firms ex-ante decide, (because of its strategic impact), to integrate forward so as to increase barriers to entry was not confirmed by the research. What was found, is that organising distribution functions can become so costly when dealing with agency problems and market imperfections, that once the channel is built, it constitutes *ex-post* a barrier for future entrants.

The popular barriers to entry argument has been applied too readily in many attempts to judge distribution activities. This, we believe, is the result of a limited understanding of the intrinsic complexity of designing efficient distribution networks.

10.3.11. Avoiding Post-Contractual Opportunistic Behaviour. How Does it Affect Channel Structure?

The concept of opportunistic behaviour has been dangerously extended to portray different types of human conduct. It has been defined as: a type of "self interest guided by deceit", or "self interest seeking with guile" or a "devious kind of self-interest behaviour" (see Chapters 1 and 3). The concept has been abusively used by subjectively evaluating human conduct, making it difficult to distinguish it from rational competitive self-interest behaviour of firms in imperfect markets. For example, if a retailer in a well located shop asks for higher margins to carry a specific product line, this could be called opportunism instead of profiting from spatial monopoly. Opportunism has also been confused with moral hazard behaviour, which

as an agency problem, can be approached and solved differently. In the proposed theoretical framework, (Chapter 3) an effort to separate both has been made in order to evaluate rational competitive conducts as such, and to separate them from behaviour guided by deceit (opportunism).

In doing so, opportunism was confined to two very specific situations: post contractual opportunistic behaviour in the presence of specialized quasi-rents³³ and contract reinterpretation³⁴.

In the empirical research these elements were very seldom found. Only in Case 1, opportunistic behaviour by appropriation of specialized quasi-rents was shown by retailers (the bakeries), who enjoy high monopoly power by owning scarce refrigerated space. In these circumstances they lie about margins given by other suppliers in order to extract higher rents from them, hardly a deceit that is likely to be long-lived.

The reasons for the absence of post-contractual opportunistic behaviour as defined in the framework can be the following. First, the danger of appropriation of specialized quasi-rents occurs when high asset specificity is required, and this is more common in manufacturing than in distribution; and second, that transactions are more frequent in distribution which make spot negotiations more important than long term arrangements.

10.4. Final Conclusions and Comments.

The cross-case analysis made in this chapter permitted us to use the empirical findings to extract general lessons which have enriched the theoretical framework proposed. It has also allowed us to evaluate the adequacy of the different approaches found in the literature. The main conclusions are derived from the fact that distribution channels are complicated systems where different functions have to be performed by the most efficient agent; that each function belongs to a different

³³ As assets become more specific, quasi rents are created and opportunistic behaviour may arise to appropriate them (Chapter 3).

³⁴ Favorable reinterpretation of contract provisions. The behaviour is opportunistic when deceit is guiding the logic of such reinterpretation.

market with its specific competitive forces and intrinsic characteristics; and that each function can be organised differently. These issues have different implications.

From the point of view of organisational theory, one of the most important findings is that highly industry specific or product specific theories have little explanatory value for the cases. They fail to explain differences in channel design among firms belonging to the same industry and the changes over a time made by a company. On the other hand, agency theory proved to be useful, because its unit of analysis is more generic: contracts among self-interest-seeking individuals. This approach permits a better comprehension of individual firm strategies and also of management discretion.

Another implication is that channel design is a dynamic and continuous process which requires important managerial skills. Firms have to constantly respond to changes in market forces which affect channel functions; and the way organisations respond to those changes can have an important impact on corporate performance and market power.

Also, this function/market approach to distribution has allowed us to identify specific market imperfections, (e.g. financing and transportation) which have interesting theoretical explanations and strategic implications for firms.

Finally, even though the case studies were carried out in a specific country, Venezuela, the elements which came out in the analysis lead to broader issues which are likely to arise in most managerial contexts.

CHAPTER 11

LESSONS, IMPLICATIONS AND FUTURE DIRECTIONS

The purpose of this chapter is to present the implications of our research for managerial practice and public policy issues. Also, some guidelines and ideas for further research will be discussed.

1. Managerial Implications

Our study can be used to derive practical guidelines for management to identify those elements which should be considered when "designing" distribution "channels". However, it is clear now that distribution channels are not "channels" and, they are not "designed" either. The process of building or structuring a distribution network is dynamic and highly competitive, resembling very little the image of managers sitting at their desks drawing alternative paths, avenues or motorways for their products to reach the consumer. It is instead an active process where competition forces operate on a daily basis, shaping and reshaping the way transactions are organised and causing considerable organizational change over time.

Since sales are made through the distribution network, competitors usually meet in this arena. But one of the lessons stemming from our empirical research is that in building distribution channels, managers have to face not only changes in market forces from competitive products, but also from markets for channel functions such as transportation, financing, storage and services.

The following elements offer a "check list approach" of the theoretical framework presented in Chapter 3. The issues presented below are only guidelines for a process which should be continuous, strategic and dynamic. The list is presented as if it were being put directly to managers.

a) Identify all channel functions (actual and potential) which have to be performed for your products, or product lines. Sometimes it is difficult to list the array of functions which are performed within the channel and there is an erroneous tendency to consider transportation and storage as the most important ones. The following list will help to recognize them:

- 1) Sales to retailers
- 2) Sales to consumers

- 3) Collection
- 4) Transportation
- 5) Storage
- 6) Financing to retailers or any other channel agent
- 7) Financing to consumers
- 8) Merchandising
- 9) Risk bearing
- 10) Promotion
- 11) Information: to the channel and from the channel
- 12) Post-sale service

b) Identify your channel objectives (e.g. quality control and sales promotion) and choose the functions with higher strategic value accordingly. Examples are presented in the following table.

c) List the specific skills needed to perform the functions (e.g. level of education or specific knowledge required to sell your product to retailers or consumers and type of transportation and delivery service required).

d) Check which functions can be structurally separated. For example, if the transportation function can be structurally separated from sales you can also separate the skills needed for transportation from those for sales.

e) By analysing competitors of similar products develop function/market matrices where market structures and competition forces for each function can be analysed. For example, who and how many are the suppliers of transportation? What kind of service do they offer? Are they unionized? Who can provide credit to the consumer? To the retailer? If post-sale service is needed to comply with guarantee commitments, how many suppliers of the specific repair service required are there? Is it a competitive market? Do any of them have ties with your competition?

STRATEGICALLY IMPORTANT FUNCTIONS ACCORDING TO CHANNEL OBJECTIVES

OBJECTIVE	STRATEGICALLY IMPORTANT FUNCTIONS
1) QUALITY CONTROL	1.1) Risk Bearing 1.2) Merchandising 1.3) Storage 1.4) Post-Sale service
2) SALES PROMOTION	2.1) Sales to retailers 2.2) Sales to consumers and consumer service 2.3) Promotion 2.4) Information 2.5) Financing to retailers 2.6) Financing to consumers 2.7) Transportation ¹ .

f) Identify possible agents to perform *each* function.

g) Try to arrange transactions by developing self-enforcing contracts for each function, that is, contracts which would make channel agents comply with your objectives (defined above) through self interest behaviour.

h) You may find that due to market imperfections some of those contracts are easier to achieve by internalizing the function, thus assigning them to your own employees. However, do not act just on first impressions. In many cases, you may also find that due to informational asymmetries it is hard to control certain functions through a hierarchy and these may be easier to achieve with looser forms of organisation. The variables which impact this decision are presented in the following table.

¹ Especially when the transportation and the sales function can not be separated.

VARIABLES WHICH IMPACT VERTICAL CONTROL OF DISTRIBUTION FUNCTIONS

ELEMENTS	VERTICAL CONTROL BY FUNCTIONS	
	MORE	LESS
COMPETITION IN SUPPLIERS MARKETS FOR FUNCTIONS:		
-Many Suppliers	no	yes
-No Suppliers	yes	
-Monopolistic behaviour	yes	
FINANCIAL MARKET IMPERFECTIONS:		
-Difficult for channel members to find bank financing?	yes	
-Do you know the borrower and his business skills?	yes	
-How are your ex-post control costs?	minimal	high
BILATERAL MONOPOLY:		
-Are the products you offer an important proportion of the products offered by your retailers?	yes	no
OPPORTUNISTIC BEHAVIOUR:		
-Is the alternative value (use) for the assets required for the channel function you are analysing?	high	low
-Are contracts easy to be reinterpreted by the channel agent for his own benefit?	yes	no
AGENCY PROBLEMS:		
-How are your channel objectives when compared with the channel member you are evaluating?	different easy	similar difficult
-To monitor the agent behaviour is		
GOVERNANCE COSTS:		
-Are your clients numerous?	no	yes
-Does the distribution network have a centralized purchasing capacity?	yes	no
ECONOMIES OF SCOPE AND SCALE:		
-Are large suppliers more efficient	no	yes
-Are exclusivity agreements usual practice?	yes low?	no high?
-Is the variety required at retail level		

i) Make an initial decision to control by analysing each function individually. You may decide to control as many functions as you *need* given your strategic objectives. Are there synergies between the individual functions which you may exploit? Is it feasible to separate the individual functions you require?

2. Further Research

One of the principal contributions of this research has been to propose a theoretical framework where channel decisions can be analysed by functions. In doing so, we have stressed the need to view channel decisions strategically given that the structure and the imperfections in the markets for functions have an impact in the way the distribution network can be organised efficiently. Furthermore, given the presence of multiple agents with different individual objectives, attention must be put to the agency problem caused by incentive incompatibility both among channel members and within each organisation. As the empirical evidence suggests, these are crucial in determining the evolution of contract forms and organisational structures.

In this sense, it can be said that this research attacks one of the problems identified in the survey on the distribution channel literature made by Frazier (1991) who stated that:

"What is needed in the future is to change the solely descriptive orientation of the research on channel functions".(Frazier, op. cit. p.268).

Frazier specifically mentioned the lack of research on the "nature" of necessary functions in the distribution channel, on the "why" and "how" given functions have to be performed by members of the channel and on the "relative importance" of functions across different channel contexts.

We would stress that it is also important to understand *why* given functions have to be performed by *specific* channel members and *how an efficient division of responsibilities* is accomplished. We believe that the way functions are divided among channel agents in successful cases is the result of a cost minimizing process by which the most efficient agent ends up performing the task, whether by design or by chance, taking into account the financial, transactional and agency costs involved. In other words, there is an implicit optimizing mechanism in choosing specific agents for channel functions which links functions with structure and which is highly important for the development (or not) of the firm's competitive advantage. We

believe that these issues have been ignored in the literature where according to the usual division of research areas, research *on functions* is mistakenly treated separately from research on *structure* such as vertical integration or other types of inter-firm linkage.

We believe that the general orientation of future research should be less product and/or industry specific, and more geared to understanding the strategic elements which allow managerial discretion in a competitive environment. This research has shown that numerous battles are fought in this arena and that managers have made important changes in the distribution network, even in circumstances where products and industries have changed little in the period analysed.

1) We believe that in general (the specific areas of research are mentioned below) this opens an important new area of research on *competitive advantage* in or through distribution channels by exploring how the dynamics of markets for different channel functions mold alternative channel structures.

2) *Comparative studies of multinationals* beginning operations in other countries with similar products would be a good place to start. This would permit an evaluation of the different strategies followed by the same corporation with identical products in different countries. In other words, with this set of variables, new insights could be drawn from the way different market structures impact channel design. We have analysed how companies, with different products in various industries have faced the problem of building a distribution network. In doing so, interesting problems emerged dealing with the way: a) functions are organised, b) contracts are designed and c) differences in market structure impact channel decisions. Multinationals must take distribution decisions in different countries with radically dissimilar market structures. For example, how would strategies followed in less developed economies by Procter & Gamble, Colgate-Palmolive or Nestle differ from those chosen in environments where markets for suppliers of channel functions are more competitive?

3) *The financing function* offers interesting new avenues for research. Two types of financing must be distinguished as impacting channel structure: consumer and intra-channel financing². We have analysed how intra-channel financing has a considerable impact on the way a channel structure evolves. Also, we have discussed

² Financing among channel agents.

how new ways of consumer financing such as "part-exchange deals" are affecting channel structure. These issues raise the question of how intra-channel financing is affected by consumer financing. For example, if alternative sources of financing (besides the retailer) are available for the consumer how does it diminish the pressure on the needs for intra-channel financing (e.g. financing from manufacturers to retailers. In particular, has the emergence of credit cards and other new possibilities of consumer credit impacted channel structure by, for example, lowering capital requirements of retailers?.

As far as intra-channel financing is concerned, further research is required in order to achieve a deeper understanding of the impact of imperfections in the loan market on channel structure³. A survey research can be conducted in order to assess how channel structure varies according to the following variables:

- a) The existence or not of a cost advantage of a specific channel agent when compared to banks (e.g. the manufacturer, the wholesaler or the retailer) and
- b) The market structure of each channel agent (e.g. monopolistic or competitive).

The results from this research will bring new insights on issues such as tied loans, forced financing and profitable intra-channel financing, which would shed some light on competition policy issues. Also, it would help to understand the logic of the illegal and informal distribution structures (also called "rackets") which usually distribute agricultural products and pay very low prices to farmers.

These "undesirable" distribution networks are very common in less developed economies where market imperfections are high⁴. Sometimes they work in parallel with more formal distribution systems but are sometimes preferred by producers for

³ A theoretical parallel can be drawn between the emergence of an internal loan market in distribution due to imperfections in the loan market and the effect imperfections in the capital markets have had on firm structure (e.g. through the emergence of the multidivisional form).

⁴ Chandler (1977) has reported that in the U.S. similar problems were radically reduced with the invention of the telegraph and the construction of railroads. The telegraph allowed the farmers and local banks to have rapid and accurate information from important trading centers and the train offered fast, cheap and safe transportation. These two elements diminished the perceived risk of the transaction (buying agricultural products in a far an isolated part of the country) and the competitive advantage of the informal distribution system disappeared.

being faster and more reliable or for offering financing or implicit insurance against crop failures. In this area the following issues should be researched. For example, how informational asymmetries and structural imperfections in the loan market affect markets where homogeneous products are the object of transaction in risky conditions (e.g. agricultural products such as meat, potatoes and tomatoes which are common "rackets"⁵ in Venezuela).

4) *Spatial monopolies* enjoyed by retailers have been underestimated in the theory⁶. The theoretical approaches analysed view integration into retailing as a manufacturer's strategic move in which the countervailing power⁷ of retailers is not evaluated.

In this research we have found that there are very often circumstances in which the opposite can be true and we have argued that the impact of spatial monopolies enjoyed by retailers may be very important.

This opens new research questions. How have manufacturers reacted to the spatial monopolies enjoyed by retailers? What strategies have they followed to circumvent this source of market power? How have new technologies impacted this relationship? For example, the spatial monopoly enjoyed by public houses (pubs) in the U.K. has made vertical integration into retailing an attractive strategy followed by British brewers. In other countries, and specifically in Venezuela, breweries have never contemplated forward integration, but have chosen instead to give heavy financing and support to retailers. What explains these differences? A comparison of strategies followed by both industries would be useful to understand different corporate strategies for similar products and to shed some light on their public policy implications.

As far as the implications of technological changes is concerned, the following questions are put forward. How has the spread of information technologies

⁵ The name commonly used for this type of distribution networks is "roscas"

⁶ It is important to mention that spatial monopolies are key concepts in regional theory and location economics. See Isard, W.(1956, 1975 and 1990) and Czamanski, S. (1974).

⁷ Galbraith, J. (1956) "The Concept of Countervailing Power". Reprinted in The Marketing Channel a Conceptual Viewpoint. Edited by Bruce Mallen. John Wiley & sons Inc. N.Y. London, 1967.

impacted retailers' spatial monopolies in the service industry, where information is an important component of the product? For example, the relationship between airlines and travel agencies must have been affected by the expansion and integration of the telephone and computer networks. Were airlines, in the past, more dependent on travel agencies for reservations and the provision of information than they are now?⁸.

Another example can be found in the banking sector where the introduction of Automatic Teller Machines (ATMs) organized through networks accessible to several banks may change the need or importance of directly controlling the banks retailing operations which are traditionally carried out by agencies. This would constitute a spin-off of previously integrated functions. Is spatial monopoly (proximity to the nearest branch), an increasingly unimportant competitive advantage in the banking sector?

On a more theoretical or normative dimension further research is needed in the following areas.

5) *Existing theories* of channel structure can be tested by applying them, not to the channel as a whole, but to specific functions, instead. Can Stigler's or Williamson's approach be used to explain channel structure by *functions*. Can the transaction cost theory enhance its predictive value if vertical integration decisions are analysed by functions rather than by number of middlemen?

For example, there are firms which are subject to considerable externalities and require highly specific assets which have not integrated forward into retailing, as predicted by the transaction cost theory. In this research we have found that, instead, they may integrate only the relevant functions, such as those required to maintain product quality or reduce negative externalities (e.g. merchandising, risk bearing and/or consumer service).

6) Agency theory can be studied in order to analyse its eventual use in channel and contract design. The issue of achieving "incentive compatibility" among network members may be a crucial task for channel leaders in order to accomplish the *systemic* view of the channel.

⁸ A hypothesis would be that since today reservations can be made directly by telephone to the airlines this constitutes a case of vertical integration made possible by information technology.

A specific research area is the evaluation of the use of a vertically controlled sales force vs. independent salesmen. We have identified some of the elements which help to define self-enforcing contracts in the organisation of the sales-force by evaluating circumstances in which a vertically integrated sales-force is more efficient than independent salesmen (e.g. owner drivers). A survey will be useful to identify how market and product elements affect the transaction and how they determine the relative efficiency of different incentive schemes.

This research has stressed the importance which manufacturers give to their distribution channels and how they may help in achieving and maintaining a competitive advantage. Further research is needed to understand how each channel function can be used as a particular competitive tool and how design decisions over those specific functions affect corporate competitive advantage in the long run.

3. Policy Issues

Every firm is vertically integrated to some degree, and this degree changes continually. One of the initial motivations for this research was the concern that vertical integration strategies into distribution channels were acting against the public interest. We wanted to find out whether the logic behind distribution channel strategies was consistent with the commonly held view that explains it in terms of building barriers to entry or other anticompetitive goals. This view has been called the "inhospitality tradition" by Williamson and is characterized by the fact that:

"The possibility that business practices are motivated by efficiency purposes is not even considered. Instead, attention is focussed on the possibility that some anticompetitive effect, however remote, might be connected with the practice in question." (Williamson, O. Antitrust Economics. Basil Blackwell Ltd. Oxford, 1987 p. 153)

Thus, we wanted to go deeper and find out why managers choose more complicated forms of transactions instead of keeping to the traditional market exchange when designing distribution channels. If efficiency instead of monopoly reasons guide management decisions then the policy implications are quite different.

Our view after conducting the research is that very little is known about the forces which determine the way contracts are made for the distribution of products and services. This implies that to have a set of laws which prohibit or restrict contractual arrangements, as has been proposed for Venezuela, can be dangerous. Contracts attempt to address agency problems, market imperfections, incentive

incompatibilities, free riders, moral hazard issues, other informational asymmetries and externalities. Given the complexity of these issues, there does not seem to be a role for government regulation of *contract design*⁹.

The *barriers to entry* argument seems like an incorrectly used metaphor when compared with the real process by which distribution channels are built. The fact that distribution channels may require large and unavoidable capital outlays can be seen by potential competitors as entry barriers. However, their existence may owe more to successful management than to an ex-ante strategic commitment to deter competition. Moreover, free access to such a system may lead to severe free rider problems which the distribution system may have been designed to prevent.

The question for policy makers should not be whether barriers to entry exist, but whether they are avoidable and whether they adversely affect the public interest. Finding an answer to this question requires a detailed analysis of the existing structure and of the potential changes which may be improve social efficiency.

In more general terms, we believe that, since the structure of contracts in distribution channels responds to a complicated combination of variables, each channel is almost unique in its nature and structure and, therefore, "general" policy restrictions are bound to be inadequate. If the structure of a specific distribution network is proven to have negative effects on the public interest then the case should be analysed within its unique context and conditions. Policies should be developed on a case-by-case basis, avoiding general prohibitions by law.

The impact of *imperfections in the financial market* also needs to be better understood by policy makers. The liberalization of the financial market is bound to have an impact on channel structure. Developing economies have usually repressive financial policies (e.g. interest rate control) where real interest rates are negative. These policies tend to create excess demand for credit, which exacerbates the structural imperfections of loan markets described by Stiglitz & Weiss (1981). The presence of excess demand for loans causes banks to direct their credit to large companies with solid financial positions. Other members of the distribution channel may be restricted, limiting potential entrants and increasing the importance of intra-channel financing. As they say in Venezuela "banks only lend money to those who do not need it".

⁹ This does not mean that competition policy should not exist, we will discuss that matter later.

We have analysed extensively the impact which these imperfections have on channel structure. It suggests that competition in the market for goods may be positively affected by the liberalization of the financial sector.

The importance of a clearer understanding of the financial imperfection problem on channel structure is highlighted by the recent row over the tied-loans in the U.K. beer industry.

"We recommend the elimination of all loan ties. Those in force at the date of publication should be allowed to run their course. We intend that this measure should restore a substantial measure of genuine freedom to the "free" trade. It should force competition at the wholesale level on to prices, discounts and quality of service, and should permit the emergence, over time, of a more flourishing independent wholesale sector."
(Monopolies and Merger's Commission report on the Beer Industry. 1989, p.5)

The report went further to recommend that the common practice of brewers owning pubs and leasing them to tenants should be restricted. In 1989, these recommendations were adopted with the intent to increase competition, "drive down beer prices, and give pub-goers a wider choice of beers". Instead, two years later the effects appeared to be the following:

"The beer industry is now dominated by four big brewers instead of six (and City analysts predict the number might shrink to two or three); beer prices have shot up by a real 10 percent or so over the past 12 months; and the largest brewers are fixing deals which will ensure that their brands remain dominant". (The Economist, August 31 - Sept 6, 1991)

Imperfections in the loan market affect channel structure because channel members have informational advantages when compared to banks. The common view places anticompetitive objectives in these tied-loan policies. This view fails to understand the following issues:

- a) Intra-channel financing is a consequence of imperfections in the external loan market.
- b) As with any other channel function, financing is performed within a specific market structure to which the firm has to react in order to compete.
- c) There are imperfections (informational asymmetries) in the loan market which may imply financing cost advantages for manufacturers. In other words some manufacturers may find some loans profitable while banks do not. The reason is to be found in differences in the

amount and structure of the information available to banks relative to manufacturers regarding the borrower and on their relative difficulty of exerting control after the credit is granted.

Competition policy has also tended to prohibit *exclusivity contracts* and *territorial restrictions*. This is particularly true of the recent proposal being discussed in the Venezuelan Congress, which is based on current legislation in Spain¹⁰. The implicit assumption is that the abolition of these practices would cause the emergence of a broader wholesale or retail distribution system. However, it may well be that when confronted with these prohibitions, firms may choose to become vertically integrated. For example, if market restrictions oriented to guarantee quality control are prohibited, the firms may decide to integrate forward. If this is not allowed either, product quality debasement will occur causing a negative effect on consumer welfare that should also be considered.

As mentioned earlier, some of the entry restrictions and exclusivity agreements intend to deal with free rider problems. For example, exclusive distributors of a particular product are often also responsible for advertising. Free entry may lead to insufficient incentives for each participant to carry out promotional investments, as they would all try to get a free ride on their competitors expenditures.

In conclusion, the complexity of the determinants of efficient distribution channels makes each channel a unique structure which is still very poorly understood. Legislation based on the outright prohibition of specific practices may be socially very costly as it may hamper the use of arrangements which deal efficiently with pre-existing market imperfections. Consequently, competition policy would be better served by relying on a commission capable of performing case-by-case in depth analyses. It should also achieve a more efficient distribution of the "burden of proof" by asking for specific justifications of given practices. However, given our limited understanding of the complex problems involved, government analysts should be very careful before imposing practices and predicting outcomes, as if regulations can easily improve upon markets and managers.

¹⁰ See Congreso de la República, "Proyecto de Ley para Garantizar la Libre Competencia", Caracas 1991. These prohibitions are described in Chapter II.

BIBLIOGRAPHY

- Achrol, R. Reve, T. & Stern, L.(1983), "The Environment of Marketing Channels Dyads: A Framework for Comparative Analysis", *Journal of Marketing*, Vol. 47, pp.55-67.
- Adelman, M.(1955), "Concept and Statistical Measurement of Vertical Integration" in *Business Concentration and Price Policy*, George Stigler, ed. Princeton, N.J.: Princeton University Press.
- Akerlof, G.(1984), *An Economic Theorist Book of Tales*, London: Cambridge University Press.
- Alchian, A. & Demsetz, H.(1972), "Production, Information Cost and Economic Organization", *American Economic Review*, Vol. 62, pp.777-795.
- Alderson, W.(1957), *Marketing Behavior and Executive Action*, Homewood, Richard D. Irwin.
- Anderson, E. & Coughlan, A.(1987), "International Market Entry and Expansion via Independent or Integrated Channels", *Journal of Marketing*, Vol 51, pp.71-82.
- Anderson, E. & Weitz, B.(1986), "Make or Buy Decisions a Framework for Analysing Vertical Integration Issues in Marketing", *Sloan Management Review*, Vol.27, pp.3-19.
- Anderson, E. & Weitz,B.(1987), "Resource Allocation Behaviour in Conventional Channels", *Journal of Marketing Research*, Feb. pp.85-97.
- Anderson, E.(1985), "The Salesperson as Outside Agent or Employee: A Transaction Cost Analysis", *Marketing Science* Vol. 4, pp.234-254.
- Anderson, P.(1982), "Marketing, Strategic Planning and the Theory of the Firm", *Journal of Marketing*, Vol 46, pp.15-26.
- Arndt, J.(1979), "Towards a Concept of Domesticated Markets", *Journal of Marketing*, Vol. 43, pp.69-75.
- Arrow, K.(1975) "Vertical Integration and Communication", *Bell Journal of Economics*, Vol. 6, pp.174-183.
- Aspinwall, L.(1958), "The Characteristics of Goods and Parallel Systems Theories", in *The Marketing Channel: A Conceptual View Point*. New York: John Wiley & Sons.
- Atack, J.(1986), "Firm Size and Industrial Structure in the United States During the Nineteenth Century", *Journal of Economic History*, Vol. XLVI, No.2, pp.463-475.

- Bain, J.(1951), "Relation of Profit Rate to Industry Concentration : American Manufacturing, 1936-1940", *The Quarterly Journal of Economics*, August, pp.293-325.
- Bain, J.(1968), *Industrial Organization*, 2d. ed. New York: John Wiley & Sons.
- Bamberg, G.(1989), *Agency Theory, Information and Incentives*, Spremannk ed. Berlin: Springer-Verlag.
- Baumol, W.(1982), "Contestable Markets: an Uprising in the Theory of Industry Structure", *American Economic Review*, Vol.72, pp.1-15.
- Baumol, W., Panzar, J. and Willing R.(1982), *Contestable Markets and the Theory of Industry Structure*, New York: HBJ.
- Blair, R. & Kaserman, D.(1983), *Law and Economics of Vertical Integration*, London: Academic Press Inc..
- Bonanno,G. & Vickers,J.(1988), "Vertical Separation", *The Journal of Industrial Economics*, Vol. 36, pp.257-265.
- Boutaney G. & Wotzel, L.(1988), "Distributor Power vs. Manufacturer Power: the Customer Role", *Journal of Marketing*, Vol.52, pp.52-63.
- Bower, J.(1970), "Capital Budgeting as a General Management Problem", from: *Managing the Resource Allocation Process a Study of Corporate Planning and Investment*, Chapt. 1. Harvard: Boston Division of Research, Graduate School of Business, Harvard University.
- Bowley, A.(1928) "Bilateral Monopoly", *Economic Journal*, Vol. 38, pp.651-659.
- Brander, J. Spencer, B.(1989), "Moral Hazard and Limited Liability: Implications for the Theory of The Firm". *International Economic Review*, Vol. 30, pp. 833-849.
- Brown, W.(1984), "Firm-Like Behaviour in Markets. The Administrated Channel", *International Journal of Industrial Organization*. Vol. 2, pp. 263-276.
- Bryman, A.(1989), *Research Methods and Organization Studies*, London: Unwin Hyman Ltd.
- Bucklin, L.(1967), "The Economic Structure of Channels of Distribution", in *Bruce Mallen ed. The Marketing Channel: Conceptual View Point*, New York: John Wiley & Sons,Inc.
- Bucklin, L.(1973), A "Theory of Channel Control", *Journal of Marketing*, Vol. 37, pp.39-47.
- Buzzel, R.(1983), "Is Vertical Integration Profitable?", *Harvard Business Review*, Jan-Feb, pp.92-192.

- Cable, J. & Dirrheimer, M.(1983), "Hierarchies and Markets: an Empirical Test of the Multidivisional Hypothesis in West Germany", *International Journal of Industrial Organization*, Vol.1 pp.439-62.
- Cable, J.(1985), "Capital Market Information and Industrial Performance: The Role of West German Banks", *Economic Journal*, Vol.95, pp.118-132.
- Cable, J.(1985), "International Organization, Business Groups and Corporate Performance", *International Journal of Industrial Organization*. Vol. 3, pp.401-420.
- Cable, J.(1987), "Organizational Form and Economic Performance". Prepared for R.S. Thompson and M. Wright (eds), *Internal Organisation, Efficiency and Profit*, Phillip Allan (forthcoming) Chapter 2.
- Casson, M. and associates(1986), Chapter 3, *Multinational and World Trade: Vertical Integration and the Division of Labour in World Industries*, London: Allen and Unwin.
- Caves, R. & Porter, M.(1977), "From Barriers to Entry to Entry Mobility Barriers: Conjectural Decisions and Contrived Deterrence to New Competition", *Quarterly Journal of Economics*, Vol. 91, pp. 241-261.
- Caves, R.(1964), *Structure, Conduct, Performance*, Englewood Cliffs, N.J.:Prentice Hall Inc.
- Caves, R.(1980), "Industrial Organization Corporate Strategy and Structure", *Journal of Economic Literature*, Vol. 17, pp.64-92.
- Chandler A.(1962), *Strategy and Structure: Chapters in the History of Industrial Enterprise*, Cambridge: The MIT Press.
- Chandler A.(1969), "The Structure of American Industry in the Twentieth Century: A Historical Overview", *Business History Review*, Vol 43, pp.255-281.
- Chandler, A.(1977), *The Visible Hand*, Harvard: Belknap.
- Clark, R.& Mc. Guinness,T. (Ed),(1987), *The Economics of The Firm*, Oxford: Basil Blackwell Ltd.
- Coase, R.(1937), "The Nature of the Firm", *Economica* Vol.4, pp.386-405.
- Comanor W.(1967), "Vertical Mergers, Market Power and Antitrust Laws, *American Economic Review*, Vol 57, pp. 254-265.
- Coughlan,A.(1985), "Competition & Cooperation in Marketing Channel Choice:Theory and Application", *Marketing Science*, Vol.4, pp. 110-129.
- Cox,S.(1974), "An Industrial Performance Evaluation Experiment." *Journal of Industrial Economics*, Vol. 22 pp.199-214.

- Czamanski, S.(1974), *Spatial Organization of Industries*, Halifax: N.S. Institute of Public Affairs, Dalhousie University.
- Cyert, R. and March, J.(1963), *A Behavioural Theory of the Firm*. Englewood Cliffs, N.J.: Prentice-Hall.
- Dahl, R.(1957), "The Concept of Power", *Behavioral Science*, Vol 2, pp.203-204.
- Day, G. & Wensley R.(1988), "Marketing Theory with a Strategic Orientation", from: *Readings in Strategic Marketing*, Weitz & Wensley ed. Chicago, London: the Dryen Press.
- Day, G., Weitz, B. & Wensley R.(1990), *The Interface of Marketing and Strategy*, Strategic Management Policy and Planning Vol. 4. Jai Press, Inc.
- Downey, K. & Ireland, D. (1979), "Quantitative Versus Qualitative: Environmental Assesment in Organizational Studies", *Administrative Science Quarterly*, Vol.24, pp.630-636.
- Dwyer, R. & Oh, S.(1988), "A Transaction Cost Perspective on Vertical Contractual Structure and Interchannel Competitive Strategies", *Journal of Marketing*, Vol. 52, pp.21-34.
- Dwyer, R. & Welsh, A.(1985), "Environmental Relationships of the Internal Political Economy of Marketing Channels", *Journal of Marketing Research*, Vol.22 pp. 397-414.
- Eco, U.(1989), *The Name of the Rose*, Picador.
- Eisenhardt, K.(1988), "Builing Theory from Case Study Research", Working Paper, Stanford: Standford University Department of Industrial Engineering.
- El-Ansary A. & Stern, L.(1972), "Power Measurement in the Distribution Channel", *Journal of Marketing Research*, Vol.9 pp. 47-52.
- Etgar, M.(1976), "Effects of Administrative Control on Efficiency of Vertical Marketing Systems", *Journal of Marketing Research*, Vol 13, pp. 12-24.
- Etgar, M.(1987), "The Effects of Forward Vertical Integration on Service Perfomance of a Distributive Industry", *The Journal of Industrial Economics*, Vol 26, pp. 249-255.
- Fama, E.(1970), "Efficient Capital Markets: a Review of Theory and Empirical Work", *Journal of Finance*, Vol. 25, pp. 383-417.
- Foreman, P.(1971), "The Theory of Case Studies", in *Research Methods: Issues and Insights*, Wadsworth.
- Franklin B. (eds.) (1971), *Research Methods: Issues and Insights*, Belmont Cal. Wadsworth.

- Frazier, G. & Rody, R.(1991), "The Use of Influence Strategies in Interfirm Relationship in Industrial Product Channels". *Journal of Marketing*, Vol.55, pp. 52-69.
- Frazier, G.(1991), "The Design and Management of Channels of Distribution", in *The Interfaces of Marketing and Strategy*, Day, G. & Wensley R. Jai Press.
- Frazier, G., Gill J. & Kale, S.(1989), "Dealer Dependence Levels and Reciprocal Actions in a Channel of Distribution in a Developing Country", *Journal of Marketing*, Vol. 53, pp. 50-69.
- French, J. & Raven, B.(1959), "The Basis of Social Power" in *Studies in Social Power*, ed. by Dorwin Cartwright, Michigan: Univeristy of Michigan.
- Fullerton, R.(1988), "How Modern is Modern Marketing?, Marketing's Evolution and Myth of the Production Era", *Journal of Marketing*, Vol. 52, pp. 108-125.
- Galbraith, J.(1956), "The Concept of Contervailing Power", reproduced by Mallen, B. in *The Marketing Channel: A Conceptual Viewpoint*, John Wiley & Sons Inc., London, 1967.
- Geertz, C.(1973), *The Interpretation of Cultures*, New York: Basic Books Inc.
- Gould, S.(1991), *Wonderful Life: The Burgues Shale and the Nature of History*, London: Penguin Books Ltd.
- Hausman, D.(1985), *The Philosophy of Economics*, Cambridge: Cambridge University Press.
- Hay, D. & Vickers J.(1988), "The Reform of UK. Competition Policy", *National Institute Economic Review*, August, pp.56-67.
- Hay,D. & Morris, D.(1979), *Industrial Economics*, Oxford: Oxford Universtiy Press.
- Hollander, S.(1960), "The Wheel of Retailing", *Journal of Marketing*, Vol 25, pp. 37-42.
- Hyman, R.(1989), "Research for Beginners", Seminar Notes, University of Warwick.
- Isard, W. (1975), *Methods of Regional Analysis*, Englewood Cliffs, London: Prentice Hall, 1975.
- Isard, W. (1990), *New Frontiers in Regional Science. Essays in Honour of Walter Isard*, Manas Chatterji and E. Kuenne eds.,London: Macmillan.
- Isard, W.(1956), *Location and Space Economy: a General Theory*, Cambridge (Mass), London MIT Press.
- Jaffee, D. & Russell, T.(1976), "Imperfect Information, Uncertainty and Credit Rationing" *Quarterly Journal of Economics*, Vol. 90, pp. 651-666.

- Jensen, M. & Meckling, W. (1976), "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure", *Journal of Financial Economics* Vol.3, pp. 306-360.
- Jick, T.(1979), "Mixing Qualitative and Quantitative Methods: Triangulation in Action", *Administrative Science Quarterly*, Vol. 24, pp.
- John, G.(1984), "An Empirical Investigation of Some Antecedents of Opportunism in a Market Channel", *Journal of Marketing Research*, Vol. 21, pp. 278-289.
- Karakaya, F. & Stahl, M.(1989), "Barriers to Entry and Market Entry Decision in Consumer and Industrial Goods Markets", *Journal of Marketing*, Vol. 53 pp. 80-91.
- Kaserman, D.(1978),"Theories of Vertical Integration: Implications for Antitrust Policy", *Antritrust Bulletin*, Vol. 23, pp. 483-510.
- Kiholm, J.(1987), "The Trade Credit and Informational Asymmetry", *The Journal of Finance*, Vol. 42, pp. 863-871.
- Klein, B., Crawford, R. & Alchian, A.(1978), "Vertical Integration, Appropriable Rents and the Competitive Contracting Process", *Journal of Law and Economics*, Vol.21, pp. 297-326.
- Klein, S. & Roth, V.(1988), "A Transaction Cost Model of Channel Integration in International Markets", Working Paper, Massachusetts: Northeastern University.
- Koch, J.(1980), *Industrial Organization and Prices*, Prentice Hall, International Edition.
- Lakatos, I. & Musgrave, A.(eds),(1970), *Criticism and the Growth of Knowledge*, CUP.
- Leblebici, H. & Salancik, G.(1981), "Effects of Environmental, Uncertainty on Information and Decision Processes in Banks", *Administrative Science Quarterly*, Vol. 26, pp. 578-596.
- Leifer, R. & Huber, G.(1977), "Relations Among Perceived Environmental Uncertainty Organization Structure and Boundary-Spanning Behavior", *Administrative Science Quarterly*, Vol. 22, pp. 235-247.
- Levitt, T.(1980), "Marketing Success Through Differentiation of Anything", *Harvard Business Review*, Jan-Feb. pp.83-90.
- Little, R.(1970), "The Marketing Channel: Who should Lead This Extra-Corporate Organization?", *Journal of Marketing*, Vol. 34, pp.31-38.
- Liveslay, H. & Porter, P.(1969), "Vertical Integration in American Manufacturing 1899-1948", *Journal of Economic History*, Vol. 29, pp. 494-500.

- Logan, S.(1969), "A Conceptual Framework for Analyzing Economies of Vertical Integration", *American Journal of Agricultural Economics*, Vol. 51, pp. 834-848.
- Macaulay, S.(1963), "Non Contractual Relations in Business, a Preliminary Study", *American Sociological Review*, Vol. 28, pp. 95-105.
- Maeda, J.(1990), "Changing the Structure of Japanese Distribution Industry", paper presented at the 19th. Annual Conference of the European Marketing Academy in Austria.
- Magee, B. (1990), *Popper*, London: Fontana Paperbacks, 15th. impression.
- Mallen, B.(1973), "Functional Spin-Off: A Key to Anticipating Change in Distribution Structure", *Journal of Marketing*, Vol. 37 pp.18-25.
- Mariotti, S. & Cainarca, G.(1986), "The Evolution of Transaction Governance in the Textile Clothing Industry", *Journal of Economic Behavior and Organization*, Vol.7 pp. 351-374.
- Marris, R. & Mueller, D.(1980), "The Corporation, Competition and the Invisible Hand", *Journal of Economic Literature*, Vol. 18, pp.32-63.
- Marsh, C.(1982), *The Survey Method*, Allen & Urwin.
- Marshall, A.(1890), *Principles of Economics*, London.
- Massey, D. & Meegan, R. "Politics and Method: Contrasting Studies in Industrial Geography. London: Methuen.
- Mc.Clintock, Ch. & Brannon, D.(1977), "Applying the Logic of Sample Surveys to Qualitative Case Studies: The Case Cluster Method", *Administrative Science Quarterly*, Vol. 24, pp. 612-629.
- Moore, R. (1989), "Conceptual and Empirical Developments of Marketing Channel Conflict", *Journal of Marketing Management*, Vol 4, pp. 350-369.
- Morgan, J.(1949), "Bilateral Monopoly and the Competitive Output", *Quarterly Journal of Economics*, Vol. 63, pp.371-91.
- Nachmias, D. & Nachmias, Ch.(1981), *Research Methods in the Social Sciences*, New York: Martin Press.
- Naim, M. (1984), "Posibilidades y Limitaciones del Funcionamiento de los Mercados en los Países Menos Desarrollados: Una Aplicación del Enfoque de Mercados y Jerarquías al Caso Venezolano", Working Paper, IESA, Caracas.
- Narus, J. & Anderson, J.(1988), "Strengthen Distributor Performance Through Channel Positioning", *Sloan Management Review*, Vol. 29, pp.31-39.

- Neumann, M.(1988), "Industrial Organization and Public Policy, *International Journal of Industrial Organization*. Vol 6, pp.155-156.
- Oppenheim, A.(1966), *Questionnaire Design and Attitude Measurement*, London: Heinemann.
- Ouchi, W.(1984), *The M-form Society*, Addison-Wesley, Publishing Company.
- Phlips, L.(1988), *The Economics of Imperfect Information*, Cambridge: Cambridge University Press.
- Popper, K.(1990), "The Logic of Scientific Discovery", 14th Impression, London: Unwin Hyman Ltd.
- Porter, M.(1980), *Competitive Strategy, Techinques for Analyzing Industries and Competitors*, New York: The Free Press.
- Porter, M.(1987), "On Competitive Strategy: Reflections and Round Table Discussions", *European Management Journal*, Vol. 6, No.1.
- Pride W. & Ferrel O.(1987), *Marketing Basic Concepts and Decisions*, Boston: Houghton Mifflin Company.
- Putterman, L. (eds.) (1988), *The Economic Nature of The Firm: A Reader*, 3rd Edition, Cambridge: Cambridge University Press.
- Reid, G.(1987), *Theories of Industrial Organisation*, Oxford: Basil Blackwell.
- Richardson, D.(1972), "The Organisation of The Industry", *Economic Journal*, Vol.82, pp.883-896.
- Romano, R.(1988), "A Note on Vertical Integration, Price Discrimination and Successive Monopoly", *Economica*, Vol. 55, pp.261-268.
- Rosenbloom, B.(1987), *Marketing Channels: A Management View*, 3erd edition, New York: The Dryden Press.
- Ross, S.(1973), "The Economic Theory of Agency: The Principal's Problem", *American Economic Review*, Vol. 62, pp.134-139.
- Ryan, A.(1970), *The Philosophy of Social Science*, Macmillan, 1970.
- Savitt, R.(1989), "Looking Back to See Ahead: Writting the History of American Retailing", *Journal of Retailing*, Vol. 65, pp. 326-355.
- Sawyer, M.(1985), *The Economics of The Industries and Firms*, Second Edition, Croom Helm.
- Scherer, F.(1980), *Industrial Market Structure and Economic Performance*, Sec. Edition, Boston: Houghton Mifflin.

- Simon, H. (1955), "A Behavioral Model of Rational Choice", *Quarterly Journal of Economics*, Vol. 69, pp. 99-118.
- Simon, H.(1957), *Models of Man*, New York: John Wiley & Sons.
- Simon, H.(1959), "Theories of Decision Making in Economic and Behavioural Sciences", *American Economic Review*, Vol. 49, pp.253-283.
- Simon, H.(1972), "Theories of Bounded Rationality" in *Decision and Organization*, C.B. Mc. Guire and Roy Radner eds., New York: American Elsevier, pp. 161-172.
- Simon, H.(1978), "Rationality as Process and as Product Thought", *American Economic Review*, Vol 68, pp. 1-16.
- Sosnick, S.(1958), "A Critique of Concepts of Workable Competition", *Quarterly Journal of Economics*, Aug. pp. 380-423.
- Smith, A.(1776), *An Inquiry into the Nature and Causes of the Wealth of the Nations*. London.
- Spekarman, R. & Stern, L.(1979), "Environmental Uncertainty and Buying Group Structure: an Empirical Investigation", *Journal of Marketing*, Vol.43, pp.54-64.
- Stern, L. & El-Ansary, A.(1988), *Marketing Channels* 3rd. edition, Englewood Cliffs, New Jersey: Prentice Hall.
- Stigler, G.(1951), "The Division of Labor is Limited by the Extent of the Market", *Journal of Political Economy*, Vol.3 pp.185-189.
- Stigler, G.(1974), "Free Riders and Collective Action", *Bell Journal of Economics*, Vol. 6, pp. 552-579.
- Stiglitz, J. & Dasgupta, P.(1988), "Learning by Doing, Market Structures and Trade Policies", *Oxford Economic Papers*, Vol. 40, pp.246-268.
- Stiglitz, J. & Mathewson, F.(1986), *New Developments in the Analysis of Market Structure*, Mac Millan Press.
- Stiglitz, J. & Weiss A.(1981), "Credit Rationing in Markets with Imperfect Information", *The American Economic Review* 393-410.
- Sutton, C.(1980), *Economics and Corporate Strategy*, Cambridge: Cambridge University Press.
- Tirole, J.(1989), *The Theory of Industrial Organization*, the MIT Press, Cambridge Massachusetts.

- Varian, H.(1984), *Microeconomic Analysis*, Chapter 8, "Topics in the Economics of Information", Second Edition New York: W.W. Norton & Company, Inc.
- Vassilakis, S.(1988), "Vertical Integration and Division of Labor", Working Paper, Department of Economics, University of Pittsburgh.
- Vernon, J. & Graham, D.(1971), "Profitability of Monopolization by Vertical Integration", *Journal of Political Economy*, Vol. 79, pp. 924-925.
- Von Weizsacker, C.(1980), "A Welfare Analysis of Barriers to Entry", *The Bell Journal of Economics* Vol. 11, pp.399-420.
- Weitz, B. & Wensley, R.(1988), *Readings in Strategic Marketing: Analysis, Planning and Implementation*, New York: The Dryden Press.
- Wensley R. (1989), "Intelligent Elephants and Part-Time Researchers. Working Paper, University of Warwick.
- Wensley, R. & Day G.(1983), "Marketing Theory with Strategic Orientation", *The Journal of Marketing*, Vol. 47, pp.79-89.
- Williamson, O.(1971), "The Vertical Integration of Production: Market Failure Considerations", *American Economic Review*, Vol. 61, pp. 112-123.
- Williamson, O.(1975), *Markets and Hierarchies*, New York: Macmillan Free Press.
- Williamson, O.(1979), "Assessing Vertical Market Restrictions: Antitrust Ramifications of the Transaction Cost Approach", *University of Pennsylvania Law Review*. Vol. 127, pp. 953-993.
- Williamson, O.(1985), *The Economic Institutions of Capitalism*, New York: Free Press Paper Back Edition 1987.
- Williamson, O.(1986), "Vertical Integration and Transaction Costs" in *New Developments in the Analysis of Market Structure*, Stiglitz, J. and Mathewson eds. for the International Economic Association. Macmillan Press Ltd.
- Williamson, O.(1987), *Antitrust Economics*, Basil Blackwell Ltd.
- Yin, R.(1989), *Case Study Research Design and Methods*, Revised Edition, Sage Publication Inc.