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Organisational Flexibility in an Emergent Economy

By

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Abbreviations

FDI	Foreign Direct Investment
MNC	Multinational Company
R&D	Research and Development
NBE	National Business Environment
ISI	Import Substituting Industrialisation
SME	Small and Medium Size Company
M&A	Merger and Acquisition
GDP	Gross Domestic Product
OTC	Over-the-Counter Medicines
HR	Human Resource
IT	Information Technology

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Declaration

The following declarations are made as required by the University of Warwick Graduate School's guide to examination for higher degrees by research.

1. The thesis is the candidate's own work
2. The thesis has not been submitted for a degree at another university
3. No material is contained in this thesis which was published or submitted for publication before the start of this study
4. No collaborative work has been included in this thesis

Summary

The management literature has claimed that the complexity of business contexts has made firms confront hypercompetitive (D'Aveni, 1994) or high-velocity environments (Brown and Eisenhardt, 1997). Behind such claims lies a new interest in the dynamics of adaptation and in particular in a firm's flexibility as a way of adjusting under conditions of uncertainty (Volberda, 1999).

This study takes up the challenge of exploring the dynamics of organisational adaptation under the conditions of environmental volatility that characterised Argentina over the period 1989-1999. The empirical focus of the thesis is the study of the determinants of organisational flexibility in four family-owned companies: two flexible and two less flexible from the edible oil industry (i.e., a deregulated industry) and pharmaceutical industry (i.e., an industry in the process of deregulation).

By means of an innovative analysis (which includes longitudinal analysis, coding analysis, statistical analysis and the use of original display charts) we were able to show what determines whether an organisation is flexible. The findings of our case study were interrogated and interpreted by developing theoretical ideas from three areas of literature between which historically there has been no interface. These are the literatures on organisational flexibility, organisational innovativeness and institutional embeddedness.

In our empirical results we identified five determinants of organisational flexibility as a set of organisational and managerial capabilities that enabled some firms to adapt quickly in a highly competitive environment (i.e., heterogeneity of the dominant coalition, centralisation and formalisation of decision-making, low macroculture embeddedness, environmental scanning, and a strong organisational identity). The study also sheds light on the process of transformation and adaptation of family firms – an area that has not yet been the subject of extensive empirical inquiry (Aronoff and Ward, 1997).

Chapter 1- Introduction

“In the old days in science, the universe was fairly simple. Nearly every science museum has a huge, old model of the solar system in which all the movements of the planets are represented with clockwork gears. Then we realized that reality was much more complex. All motion was relative. The universe is a system in dynamic motion and flux with all motion being determined by the forces of inertia, complex gravitational interactions of heavenly bodies and even unseen gaseous clouds, random collisions, millions of asteroids, and the overall movement of galaxies toward the outer boundaries of the universe.” (D’Aveni, 1994:xiii).

D’Aveni (1994) goes on to draw an analogy between our increasing perception of the complexity of the universe and the complexity of the business world. Business has entered a new reality, one that is more complex and dynamic, in which timely adaptation is critical for a firm’s survival. Since the 1990s the new business context has been characterised by macro-environmental changes, changes in the way firms are organised, and changes in management style.

The macro-environmental changes affecting businesses have been shaped by an acceleration of change in the economic, social, technological and political worlds. March (1995) underlines four factors that have brought volatility and uncertainty into the environment in which firms operate. The factors are global linkages (i.e., the business networks that cause global interdependencies to multiply and national boundaries to fade), information technology (which affects the possibilities for coordinating and controlling organisations), knowledge-based competition (i.e., the use of knowledge as a primary source of competitive advantage), and political uncertainty (i.e., the loss of autonomy of the national state through a general loss of control over boundaries).

All these factors have caused competition to intensify, product life cycles to shorten and technological innovation to increase. Hypercompetition, D’Aveni (1994) states, best describes the process by which the business environment accelerates. D’Aveni (1994) indicates that the choice is clear for managers: either to stand still and allow the constant change to wash over them, trying to resist the environmental changes, or to actively adapt to the environment and take

advantage of its opportunities. In a dynamic world, D'Aveni (1994:356) points out, only dynamic firms and those that can adapt rapidly to hypercompetitive environments, will survive.

Over the last decade, management literature has also heralded the importance of new forms of organising to confront uncertain and hypercompetitive environments. Theories regarding ideal types of organisation have proliferated in an attempt to find ways firms can adapt rapidly under high levels of competition. Goranson (1999:65) suggests the concept of agile and virtual enterprise, understanding by virtual organisation "*aggregations of smaller units that come together and act as though they were a larger, long-lived enterprise.*" Such an organisation has the advantage of being highly responsive.

Hedlund (1994) introduced the N-form in which different elements of an ideal organisation are highlighted, namely lateral rather than vertical communication, temporary constellations of people and units rather than permanent structures, and heterarchy instead of hierarchy, among others. Hedlund's N form is less futuristic but still more an ideal than a realisation.

The latest empirical attempt to understand the ways firms organise themselves to adapt to competitive contexts comes from Pettigrew and Fenton (2000). Instead of focusing on ideal ways of organising, Pettigrew and Fenton (2000) have stressed how firms organise themselves and what the indicators of this are. The conclusion of their European survey is that the most adaptable and innovative firms have combined changes in structure (i.e., more decentralisation, layering and project forms of organising), changes in processes (i.e., horizontal communication, investments in information technology and new human resource practices), and, changes in their boundaries (i.e., downscoping, outsourcing and more strategic alliances).

Finally, the changing environment of the 1990s has also brought challenges in terms of the way firms are managed if they want to adapt successfully. These challenges have been signalled in management literature as a need for environmental sensing and sense-making (Pettigrew and Whipp, 1991), a managerial culture favouring change (Newman and Nollen,

1998), a broad knowledge base and variety of managerial expertise (Grant, 1996), and the development of high-order learning (Teece *et al*, 1997; Fiol and Lyles, 1985).

Behind such claims of environmental, organisational and managerial changes lies a new interest in the dynamics of adaptation and in particular in a firm's flexibility as a way of adjusting under conditions of uncertainty (Volberda, 1999). Amongst those who champion the new dynamic view of the firm, there is a belief that managers are unable to influence their rapidly changing environment (Astley and Van de Ven, 1983). Hence, they urge the adoption of flexible structures and systems which react to change automatically. This is a highly deterministic view – the actions of the manager being limited merely to making adjustments to the structure and systems. Others (D'Aveni, 1994; Child, 1972 and 1997) suggest a more proactive role for the manager in which he/she does have the ability to influence the environment in which the firm operates.

In spite of the recognition of the importance of a firm's adaptation and flexibility, much of writing on adaptation concentrates on short-term strategic and organisational adaptations (Lewin *et al*, 1999). Moreover, research into adaptation still involves using cross-sectional research designs combined with the static metaphors of contingency thinking to analyse the fit between firm and environment. The inadequacies of this tradition are now well recognised by an emergent approach in the field of adaptation that seeks more dynamic explanations of adaptation (Lewin and Volberda, 1999). This emergent approach has encouraged researchers to identify the best ways for firms to adapt rapidly to ever changing realities (Volberda, 1999). Lewin *et al* (1999) applaud research which utilises historical and longitudinal data to reveal the chains of causality that help to make up a more dynamic theory of adaptation and discover the essence of the adaptation process. Our research into determinants of organisational flexibility comes at a time when a more dynamic approach to the study of organisational adaptation under conditions of environmental uncertainty is badly needed.

This study takes up the challenge of exploring the dynamics of organisational adaptation under the conditions of environmental volatility that prevailed in Argentina over the period 1989-1999. In particular, we focus our attention on the determinants of organisational flexibility that made it possible for some firms to adapt rapidly in uncertain contexts. The empirical focus of the thesis is the study of the transformation process in four firms – two of which are considered flexible and two less flexible in two different industries: pharmaceuticals (an industry in the process of deregulation) and edible oils (a deregulated industry). Our analysis draws upon longitudinal data collected from the firms by means of interviews, archive material and statistical data. Using an innovative analysis, we combine coding analysis from interview transcripts, statistical analysis and the use of original display charts, to show the determinants of organisational flexibility as a set of organisational capabilities that enabled some firms to adapt rapidly in the changing and highly competitive business environment that prevailed in Argentina in the 1990s.

Outline of this thesis

Chapter 2 has a double focus. Firstly, we present views on a firm's adaptation. Secondly, we introduce views on inertia in organisations as a force that prevents organisations from adapting. The approaches analysed are: contingency theory and strategic choice theory (to explain a firm's adaptation) and population ecology and elements of strategic management theory (to explain the causes of inertia in organisations). While these theories allow us to understand why and how firms adapt, they do not analyse what factors allow a firm to adapt quickly under conditions of environmental turmoil. We describe how three alternative literatures – flexibility (i.e., Volberda, 1999), innovation (Damanpour, 1991) and institutional embeddedness (Greenwood and Hinings, 1996) – can be used to build a more precise approach towards adaptation under conditions of environmental turmoil. We then use the concept of organisational flexibility to refer to the organisational and managerial capabilities firms need to enable them to

adapt quickly following environmental shifts. This literature review also raised several issues about what determines whether an organisation is flexible, and from this exploration of the determinants of flexibility we state the three main questions of this study:

- Do some firms display more flexibility than others in competitive circumstances?

- Why are some firms able to display more flexibility?

-And how they do it?

Chapter 3 describes the methodology adopted for our empirical research. While our focus is the firm level of analysis, a dual phase research strategy was used: the sectoral level and firm level of analysis. At the sectoral level of analysis, we first of all needed to select which industries were going to be studied and then we needed to operationalise which firms were flexible and less flexible in each industry. Regarding the first issue (i.e., the selection of the industries to be studied), two industries were selected, one which was in the process of deregulation (i.e., pharmaceuticals) and the other which was already deregulated (i.e., edible oils). It was believed that the regulation levels could shed light on the way firms adapted and their ability to be flexible (Volberda, 1999; Grabowsky *et al*, 1978). To identify the different levels of flexibility, a set of operational indicators of organisational flexibility were selected and applied. These were then customised for each industry.

The case study approach used at the firm level of analysis allowed the firms' process of transformation to be investigated and the determinants of organisational flexibility to be identified. Four firms, two from each industry, were selected (i.e., Sidus and Andr omaco in the pharmaceutical industry, and AGD and Vicent n in the edible oil industry). The firms were polar types, one flexible and the other less flexible, and they were analysed over the period 1989-1999. This chapter also provides an account of the epistemological stance of the research.

In chapter 4 we begin our multilevel analysis by analysing the national business environment (NBE) in which firms were embedded over the period of analysis. Three main elements of the NBE were examined in order to understand how the NBE has affected the competitiveness of the industries and companies over time. The three elements considered in our analysis were: the role of the state, the financial institutions and the role of the national culture.

Chapter 5 is an analysis of the macro and competitive environment faced by the pharmaceutical and edible oil industries in the 1980s and 1990s. We describe how this environment changed for both pharmaceuticals and edible oils from one characterised by low levels of competition to one characterised by hypercompetition (D'Aveni, 1994).

The results of our comparative case study are described in chapters 6 to 10. Chapters 6 to 9 outline the significant strategic and organisational transformation within the four case studies. Chapter 10 compares the four firms and describes the factors our analysis identified as determining organisational flexibility – namely the heterogeneity of the dominant coalition, the levels of centralisation and formalisation of the decision-making process, the low level of macroculture embeddedness, environmental scanning, and the strong organisational identity found in the flexible firms. Each determinant was operationalised and analysed according to a series of methods identified in the empirical literature relating to the different fields.

In chapter 11 we conclude this thesis. Having summarised our findings we discuss the contributions made by this research to the study of organisational adaptation and in particular organisational flexibility. We also comment on the study's limitations and suggest areas for future research to address these limitations and to utilise further the methodology developed in this research.

Chapter 2: Adaptation, Innovation and the Flexible Organisation

2.1 Introduction

The business literature on organisational change is replete with prescriptions regarding the management and design organisations require to confront highly competitive and changeable environments. Such characteristics include decentralisation of decision-making, flatter structures, risk-taking attitudes, empowerment and innovations of different sorts (Miles and Snow, 1986; Ezzamel *et al*, 1994; Hedlund, 1994; Pettigrew and Fenton, 2000).

In spite of all the business literature offering these signposts for flexibility, there is little theory on the determinants of organisational flexibility. However, it is necessary to develop such a theory in order to understand how organisations can adapt rapidly to the sudden environmental and market changes that occur in volatile contexts (D'Aveni, 1994).

This chapter seeks to analyse the literature on determinants of organisational flexibility. The literature on determinants of organisational innovativeness and institutional embeddedness are also examined. The latter are highlighted because they relate to organisational flexibility and inform those organisational and contextual factors influencing flexibility. The chapter is therefore divided into six sections. After this brief introduction, the second section sets out to understand how and why firms adapt. In particular we are interested in the environmental pressures exerted on firms, and organisational and managerial processes influencing their adaptation. Inertial approaches are used as an explanation of those factors that may prevent organisations from adapting.

In sections three to five we describe how three alternative literatures can be used to build a more precise understanding of how organisations adapt under conditions of environmental turmoil. This combined approach includes literature on the determinants of organisational flexibility, organisational innovativeness and institutional embeddedness. Sections three and four deal with both determinants of organisational flexibility and determinants of organisational

innovativeness as related and sometimes overlapping concepts. The research on institutional embeddedness in section five sheds light on the strategic and organisational constraints environmental pressures impose and seeks to explain variation in how firms respond to a given set of institutional pressures. Section six states the patterns of adaptiveness from which the determinants of organisational flexibility are derived. Finally, in section seven we underline a set of researchable questions to guide the subsequent methodology and analysis.

2.2 Adaptation and inertia in organisations

Many writers have characterised today's business environment as "*hypercompetitive*" (D'Aveni, 1994, Volberda, 1996, 1999), "*high velocity*" (Brown and Eisenhardt, 1997), or shaped by "*jolts*" (Meyer *et al*, 1990). In emerging economies, such as the Argentinian one, these environmental features have been exacerbated by a sudden opening up of the markets to free competition. In these circumstances, rapid adaptive organisational processes are essential to a firm's survival and success (Volberda, 1999; D'Aveni, 1994).

From a social science point of view, organisational adaptation is "*the ability of an organisation to change itself, or the way in which it behaves, in order to survive in the face of external changes which were not predicted in any precise way when the organisation was designed*" (Tomlinson, 1976:533). This definition confirms March's assertion that adaptation is essential to survival: those companies that do not adapt "*seem destined to expire*" (March, 1995).

However, adaptation views of organisation development have been contested. In an attempt to distinguish between the different debates within organisational theories, Astley and Van de Ven (1983) argue that one of these debates is about the adaptation/selection dichotomy. Even though the adaptation approach is widely accepted in strategy and organisation theory (Lewin and Volberda, 1999), some theories emphasise the idea of selection, retention, or inertia (Hannan and Freeman, 1977 and 1984; DiMaggio and Powell, 1983).

Those favouring the inertia approach – such as the ecological perspective – stress environmental selection rather than “*selection of the environment*” (Child, 1997:45). For them, organisations are swept along by environmental pressures. These approaches highlight tensions between the possibilities an organisation has for adaptation and change, preservation and inertia.

So what makes it possible for organisations to adapt rapidly to environmental changes? How can organisations learn to adapt to volatile conditions? Concepts such as the flexible firm (Volberda, 1999), the innovative firm (Blau and McKinley, 1979; Drucker, 1999; Pettigrew and Fenton, 2000), the adaptive firm (Haeckel, 1999) or the agile firm (Goldman *et al.*, 1995) were coined as a way of explaining the organisational capabilities needed in organisations to allow them to adjust to the ever-changing environment.

This study draws heavily on the concept of organisational flexibility for two reasons: firstly, because of its appropriateness to understanding unpredictable and uncertain contexts such as the Argentinian one (Volberda, 1999, 1997; D’Aveni, 1994); secondly, the concept of organisational flexibility also sheds light on the enhanced capabilities organisations under environmental turmoil develop to enable them to adapt quickly and undertake great transformations (Volberda, 1999; Bahrami, 1992; Evans, 1991).

So, why and how can organisations adapt? In particular, what are the contextual, managerial, and organisational challenges organisations have to meet so that they can adapt? What role do environmental forces play in a firm’s adaptation? And does the organisation and its top management have an active or reactive role in the adaptation process? By asking two final questions we aim to understand those factors preventing firms from adapting: Why are organisations inert? And, do inertial forces stem from environmental forces or from within the organisation? In our analysis of the adaptation and inertia approaches, we focus on three main issues (i.e, role of outer context, organisation and top management team) that will help us to determine why and how adaptation is possible and identify the forces that may prevent organisations from adapting. We leave aside one important question, however: what are the

capabilities needed by organisations to enable them to adapt? This question, however, will be addressed later in the analysis as we discuss the importance of a firm's flexibility in adapting in rapidly changing environments.

We therefore use key organisational frameworks to understand the possibilities organisations have for adaptation and the inertial forces that might prevent them from doing so. Following traditional studies in the field of organisational adaptation and inertia (Lewin *et al*, 1999; Lewin and Volberda, 1999; Lewin and Koza, 2001) we note four organisational perspectives in which the role of the context, organisation and management feature as key elements in understanding a firm's adaptation process. These perspectives are: contingency theory, strategic choice theory, population ecology theory and elements of strategic management theory. Work on organisational renewal and the neo-institutional theory, both of which are clearly relevant to this theme, were deliberately excluded at this stage. These streams of research, however, are picked up later in the thesis. In the following pages we briefly describe key organisational frameworks and the dominant themes of these frameworks as they relate to adaptation or inertia.

Organisational adaptiveness

How can firms adapt? And what is the role of organisational flexibility in a firm's adaptation? The answer is highly dependent on one's conceptions of the environment and perspective on the organisation-environment relationship. In this section, two theories dealing with the organisation-environment relation are considered: contingency theory and strategic choice theory. These theories may clarify the extent to which the environment affects the possibilities a firm has of adapting and being flexible.

The old *contingency approach* was based on the assumption that organisations adjust their aims and shape in order to suit themselves to market and other environmental characteristics (Astley and Van de Ven, 1983; Singh *et al*, 1986). Burns and Stalker (1961:21) pointed out that:

“Very often, the environment of the person or organisation is itself changing, so that even to maintain the same degree of fitness for survival, people and institutions may have to change their ways.” The consequence of the contingency approach for a firm’s adaptation is that the firm should achieve a fit with the changing and competitive environment through *“appropriate organisational form”* (Lewin and Volberda, 1999:522).

On the basis of their qualitative research, Burns and Stalker (1961) identified organisational forms which they characterised as mechanistic and organic. They postulated that the more variable and unpredictable the environment is, the more flexible the organisational structure and process must be to enable the firm to adapt rapidly. According to this perspective, organisational flexibility is considered to be the reactive capacity of organisations to confront turbulent environments (Volberda, 1999).

Burns and Stalker (1961) and Woodward (1965) also emphasise that an organisation’s successful adaptation to the environment depends on the ability of top management to interpret the conditions facing the firm in an appropriate manner and to adopt relevant courses of action. The role of the top team then is to be reactive and their most important task is to be in tune with the environment (Singh *et al*, 1986).

Contingency theory is useful in identifying the importance of environmental pressure in organisational life and in balancing out more subjective approaches towards organisational adaptation. In emerging markets in which environmental turmoil is frequent (Hoskisson *et al*, 2000), it is essential to appreciate the role exerted by the environment in triggering internal changes.

However, the most important shortcoming of contingency theory is that it fails to explain internal organisational factors that may influence adaptive processes (i.e., social and cultural aspects, and leadership factors among others) (Pettigrew *et al*, 1992). It also fails to understand the role of the management in organisations and their ability to influence decision making and exert strategic choice (Child, 1972). It was the combination of external and internal factors (i.e.,

environmental pressures, organisation and top management team roles) that defined the determinants of organisational flexibility we introduce later in chapter 10.

Some organisational scholars have become increasingly disenchanted with the mechanical and deterministic conception of the organisation-environment relationship as described by contingency theory. Its strong deterministic bias largely ignores the important variable of managerial choice. It was Child (1972) who most explicitly argued for a less rigid view of the interaction between organisations and their environment. He called for a more voluntaristic or "*strategic choice*" approach to organisation-environment relations.

The strategic choice perspective suggests that proactive adaptability and loose coupling between organisations and environments allows structural variation and renders organisations less vulnerable to homogenising forces exerted by the environment. Child and several others (Khandwalla, 1977; Hrebiniak and Joyce, 1985) have argued that organisations are not always passive recipients of environmental influence but also have the power to reshape the environment. Organisational flexibility is thus necessary to enable a firm to make rapid and viable choices (Child, 1997) and to enact environments (Weick, 1979). Organisational flexibility will not, however, be a reactive capacity (as it is in contingency theory) but a proactive one (Volberda, 1999).

The strategic choice approach then drew attention to the active role of those who have the power to make decisions. However, new approaches within the theory (Child, 1997; Hrebiniak and Joyce, 1985) argue that organisational adaptation is the result of the interdependence of and interaction between strategic choice and environment. Both agency and environment are necessary for a satisfactory explanation of organisational adaptation.

The previous analysis of contingency and strategic choice perspectives on adaptation opens up a debate between what Astley and Van de Ven (1983) have called deterministic and voluntaristic orientation in the adaptation and change of organisations. In the deterministic orientation (represented in our analysis by contingency theory), change takes the form of

adaptation from the organisation to the environment. The role of the manager is reactive because the manager has to re-arrange the internal organisation to fit the environment. Conversely, the voluntaristic orientation for Astley and Van de Ven (1983) (in our analysis represented by the strategic choice approach) sees the environment as subject to influence by individuals. Managers have freedom to change contextual factors. Organisations are continually constructed, enacted and changed by organisational members. Accordingly, the manager can be said to have a proactive role in guiding the process of adaptation.

In this research we view the adaptation process as a dynamic one in which, for any given organisation, elements or variables related to managerial choice and environmental influence coexist. Thus we avoid the deterministic and voluntaristic extremes provided by some organisational approaches (Hrebiniak and Joyce, 1985; Child, 1972 and 1997). Change, then, is the outcome of environmental context and managerial action (Pettigrew, 1985, 1987). Here, we view organisational flexibility as the interplay between outer and inner organisational contexts, in which managerial and environmental factors are interrelated (Pettigrew, 1985, 1990; Lewin *et al*, 1999; Lewin and Volberda, 1999; Lewin and Koza, 2001). Such a view of organisational flexibility allows us to appreciate more holistically how organisations adapt quickly in conditions of environmental turmoil (D'Aveni, 1994; Volberda, 1999).

So far, we have been analysing how and why firms adapt. We have established the importance of the interrelation between environmental pressures and managerial choice, thereby avoiding extreme and incomplete explanations of adaptation. However, there are many factors that may restrict the ability organisations have to adapt to environmental changes and take advantages of opportunities the environment offers. But what are the factors that may hinder an organisation's ability to adapt? Do those factors stem mainly from the firm's outer context or can inertia be found in the inner context of the organisation? Organisational inertia is offered as an explanation as to how and why firms are prevented from adapting.

Organisational inertia

Many authors have argued that organisations are fundamentally inert and therefore constrained in their ability to respond to environmental change (Hannan and Freeman, 1977; Miller and Friesen, 1980). In other words, organisations may be limited in their ability to recognise and act upon opportunities despite the fact that those opportunities are present in their industry.

Early organisational theory researchers recognised some of the negative consequences of bureaucracy (Blau, 1956; March and Simon, 1958). Stinchcombe (1965) suggested that firms tend to become institutionalised and that the basic structure of organisations remains relatively stable over time. More recently, organisation theorists have argued that major stimuli are required for organisations to undergo periods of revolution, and therefore organisations are, by nature, sluggish in their ability to respond to environmental change (Miller and Friesen, 1980).

However, *population ecology* writers have taken a more extreme stance on the subject of organisational inertia. Organisational ecology has developed in response to the reactive adaptation bias generated by contingency theory. It considers the dynamic processes affecting the development of organisational populations over time and, in contrast to the prevailing adaptive perspective, focuses on selection as the main mechanism of adaptation and change. According to this perspective, adaptation and change is severely constrained and most organisations flounder helplessly in the grip of environmental forces (Carroll, 1988).

Hannan and Freeman's (1984) seminal paper presents a model of structural inertia. They argue that inertial properties in organisations are so strong that timely adaptation to environmental change is impossible. When levels of inertia are high, adaptive behaviour is more difficult and the environment selects out those organisations that do not fit (Hannan and Freeman, 1984; Delacroix and Swaminathan, 1991). For the population ecology approach environmental selection replaces internal adaptation (Astley and Van de Ven, 1983). As the

environment is relentlessly efficient in weeding out any organisation that does not fit, the role of managers is therefore insignificant (Hannan and Freeman, 1977, 1984).

In population ecology theory, there is no place for flexibility; rather, population ecology emphasises the anti-flexibility of organisations and their slowness in responding to changing environmental opportunities and threats. In this view, organisations are rarely able to engage in transformations (Carroll, 1988; Hannan and Freeman, 1984).

Latterly some population ecology theorists, however, have admitted structural change of units. In his study of strategic business exit in Intel Corporation, Burgelman (1994) argued that it was not corporate strategy but the internal selection environment that caused a shift from memory chips to the more profitable microprocessor business. Burgelman found that the context set by top management had strong selective effects on the strategic actions of the firm. Similarly, Noda and Bower (1996) try to explain how selection processes operate within organisations. They reveal how the initial internal constraints in two different companies – BellSouth and US West – shaped the firms' very different strategies in cellular telephony over the period 1984-1990.

While some researchers in the field of population ecology have thus admitted structural change, the general fatalistic tendency of population ecology exposes it to more fundamental criticism. Its underlying theories represent a view of individual-organisation interactions that are grounded in the assumption that the human role in organisations is essentially passive (Hannan and Freeman, 1984).

The early ecologist approach also failed to explain several relations and organisational aspects. This approach could not explain situations in which the environment had been altered (i.e., regulated environments like the pharmaceutical industry in this research). Moreover, while theories of structural inertia can explain variation in change across large populations of organisations, they provide less insight into variation in change within organisations. Their tendency to take inertial forces for granted has led population ecologists to overlook the process

by which individual firms adapt to environmental changes by renewing their organisations to confront different contextual realities in a competitive way. Nor could it explain how radical change and innovation can occur. The transformation stories of Sidus and AGD in chapters 7 and 8 of this thesis are proof of the inability of population ecology theory to understand the way firms can undertake profound changes and avoid inertial forces stemming from the environment.

While the population ecology perspective has emphasised the ruthless role of the environment as a key factor in understanding inertia in organisations, elements of the *strategic management* literature have placed considerable importance on internal sources of inertia.

Miller and Chen (1994) point out that competitive inertia reflects the number of market changes a company makes to attract customers and overcome competitors' practices. Inertia would be high when, compared with competitors, firms make few changes in competitive practices. In their analysis of 32 US domestic airlines, Miller and Chen (1994) found the sources of competitive inertia in the managers' willingness to act.

Like Miller and Chen (1994), Sull (1999 a, b) tries to determine what the internal sources of inertia in organisations are. Studying the process of adaptation in Firestone and Laura Ashley, Sull (1999 a, b) mentions four factors that may cause companies to fail to adapt appropriately in the event of environmental shifts: strategic frames; processes; relationships; and values. Each of these factors can restrict adaptation. Strategic frames or mental models can act as blinkers and make it difficult to assess competitors, customers and business strategies. Processes may become routines, thus impeding effective responses (i.e., as in the case of Firestone and radial technology). Relationships (i.e., with customers and suppliers) may fetter the company, thereby limiting flexibility. Finally, the company's set of beliefs may harden into dogma, thereby precluding other business possibilities. Elements of the strategic management literature thus widens our understanding of the problems the less flexible firms may have when they try to adapt. In chapter 10 we discuss the different managerial and organisational factors that may have caused the sluggish response of the less flexible firms in conditions of environmental pressure.

Concluding remarks

The review of adaptation and inertial theories has stressed different challenges organisations have to meet to be able to adapt and those factors that may deter them from doing so. Some perspectives (population ecology, contingency theory) emphasise the constraining influence of contextual forces; others (strategic choice) recognise the opportunities for human agency. Each of these perspectives helps to understand a particular aspect of how organisations develop ‘fitness’ within a given context, but they do not explain how organisations survive in endogenously dynamic environments and how they cope with unknown future states. In the perspectives analysed, nothing is said about what organisational capabilities are needed to adapt and avoid inertial traps. What are the enhanced capabilities organisations need to cope with higher levels of disorder? Is it possible for some organisations to learn to adapt to more volatile conditions?

By organisational capabilities we mean the *“unique internal management processes and intangible resources, which are less visible and less easily copied [and which] have come to be seen as potential sustainable sources of advantage”* (Galbraith, 1994:2). Capabilities are developed by organisations as they grow in size and scope (Galbraith, 1994).

Firms that are careful about the capabilities they develop relative to the environment in which they operate can transform and adapt quickly to very dynamic markets (Eisenhardt and Martin, 2000; Raff, 2000; Helfat, 1997, 2000; Huygens *et al*, 2001). However, under extreme competitive pressure, very persistent or long-standing core capabilities that do not incorporate new competences and skills may evolve into core rigidities (Rosenbloom, 2000; Leonard-Barton, 1992), thereby impeding organisational adaptation. Organisational flexibility is the concept we use in this research to refer to those capabilities that allow organisations to adapt rapidly under conditions of environmental turmoil.

But what determines whether an organisation is more or less flexible? In the following section we deal in particular with the determinants of organisational flexibility. Innovativeness is

not rejected. On the contrary, as Quinn (1985) and Volberda (1999) suggest, organisational flexibility is an inclusive concept that encompasses the idea of innovation. Thus, organisational flexibility is a necessary condition for innovation. But what makes a firm more innovative or flexible? The lack of precision and blurred boundaries between these two concepts warrants a discussion of the similarities and differences between organisational flexibility and organisational innovativeness.

Institutional theory is introduced as a complementary theory because it emphasises the role of mimetic behaviour in explaining patterns of adaptation, innovation and change among firms in an industry (Dacin *et al*, 2002; Webb and Pettigrew, 1999; DiMaggio and Powell, 1983) thus shedding light on both the capacity for action and inertial forces of companies in an industry (Greenwood and Hinings, 1996). Institutional theory also spells out the capabilities firms need in order to overcome isomorphic pressures arising from the environment (Greenwood *et al*, 2002).

2.3 Research on determinants of organisational flexibility

What is organisational flexibility? What does being a flexible firm imply? How do we know if we are in the presence of a flexible organisation?

Bahrami (1992:34) indicates that organisational flexibility varies according to the situational context. Bahrami (1992) attributes this variation to the polymorphous nature of the concept of flexibility. Thus, the precise meaning of flexibility is dependent on the focus of the research. Thus, it is possible to talk about manufacturing flexibility (Adler, 1988; De Meyer *et al*, 1989; Gerwin, 1993; Upton, 1994; Heijltjes, 2000), numerical flexibility, functional flexibility (Atkinson and Meager, 1986), flexible information systems (Boynton and Victor, 1991; Golden and Powell, 2000), flexible automation (Adler, 1988) and a flexible workforce (Prowse, 1990; Dastmalchian, 2001).

The polymorphous nature of the concept of flexibility indicated by Bahrami (1992) led us to expect difficulties in finding an accurate definition. However, there have been some attempts to bring conceptual clarity into the field of organisational flexibility.

The most relevant work on organisational flexibility has been done by Volberda (1999:100). In his book he defines organisational flexibility as *“the degree to which an organisation has a variety of managerial capabilities and the speed at which they can be activated, to increase the control capacity of management and improve the controllability of the organization.”* Through this definition Volberda articulates one of his core arguments: the flexible organisation needs to balance the conflicting demands of stability (viz. control) and dynamism. While many organisational scholars present flexibility and stability as opposite ends of a continuum (Adler, 1988; Boynton and Victor, 1991), Volberda argues that flexibility and stability are two sides of the same coin, in that flexibility without stability results in organisational chaos.

While Volberda’s definition is revealing in terms of the role of management and the need for rapid reaction to achieve flexibility in organisations, he does not consider organisational capabilities that may boost or hamper the attainment of flexibility. For Volberda, organisational flexibility is comprised of two components: managerial task (i.e., *“the creation or promotion of capabilities for situations that generate unexpected disturbance”*) and organisational design (i.e., structure of the organisation) (see Volberda, 1999:100, 101). However, Volberda’s concept of flexibility does not identify other organisational factors that are not related to the design of the firm such as those we have considered in our research (i.e., organisational identity or the role of organisational embeddedness in the firms’ institutional macroculture).

A more comprehensive definition of organisational flexibility is given by Teece *et al* (1997). American literature has tended to use the concept of dynamic capabilities to refer to flexibility (Teece *et al*, 1997; Rosenbloom, 2000, Tushman and Smith, 2001). In their theoretical framework, which is based on dynamic capabilities as enablers of adaptation and change in a rapidly changing environment, Teece *et al* (1997:516) define dynamic capabilities as *“the firm’s*

ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments.” More concretely, Teece *et al* (1997) indicate that dynamic capabilities should be able to enhance technological, organisational, and managerial processes inside the firm to enable it to organise more effectively. Teece *et al* (1997:521) also state that firms that have honed and perfected these capabilities are referred to as “*high-flex.*”

In this thesis we use the concept of organisational flexibility in a way similar to that proposed by Teece *et al* (1997), considering organisational flexibility as a repertoire of organisational and managerial capabilities that allow organisations to adapt quickly under conditions of environmental change. We must now consider the organisational and managerial capabilities mentioned in the literature that allow organisations to be flexible.

Organisational flexibility as an organisational task

For many authors, the ability of an organisation to achieve organisational flexibility depends on the design adequacy of organisational variables, such as technology, structure and culture (Zammuto and O’Connor, 1992; Volberda, 1999). Organisational structure, however, is the main focus of the organisational flexibility writers (Volberda, 1999). The design of the organisational structure encompasses not only the actual distribution of responsibilities in an organisation, but also the planning and control systems set up in the companies, the process of decision making and coordination (Zammuto and O’Connor, 1992; Volberda, 1999).

The theoretical literature on organisational flexibility stresses the importance of multidimensional design (i.e., units that can be easily added and subtracted) (Ackoff, 1977), lateral organisation (i.e., in terms of coordination across functions and businesses) (Galbraith, 1994), innovative structure (i.e., a structure that allows the rapid shift of product composition and decentralisation of decision making) (Krijen, 1979), and an organisational design aligned with market needs, the nature of competitors, and the industry (Overholt, 1997).

From an empirical point of view, many other writers have suggested networking forms of organising (in Liebeskind *et al*'s (1996) study of two biotechnology firms), flat structures (in Rosenbloom's (2000) analysis of the process of transformation in NCR), and collaboration partnerships (in Bahrami (1992) and Bahrami and Evans' (1995) study of organisational flexibility in the hi-tech sector in the Silicon Valley). These empirical studies provide evidence of how a flexible design allows companies to become front-line organisations that deal with problems rapidly by reducing the lag between strategy and operation.

One of the problems associated with the foregoing research is that it does not examine how the suggested designs can be implemented in organisations. The authors do not attempt to clarify whether 'a flexible design' is suitable for every company or whether it should apply to those organisations competing in industries with fast product cycles (i.e., information technology). This thesis undertakes an examination of the changes in the organisational design of the firms under study from an empirical point of view, and thereby complements the existent theoretical studies.

Besides organisational design, other organisational factors are also mentioned as influencing organisational flexibility. For example, Volberda (1999) considers that culture plays an important role in promoting flexibility. He distinguishes between conservative and innovative culture: an innovative culture (the culture required to encourage flexibility) will be heterogeneous, with a delegative leadership style and managers with an attitude that favours improvisation rather than routine. It will also tolerate ambiguity and autonomy.

Delegation and autonomy are not new ideas in the literature however (Overholt, 1997; Krijnen, 1979). Overholt (1997) examines the organisational archetypes needed under conditions of environmental change and severe competition. He points out that flexibility may be achieved through highly autonomous and decentralised organisations. These firms are process-based with fewer layers and high levels of permeability of boundaries.

In his study of organisational flexibility in companies in the Silicon Valley, Bahrami (1992) provides evidence of how the most flexible firms accommodate opposing tendencies such as centralisation and decentralisation. The companies described as flexible by Bahrami are centralised in terms of their strategic direction with a lot of autonomy for managers to run the business. The case of a telecommunication corporation illustrates these ideas. The corporation has very small and decentralised units with a great deal of autonomy. However, centralisation of strategic decisions was a key element for coordination and cooperation between units.

In flexible organisations not only are levels of centralisation of decision making low, but there is also a low number of formalisation processes (Volberda, 1996). Again Volberda (1996 and 1999) indicates that organisations with the potential to be highly flexible have low levels of standardisation (i.e., specification of the contents and result of the work), and low levels of formalisation (i.e., job descriptions, work instructions and general rules). (See also Ng and Dastmalchian, 2001).

Such flexible organisational factors – decentralisation and formalisation of decision making – will provide great leeway for managers to assume more responsibilities in the firms and to move quickly, thereby achieving fast responsive capacity. The managerial role in achieving organisational flexibility will be the subject of the analysis of the following section.

Organisational flexibility as a managerial task

In this section we concentrate on two main questions: what are the managerial features of flexible firms? And what kind of flexible capabilities are needed to respond and adapt to sudden environmental shifts?

From a manufacturing perspective, Adler (1988) states that technological flexibility requires managerial flexibility. He highlights the new content of these managerial capabilities as attitudinal, that is taking responsibility for the whole process; cognitive, meaning the process of

identifying and solving problems; and, lastly, systemic interdependence, which is reflected in inter-functional cooperation and team-work.

Volberda (1999) asserts the importance of a broad knowledge base and a variety of managerial expertise in devising appropriate responses. The heterogeneity of backgrounds and experiences needed in a flexible firm is related to the need to face competitive environments. Boynton and Victor (1991) show how a company like Corning, which had managers with a broad knowledge base deriving from a variety of expertise, was able to develop capabilities in order to introduce new products and seize market opportunities.

Diverse managerial expertise may encourage the organisation to recognise the need for change (Volberda, 1999; Rosenbloom, 2000). This was studied empirically by Calori *et al* (2000) while analysing the process of change in Novotel. Novotel increased its management team from eight to eighteen employees and in so doing broadened the kinds of experience in the management team. The new management team complemented each other in terms of different cognitive styles, thus bringing new strategic options, innovation and creativity to the company.

Heterogeneity and broad managerial mindsets foster the ability to create and support ideas. Bahrami (1992) points out how the cosmopolitan mindset at Apple Computers has led to different cultural assumptions and premises being incorporated. Volberda (1999) indicates that management must have the ability to identify, experiment and explore new fields and ideas rather than exploiting existing routines. Experimentation, for Volberda, can be achieved by having heterogeneous managers with broad managerial mindsets. Volberda illustrates differences in heterogeneity and managerial mindsets in two electronic firms: Sharp and Texas Instruments (TI). While Sharp was able to develop dynamic capabilities in the electronic calculator industry, TI failed because its limited managerial mindsets caused it to focus exclusively on the semiconductor market.

The literature on organisational flexibility makes a number of predictions about the factors determining the flexibility of an organisation. Each company's flexibility will be determined by a variety of organisational and individual factors. At the organisational level, an adequate 'flexible' organisational design and low levels of centralisation and formalisation of decision making were mentioned. In addition, the literature has suggested that at the top management level, heterogeneity of the managerial team and a broad knowledge base are required to build a flexible organisation.

The perspectives analysed so far have limitations. Most of the literature reviewed in this section is theoretical and little empirical research has been done in organisational settings. Take, for example, the most comprehensive research in the field by Volberda (1999). As Volberda (1999:264) admits, his analysis of the flexible firm "*is to some extent speculative, based on a limited number of observations.*" There has been little empirical verification of the concepts Volberda presents. Our analysis of the determinants of organisational flexibility is thus an attempt to link both theory and practice in a field in which empirical analysis is scarce.

Many questions regarding the content and process of being flexible remain unanswered. Volberda, for example, suggests that organisational flexibility is an emergent process triggered by highly competitive environments. As such, he focuses on describing the way firms react using some 'flexible capabilities' rather than trying to understand what causes them to be flexible and the way those determinants have been built up over time. Furthermore, can organisational flexibility be built as an intended process instead of just an emergent one? The intentionality of the process of being flexible opens up a series of questions that Volberda does not tackle directly: is the building of organisational flexibility a long-term process? What are its antecedents and origins? What antecedents are necessary or sufficient? We have filled this void in the literature by analysing the determinants of a firm's flexibility and have empirically demonstrated the importance of flexibility as an intended process in the firms.

2.4 Research on determinants of organisational innovativeness

“A variety of innovations are essential for our economic health. In the corporate environment that has been emerging since the 1960s, business must be innovative, learning to operate in an unfamiliar context and within new constraints stemming from worldwide trends, changes in the labor force, the ups and downs of government regulations, and technological development” (Kanter, 1983:22).

Kanter’s statement shows an awareness of the importance of the study of the determinants of innovativeness as another means of understanding how organisations adapt to their ever-changing context.

However, before examining the determinants of a firm’s innovativeness, it is important to achieve clarity regarding the conceptual basis of innovation. In the literature there are multiple definitions of the content and scope of innovation. Some writers focus on the element of product innovation, suggesting that innovative firms are those that bring new products onto the market (Kessler and Chakrabarti, 1996; Whipp and Clark, 1986; Normann, 1971). Eisenhardt and Tabrizi (1995:84) also emphasise the idea of product innovation as *“the central path by which they [organisations] adapt and sometimes even transform themselves in changing environments.”* Brown and Eisenhardt (1997), studying high-velocity industries, go further by saying that rapid and relentless change can occur through product innovation.

The perception of newness, that is *“any idea, practice, or material artifact perceived to be new by the relevant unit of adoption”* (Zaltman *et al*, 1973) has also been considered a factor that characterises and represents innovation (Thompson, 1965; Knight, 1967; Damanpour and Evan, 1984; Van de Ven, 1986).

Another school of writers prefers an even broader perspective when it comes to understanding innovation. In this approach, product, process and service are seen as elements involved in the process of innovation (Van de Ven, 1986; Kanter, 1983; Van de Ven and Poole, 1995; Tidd *et al*, 1997; Pettigrew and Fenton, 2000).

This thesis adopts a broad approach to understanding innovation, considering product, processes and services among all the innovative activities companies can engage in (Van de Ven, 1986; Walton 1987; Van de Ven and Poole, 1995; Pettigrew and Fenton, 2000).

But what determines whether a firm is innovative? The determinants most frequently researched in the literature on organisational innovativeness can be divided into two different levels: the organisational level and the top management team level (Wolfe, 1994; Slappender, 1996).

The influence of the characteristics of the top management team

Much of the literature on innovation stresses the impact of characteristics of the top management team on an organisation's innovativeness. This view of innovation assumes that certain individuals have personal qualities that predispose them to innovative behaviour (Slappender, 1996).

Hage and Dewar (1973) empirically compared the concept of elite values and structural factors in sixteen health and welfare organisations. They argued that the diversity of occupations in an organisation led to more ideas about what needed to be done in the organisation and also facilitated adoption of innovations. This variety also implied a variety of contacts outside the organisation in which the professionals were working.

Robertson and Wind (1983) gathered together both the diversity of managerial experience and the contacts managers have with people outside the firm or industry under the name of "*cosmopolitanism*", or the "*cosmopolitan mindset*". Their empirical analysis of more than a hundred hospitals reveal that innovativeness is higher in those hospitals in which professionals (i.e., the physicians) have a cosmopolitan orientation. Diversity among top managers may provide the external linkage needed to bring new ideas into the organisation.

Diversity in the top team can also bring administrative innovations into the organisation (pertaining to organisational structure, administrative processes, and human resources) rather than only technical innovations (referring to products, services and technology used in the company) (Evan and Black, 1967; Moch and Morse, 1977; Daft, 1978; Damanpour, 1996).

Finally, some writers assert that the diversity of experience and mental models that will foster innovativeness in an organisation will be supported by the managers' tenure in the job or company and their educational background. In that respect, some have argued that new managers with different perspectives, new ideas and less commitment to the organisation are thus more receptive to innovation and change than those with longer tenure in the companies (Kimberly and Evanisko, 1981; Rogers, 1983; Damanpour, 1991; Pettigrew *et al*, 1992). Kimberly and Evanisko (1981), in their study of innovation in hospitals, show evidence of how the personal traits of managers (i.e., tenure, cosmopolitanism, educational level) are significant predictors of both technological and administrative innovation.

The concepts of diversity of backgrounds and cosmopolitanism highlight the importance of the internal heterogeneity of the management team. This heterogeneity might boost the setting up of networks outside the organisation (Hage and Dewar, 1973; Robertson and Wind, 1983), the possibility of introducing new ideas into the organisation (Pettigrew, 1972), and the creation or diffusion of both technical and/or administrative innovations (Evan and Black, 1967; Daft, 1978).

Criticism of the perspective focusing on the traits of the top team and their influence on a firm's innovativeness stems from the fact that it tends to focus its analysis on the innovative actions of the organisational participants, thus leaving aside important organisational and contextual characteristics (Slappender, 1996). In our research we need to look at the way these concepts are operationalised in family firms: do the firms analysed in this study have a degree of diversity that grants them internal heterogeneity? How did the family firms in our research balance out the need for diversity among the top team and the critical role played by family members in the direction of the companies? The literature has not yet addressed these questions.

The influence of organisational characteristics on innovativeness

The most frequently investigated organisational determinants of innovativeness include the degrees of centralisation and formalisation of the decision-making process. There is a general consensus among theorists in the field of organisational innovativeness that higher degrees of centralisation and formalisation influence innovation in a negative way because together they concentrate decision making, hindering the ability of members of the organisation to participate in and be committed to organisational aims (Normann, 1971; Kanter, 1983; Nicholson *et al*, 1990; Damanpour, 1991; Webb and Pettigrew, 1999; Chandler *et al*, 2000).

Thompson (1965) tries to explain the rigidity of the centralised organisation by using the Weberian concept of the “*bureaucratic*” organisation. In this kind of organisation, each member receives orders from a superior. Internal distribution of power and status are relevant goals. The bureaucratic organisation is characterised by efficiency but low innovative capacity.

Hage and Dewar (1973) and Hage (1999) justify the idea of the negative relation between innovation and centralisation by arguing that when power is concentrated in only a few people, there are fewer opportunities for creation and innovation since those who have power prefer to maintain the status quo.

Bringing together earlier empirical work that takes an organisational level view, Damanpour (1991) indicates a negative relationship between innovativeness and the degrees of formalisation and centralisation. However, Damanpour also argues that the implementation stage of the innovation process requires a higher degree of formalisation and centralisation than the initiation phase.

The process view of innovativeness (Van de Ven *et al*, 1999) stresses that at any time an organisation is likely to be in the process of adopting several innovations, each at a different stage of generation and implementation. The innovativeness of an organisation, therefore, will depend on its ability to address the different requirements of each phase of adoption simultaneously. Hence, while low levels of formalisation and centralisation of decision making

may increase innovativeness in the creation phase, there will be a point at which the relaxation of control will disrupt implementation (Zaltman *et al*, 1973; Zmud, 1982; Kanter, 1983; Nicholson *et al*, 1990; Damanpour, 1992).

The literature on organisational innovativeness thus identifies a number of patterns of adaptiveness. Innovativeness in a firm will be determined by a variety of organisational and individual factors, which include the characteristics and diversity of the firm's top management team and the degree of centralisation and formalisation of decision making.

Context is central to our understanding of organisational innovativeness (Van de Ven, 1986). With the exception of some processual writers (Whipp and Clark, 1986; Clark, 1995; Van de Ven *et al*, 1999) the research examined so far tends to look into organisational and managerial features without taking into consideration the importance of a firm's embeddedness in the sector and national business environment. The sector, industry and national systems of innovation do, however, influence the process of innovation in an organisation (Walton, 1987; Tidd *et al*, 1997).

Institutional influence comes into play when levels of uncertainty and unpredictability increase (DiMaggio and Powell, 1983; Webb and Pettigrew, 1999). In the face of uncertainty, mimetic behaviour and institutional embeddedness would protect companies from turmoil (DiMaggio and Powell, 1983; Abrahamson and Formbrun, 1994). Questions arise as to how companies in volatile contexts – as in the Argentinian case – can adapt rapidly without being caught by inertial forces. A consideration of the so-called neo-institutional theory and, in particular, the degree of embeddedness in the macroculture domain will lead to an appreciation of the influence of institutional pressures on the process of adaptation.

2.5 Institutional embeddedness

In the literature on organisational innovativeness and flexibility, the debate concentrates on the ways organisations adapt and what determines organisational adaptability (Volberda, 1999; Kessler and Chakrabarti, 1996). In institutional theory, however, the debate is split between those writers that stress the explanation of similarities (i.e., isomorphism and stability in a population of organisations), and those that consider the institutional approach as the basis for a theory of continuity and change (Greenwood and Hinings, 1996). In this section we shall concentrate on the latter. We also explore the mechanisms needed by companies to overcome environmental pressure and how this affects new business initiatives and strategic decisions taken by firms.

Institutional theory explains adaptation as a homogenisation process by which firms within a sector will become increasingly alike overtime. The process of homogenisation in a sector is called isomorphism by DiMaggio and Powell (1983:149): *“Isomorphism is a constraining process that forces one unit in a population to resemble other units that face the same set of environmental conditions.”*

One of the consequences of the process of homogenisation is that it tends to increase the organisation’s levels of inertia and also increases the similarity of member organisations’ strategic profiles (Abrahamson and Fombrun, 1994; DiMaggio and Powell, 1983). Hence this line of institutional argument suggests that it is very difficult to find firms that are applying a different strategic pattern or doing things in a very different way from other businesses in the same sector.

Abrahamson and Fombrun (1994:729) go further by stating that *“insularity and sluggishness result because homogeneity of beliefs within an interorganizational macroculture encourages member firms’ managers to interpret environment in similar ways, to identify similar issues as strategic, and so to adopt similar competitive positions.”*

Therefore, in assessing the adaptation process of an organisation in an industry it is important to address the issue of what determines the threshold level at which institutional pressures are overcome and the company can adopt new initiatives or strategies that differ from the rest of the actors in the industry. The threshold level will be determined then by the degree of embeddedness in the dominant macroculture or institutional field (Webb and Pettigrew, 1999; Abrahamson and Fombrun, 1994). Institutional embeddedness (Greenwood and Hinings, 1996; Greenwood *et al*, 2002) may encourage companies to copy other successful organisations within the same institutional settings (Haveman, 1993). The zones of manoeuvre available for firms are severely constrained by institutions (Scott, 1987).

DiMaggio and Powell (1983) and Abrahamson and Fombrun (1994) suggest that embeddedness is determined by a range of factors which include the degree of connectedness of an organisation to its institutional field (e.g. participating in trade or professional associations, facilitating and sharing information) and the perceived similarities to other members of the sector (e.g. similarity of education and career background of key decision makers).

Cognitive mechanisms are also said to influence embeddedness. The concern in this literature is how frameworks of meaning affect individual and corporate actors as they interpret and make sense of their worlds (Dacin *et al*, 1999, 2002; Zilber, 2002). Dutton and Dukerich's (1991) work on the Port Authority of New York sheds light on the embeddedness of that organisation in terms of cognitive mechanisms. They found that the attitudes and actions of both administrators and employees of the Authority were the outcome of moral and emotional concerns. The study represents an important contribution to our understanding of how normative and affective factors can shape organisational strategy.

Thus far, our discussion has highlighted the importance of embeddedness and the inertial forces that embeddedness brings to the organisation. But firms may simply not conform to institutional pressures (Ang and Cummings, 1997; Westphal and Zajac, 2001). So, how can they avoid becoming deeply embedded in their industry macroculture? Do organisations exhibit

different processes of change in response to a pressing institutional context? What are the mechanisms of disembeddedness, or de-institutionalisation? More recent literature in this area has tried to answer these questions by taking a different approach towards embeddedness and the organisation's ability to overcome institutional pressures. Oliver (1991 and 1992) and Greenwood and Hinings (1996) introduce a less deterministic perspective to the institutional literature by recognising the critical role of managerial action.

Oliver (1991 and 1992) introduces the notion of dissipation and de-institutionalisation as a way of explaining the gradual deterioration in the acceptance and use of a particular institutionalised practice. For Oliver, characteristics of the institutional field interact with the internal features of an organisation. The outcome of this interaction is the possibility of breaking down institutionalised practices and replacing them with new ones.

Greenwood and Hinings (1996), on the other hand, introduce a framework for understanding adaptation and change in which exogenous factors (such as market context and institutional context) are tied up with endogenous dynamics (e.g. interest, values, power dependencies and capacity for action). If there are competing mindsets or values and a fluctuating balance of power among the dominant coalition, the endogenous dynamics are enablers of change. Diversity among the top team – deriving from different professional experience and backgrounds, and even the appointment of a new CEO stimulates the flow of new ideas in the organisation. These mechanisms mean that an organisation is less tied down by prevailing archetypes (Greenwood and Hinings, 1988), less likely to accept environmental pressure and more likely to challenge the outer context (Westphal and Zajac, 2001).

Analysing the change process at the institutional, organisational and strategic issue levels in two banks, Fox-Wolfgramm *et al* (1998) conclude that the “*prospector*” bank (i.e., a dynamic and organic organisation) had a low level of embeddedness because of its “*virtuous resistance*” to institutional coercive and mimetic forces. This resistance helped the bank to achieve strategic reorientation. The “*defender*” bank (i.e., a less dynamic bank, focused on efficiency and

mechanic organisation), however, it was deeply rooted in the institutional context and this led the bank to an “*aborted adaptation*”. Fox-Wolfgramm *et al* (1998) emphasise the mechanisms that prospector organisations need so as to avoid institutional pressures. Prospector organisations have low levels of formalisation and specialisation, with higher levels of decentralisation of decision making than their defender counterparts.

Similarly, Zondra and Hinings (1998) develop a taxonomy of organisations in order to understand how they respond to violations of institutional norms. In that taxonomy, they argue that “*renegade*” organisations are those organisations operating outside institutional norms. Renegades have organisational diversity, are willing to take risks and respond to exogenous change with – if necessary – fundamental reorientations. Renegades avoid complying with institutional pressures.

The neo-institutional perspective adopted by Oliver (1991 and 1992) and Greenwood and Hinings (1996) provides some insight into adaptation processes. This newer approach in institutional theory opens up the discussion of a firm’s capacity for action, that is “*the ability to manage the transition process from one template to another*” (Greenwood and Hinings, 1996: 1039). This capacity for action means that change, adaptation and innovative behaviour are possible, and avoids the rather deterministic perspective of earlier approaches in institutional theory in which organisations were passive recipients of environmental pressure (DiMaggio and Powell, 1983). Thus, organisations can challenge the environment in which they are embedded by introducing new practices and strategies.

2.6 Patterns of adaptiveness derived from the literature review

Our review of the literatures on organisational flexibility, organisational innovativeness and institutional embeddedness offers insight into the determinants of organisational flexibility. This combined approach was needed to provide depth and scope in the study of adaptation under

conditions of environmental turmoil. Table 2.1 is a composite table that shows patterns of adaptiveness derived from the literature review.

TABLE 2.1: PATTERNS OF ADAPTIVENESS IN THE LITERATURE REVIEW ON ORGANISATIONAL FLEXIBILITY, INNOVATIVENESS AND INSTITUTIONAL THEORY

Patterns of Adaptiveness	Sources in the literature
<p><i>At the Sector/Industry Level</i></p> <p>#Low level of embeddedness in the dominant macroculture</p>	<p><i>Institutional Theory Literature:</i> DiMaggio and Powell, 1983; Oliver 1991 and 1992; Abrahamson and Fombrun, 1994; Greenwood and Hinings, 1996; Ang and Cummings, 1997; Fox-Wolfgramm <i>et al</i>, 1998; Zondra and Hinings, 1998; Webb and Pettigrew, 1999</p>
<p><i>At the Organisational Level</i></p> <p>#Decentralisation of decision making (through autonomy of decision making and a flexible organisational design)</p> <p>#Low level of formalisation of decision making</p>	<p><i>Literature on Organisational Flexibility:</i> Krijnen, 1979; Overholt, 1997; Bahrami, 1992; Galbraith, 1994; Bahrami and Evans, 1995; Volberda, 1996, 1997 and 1999</p> <p><i>Literature on Organisational Innovativeness:</i> Normann, 1971; Zaltman <i>et al</i>, 1973; Kanter, 1983; Nicholson <i>et al</i>, 1990; Damanpour 1991 and 1992</p>
<p><i>At the Top Managerial Level of the Firm</i></p> <p>#Heterogeneity of the dominant coalition (e.g. diversity of backgrounds and experience and cosmopolitan mindset)</p>	<p><i>Literature on Organisational Flexibility:</i> Adler, 1988; Bahrami, 1992; Volberda, 1996, 1997 and 1999; Heijltjes, 2000; Calori <i>et al</i>, 2000</p> <p><i>Literature on Organisational Innovativeness:</i> Moch and Morse, 1977; Hage and Dewar, 1973; Daft, 1978; Kimberly and Evanisko, 1981; Rogers, 1983; Damanpour, 1991 and 1996</p> <p><i>Institutional Theory Literature:</i> Oliver, 1991 and 1992; Greenwood and Hinings, 1996; Zondra and Hinings, 1998; Fox-Wolfgramm <i>et al</i>, 1998</p>

The common patterns identified in table 2.1 inform the choice of determinants of organisational flexibility in this study. Our literature review and empirical evidence have identified five determinants of organisational flexibility. Three of them are drawn deductively from the literatures on organisational flexibility, innovativeness and institutional theory (see table 2.1). These determinants are: low macroculture embeddedness; heterogeneity of the dominant coalition; and low degree of centralisation and formalisation of decision making. In addition, we are going to explore two further determinants that have emerged inductively from our empirical findings. These are environmental scanning and a strong organisational identity.

The neo-institutional approach developed by Greenwood and Hinings (1996) and Oliver (1991 and 1992) allows us to see how low macroculture embeddedness is needed to avoid

mimetic and inertial forces exerted by the institutional domain. Organisations that are more peripheral and thus less embedded in an institutional context are less committed to prevailing practices and more ready to develop new ones (Greenwood and Hinings, 1996).

The literature on organisational flexibility and innovation, on the other hand, makes two predictions: firstly, that heterogeneity in the dominant coalition (e.g. through diverse backgrounds and experience) will enable different cognitive frameworks to emerge, helping companies navigate turbulent times and cope with change and uncertainty; and secondly, the low degree of centralisation and formalisation of decision making (e.g. through more autonomy and flat structures) are needed to adapt quickly to environmental changes (Hage and Dewar, 1973; Nicholson *et al*, 1990; Volberda, 1999).

Finally, environmental scanning and a strong organisational identity emerged inductively and are elaborated in two different bodies of literature that will be analysed in chapter 10. It will be necessary to examine the empirical results of this research, however, in order to understand the extent to which the latter two determinants are significant in explaining organisational flexibility.

2.7 Themes and questions for empirical research

The competitive landscape faced by firms throughout the 1990s has become more uncertain (D'Aveni, 1994). In such a hyperturbulent or hypercompetitive environment, traditional approaches to adaptation have failed because of their assumptions of stability (Brown and Eisenhardt, 1997; Lewin *et al*, 1999). In our literature review we have seen how new concepts have emerged that reflect this highly dynamic situation (i.e., our combined approach to determinants of organisational flexibility, innovativeness and institutional embeddedness).

As we have seen in this chapter, research on adaptation has been dichotomised by polar positions postulating either environmental determinism or managerial choice. Neither position is realistic and therefore cannot help to understand adaptation in a dynamic reality. We have,

therefore, stated how organisational flexibility is needed to adapt to rapidly changing environments. In particular, we have identified a possible set of determinants of organisational flexibility as the capabilities firms need to adapt under conditions of uncertainty. It is this theme that will form the basis of our empirical research. This leads to the first research question:

-Do some firms display more flexibility than others in similar competitive circumstances?

By asking this question we aim to understand the adaptive capability of organisations in a rapidly changing environment. Flexible firms will be those that cope with acceleration of change in the business environment. Competitive changes force firms to move more quickly and boldly and to experiment with new strategies and new ways of organising. There is a sense in the management literature that these experiments characterise the rise of a flexible firm (Volberda, 1999), which leads to our second and third questions:

-Why are some firms able to display more flexibility?

-And how they do it?

If firms are consistently adapting to environmental pressures and leapfrogging industry boundaries, this would suggest that a set of determinants of organisational flexibility is influencing their behaviour. Throughout the literature review we have mentioned the importance of three elements as factors affecting how and why firms adapt. These elements are: the institutional pressures firms have to bear, and the managerial capabilities and organisational arrangements needed to confront quickly changing environments and achieve flexibility. These three elements trigger a set of sub-questions relating the how and why firms display flexibility, hence:

How do firms cope with institutional pressure? The way institutional pressure is handled by firms may provide insight into why some firms comply with environmental forces while

others prefer to reject those forces. Particular questions concerning the link between the firms and their environment are: how were flexible firms able to anticipate changes in their environments? And did firms' macroculture embeddedness affect their response capacity, and if so, why?

What are the new managerial capabilities needed in order to adapt in conditions of environmental turmoil? We have already mentioned the challenges companies face under these circumstances. In such an environment of uncertainty, if firms do not incorporate new managerial capabilities, it will be difficult for them to respond quickly to market changes. Moreover, their capacity for action will be reduced. Understanding which are the intangible resources (capabilities) that allow firms to cope with environmental turmoil and how these new capabilities influence the sensemaking of organisational issues is one of the aims of this research. More specific questions concerning the managerial capabilities of the companies in this research are: what are the demographic characteristics of the managerial team in flexible and less flexible companies? To what extent does the diversity of mental models enhance flexibility and why?

What organisational arrangements enabled fast adaptive response behaviour by firms? Adapting the organisation to compete in hypercompetitive environments may imply that companies have developed new structures and organisational arrangements to bring about the flexibility needed to move fast. Here we are interested in analysing what the new organisational arrangements were and how the new arrangements have positively or negatively influenced the decision-making process. In particular we want to know how flexible and less flexible firms balanced autonomy, control and delegation. What were the main obstacles in the way of achieving higher degrees of decentralisation without risking loss of organisational control?

As we have seen, there are still significant failings in the way organisational flexibility is investigated and operationalised. The focus of research on organisational flexibility has been theoretical rather than empirical. We have previously stressed the lack of empirical verification of the theoretical concepts presented in the literature. These shortcomings must be addressed in

order to pursue our research questions. These issues will be taken up in the next chapter where we discuss the methodology used for this research.

Chapter 3: Methodology

3.1 Introduction

Three philosophical and methodological issues are central to any research study –why to research? what to research? and how to research? (Guba and Lincoln, 1994). The first two of these questions were addressed in chapter 2, which culminated in the statement of our research questions. A further issue is analysed in this chapter: how should the research be carried out? The questions that we raised at the end of chapter 2 aim to guide and support the empirical analysis of determinants of organisational flexibility. In stating the questions we also underline the research strategy and design adopted in this research. We conducted the study in two main stages. The first one was the sectoral level of analysis and the second one – the focus of our analysis – the firm level.

The first research question – do some firms display more flexibility than others in competitive circumstances? – involved both selecting the most appropriate industries to be analysed and discovering the most suitable firms for the analysis. Regarding the selection of the industries, a common denominator throughout the 1990s was the competitive pressure that affected different industries across different sectors after the opening up of the economy to foreign competition. The general level of foreign direct investment was therefore the main factor in the selection of the industries in this study. However, different industries may differ in terms of their degree of regulation which may considerably moderate competitive pressure in a sector (Smith *et al*, 1991). Exploring the differences between firms in extreme sectoral situations (i.e., regulated sectors and sectors in transition to deregulation) can shed light on different ways of handling institutional pressure. We therefore selected the pharmaceutical industry (i.e., in process of deregulation) and the edible oil industry (i.e., a deregulated industry).

Moreover, a series of indicators was created to rank the different companies in the two industries according to their organisational flexibility. The indicators highlighted a group of

flexible and less flexible companies from which the firms studied in this research were chosen: two flexible and two less flexible firms from both industries.

The second stage of our research – the firm level of analysis – aimed to answer the other two broad research questions we have: why are some firms able to display more flexibility? And how they do it? This stage implied a deeper level of analysis using comparative case studies to explore the content, context and process of transformational change in the firms identified at the first stage (Pettigrew, 1990; Eisenhardt, 1989a; Pettigrew *et al*, 1992). In so doing, we started to give shape and scope to the determinants of organisational flexibility.

The depth of the analysis needed to understand the different determinants of organisational flexibility, on the other hand, also necessitated a different approach in which multiple methods – both qualitative and quantitative – were applied. These methods were backed up by the specific literatures supporting each determinant. These methods are indicated later in this chapter and their operationalisation explained in chapter 10.

After this introduction, in section two the epistemological underpinning of the research is explained. The sections which follow focus more concretely on the research strategy and design. In section three the sectoral level of analysis is elaborated. Here we discuss how the industries in this research – pharmaceuticals and edible oils – were selected. In section three we also give details of the indicators used to identify firms according to their organisational flexibility in the industries under analysis. These indicators highlighted firms that were consistently flexible and less flexible over the period analysed (1989-1999).

Section four provides an account of the firm level of analysis. We discuss the use of comparative case studies to understand the process of transformation of the firms. We also explain the process of data collection and data analysis. We briefly describe the methods used to analyse the determinants of organisational flexibility. Finally, section five and six state the limitations of the research and the conclusions respectively.

3.2 Epistemological underpinnings

Traditional approaches to theory building in organisational study have tended to produce valuable, but nonetheless incomplete, views of organisational knowledge, mainly because they have been predicated predominantly on the tenets of one major paradigm (Kuhn, 1970). While many scholars have argued that there are all sorts of difficulties with paradigm aggrandisement (see Burrell and Morgan, 1979, Gioia and Pitre, 1990) by now the field recognises that the use of any single research paradigm produces too narrow a view to reflect the multifaceted nature of organisational reality.

In this research a multiparadigm perspective is adopted as multiparadigms allow a more comprehensive consideration of organisational phenomena and generate more complete knowledge (Burrell and Morgan, 1979; Gioia and Pitre, 1990).

The epistemological assumptions of this research seek to straddle both functionalist and interpretive paradigms. If one concedes that the boundaries between paradigms are blurred then their conception as transition zones to be bridged is facilitated by the use of second-order concepts (Guba and Lincoln, 1994). The most useful bridge between the interpretive and positivist paradigms falls under the rubric of structurationism (Gioia and Pitre, 1990; Giddens, 1979, 1984).

Giddens's structuration theory reconciles human action (in the form of structuring activities) and established organisational structures, suggesting that agents pursue their own ends, even though their activities or inactivities might be influenced by structural precondition. Proponents of this theory do not treat structuring as separate from structure: they consider social construction together with the objective characteristics of the social world. While an account of the agent's activities can be built up from an interpretive analysis of the actions, such an account would be inadequate unless it included the factors guiding these actions and their results. Structuring and structure are placed on an equal footing by showing how social structures emerge

from structuring activities and become external and influential on subsequent structuring processes. Structure is both the medium and the outcome of the interaction (Giddens, 1979).

Giddens (1979) also argues for 'knowledgeability' of actors and for their postulated capacities to interpret and undertake actions. However, the possibility of accessing knowledge is restricted by the flaws of the same human intellectual mechanism and the intricate nature of phenomena (Guba and Lincoln, 1994)

As such, the structuration theory serves as a means of bridging the gap between subjectivist and objectivist views by proposing a revision of the dichotomous relationship between the two analytic units favoured by positivist approaches: the voluntarism of individuals (agency) and determinism (constraining structures and systems) (Clark, 2000; Fenton, 1996). The net effect of this view is that structuring and structure are not seen as exclusive concepts simply because they reside in a different paradigm. As Gioia and Pitre (1990) phrased it, structuration resolves an apparent paradox between action and structure. However, critical assessment of the theory reveals that structuration theory seems preoccupied with social interaction emphasising "*temporal conflation*" (Clark, 2000:69). Giddens own recommendations were few, beyond an artificial separation of analysis of strategic action from the analysis of social structure (Clark, 2000; Archer, 1988).

Whether social reality is a steady state or rather a process of becoming (Sztompka, 1993) is not clarified by the structuration theory. Burrell and Morgan (1979) argue that organisational theories have largely adopted views of reality based on assumptions of order and equilibrium rather than change. As we showed in Chapter 2, this is very much the case in the literature on inertia. However, some adaptation theories, such as the contingency theory, impose order and stability (Hannan, 1998; Carroll and Hannan, 2000). In this research we follow Sztompka's (1993) dynamic concept of the social reality.

Sztompka (1993) develops a dynamic view of reality he calls 'social becoming'. At the core of the concept of social becoming lies the idea that reality is not in a steady state but in the

process of becoming. The notion of determinism is rejected in favour of the notion that an individual can initiate changes in the environment – however, the environment in turn influences or constrains these actions (Sztompka, 1993).

Aligning with a mixed epistemological stance (i.e., structurationism) raises important issues regarding suitable methodology and consequently research design choice. In this thesis, we give greater prominence to the strengths of the data-collection and data-analysis techniques with which quantitative and qualitative research are each associated and see this as capable of being fused. We recognise that quantitative and qualitative research may often be connected with distinctive epistemological and ontological assumptions but these connections are not viewed as fixed and ineluctable. The experience of this thesis made us view research methods as somewhat autonomous.

The approach of this research means that elements of positivism and interpretivism can be used together. Examples of this combined approach in our research can be found in the way we analyse the determinants of organisational flexibility. The case of the heterogeneity of the dominant coalition is revealing in that it illustrates how we applied elements of the positivist and interpretivist approach. To understand the heterogeneity of the dominant coalition we used objective data stemming from our demographic analysis. However, we enhanced our demographic analysis with interpretive data from the interviews. In so doing, we were able to combine the static picture given by the quantitative data with the more processual data provided by qualitative data.

The need for a multi-method research technique makes us reject epistemological polarities (i.e., functionalist and interpretive). The combination of qualitative and quantitative research also helped us to understand macro and micro levels of the phenomena. Quantitative analysis was more suitable for the investigation of macro phenomena in our research (i.e., such as the use of indicators at the sectoral level of analysis to discover flexible firms) as well as micro level ones (such as the analysis of some of the determinants of organisational flexibility).

Qualitative analysis was better suited to penetrating the meaning of micro phenomena (such as the stories presented in our case studies that illustrate the meaning actors attribute to the structural environment).

Given the broad questions with which we started, it would have been unrealistic to expect one method to satisfy all the requirements. Not only was the explanation of the firm level features that cause the phenomena deemed important in the research, but so was the identification of the phenomena at the sectoral level. We have therefore tried to find flexible and less flexible firms. Moreover, we have also tried to reveal what determines whether a firm is flexible.

Our epistemological stance implies a method of inquiry that is concerned with action and movement in the analysis of the firm (i.e., through Sztompka's, "social becoming", 1993). A holistic approach is also necessary to show the interaction of social actors in their context as another element derived from our epistemological stance (i.e., through Giddens's structuration theory, 1979 and 1984). The method of inquiry implied by our epistemological assumptions is that of contextualism derived philosophically from Pepper (1942) and theoretically and empirically from Pettigrew (1985, 1987, 1990; and 2001).

Contextualism

Pepper (1942) describes four "*world hypotheses*" or approaches to obtaining formal knowledge – formism, mechanism, contextualism and organicism. Central to these hypotheses is the notion that knowledge is acquired through the constant refinement of common sense and claims by criticism and improvement (Tsoukas, 1994). Pepper describes contextualism as a theory that is synthetic and dispersive. The theory is synthetic in that it takes as its object of study patterns of historical events rather than discrete facts. It is also dispersive in that it considers the historical events as loosely structured rather than connected by 'lawful relationships' (Tsoukas, 1994).

The strength of contextualism is that the focus on the historical event can help the researcher to understand the regularities and deep structures in the events analysed. This theory of method conceives of the understanding of phenomena as holistic in nature. Contextualism not only attempts to identify the influence of the environment but also tries to understand the intra-organisational features. By realising the complexity of reality, it gives a role to both points of view. Organisations are embedded in an environment that conditions their actions and performance but, at the same time, gives managers the possibility of acting and reacting under environmental pressure. In other words, there is room for managerial or strategic choice (Child, 1972), for action and context (Pettigrew *et al*, 2001). Contextualism is a bridge between those theories emphasising environmental determinism and managerial choice.

One of the first and most thoughtful attempts to understand organisational change according to the contextualist framework was the work done by Pettigrew (1985) in ICI. Pettigrew proposes a holistic and contextualist analysis of organisational phenomena. This implied two different analyses: a vertical (or multilevel) analysis and a horizontal (or longitudinal) analysis. The multilevel perspective tries to grasp the intertwined existence of different levels of analysis: the impact of the economy, the sectoral perspective, and features of individual firms. Longitudinal analysis, on the other hand, aims to analyse the past, present and future of the phenomena. It is concerned with both the content and action. Holism is achieved by overlaying horizontal and vertical levels of analysis, the two being interconnected through time.

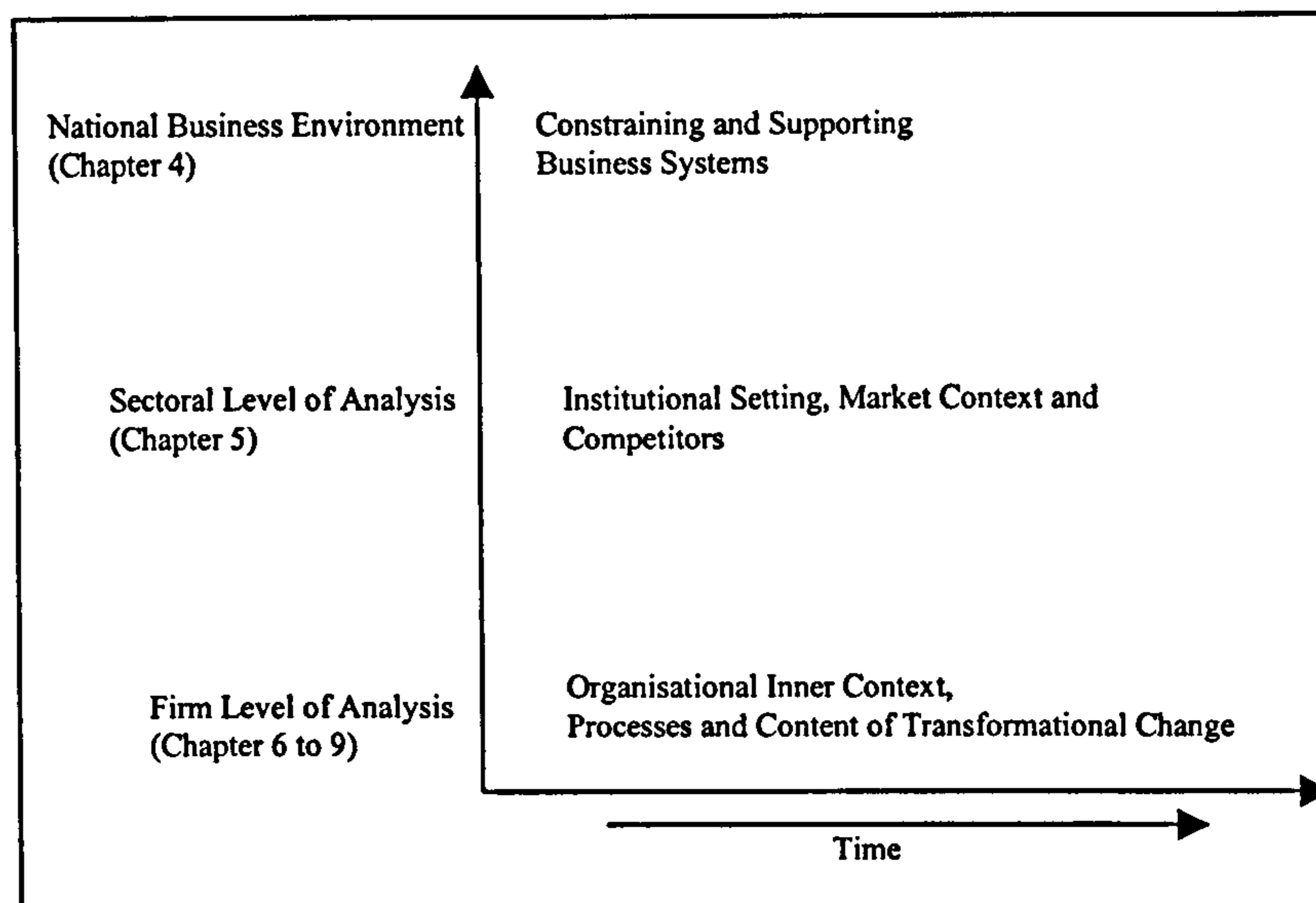
A multiple level of analysis is required to show how firms shape their organisational flexibility. Understanding the transformation of the firms from a multilevel perspective sheds light on the historical, organisational and economic roots from which it emerged (Pettigrew and Whipp, 1991). Pettigrew (1985), however, points out that because phenomena are studied in the context of interconnected levels of analysis, the researcher must clearly delineate these levels. These levels of analysis are explained below.

In order to be aware of the business system in which firms run their business it is important to recognise those factors (i.e., institutional or cultural) that either restrict or support businesses in a particular country. In his examination of organisations from both a postmodern and new organisational economics position, Clark (2000) states the importance of the study of national factors. Institutional (Whitley, 2000) and culturalist approaches (Hofstede, 1991) also stress the importance of studying national contexts because nations shape organisational action. In the particular case of Argentina, the process of the opening up of the economy to foreign competition, the privatisation programme and political reform were fundamental factors that disrupted the national business environment during the 1990s (see chapter 4).

The sectoral level, on the other hand, has an immediate impact on the organisational life and performance of the companies (Pettigrew, 1990; McGahan and Porter, 1997). In the case of the industries analysed in this research, edible oils and pharmaceuticals were affected by a process of deregulation that either impinged on the companies directly (such as the pharmaceutical industry) or indirectly (in the case of the edible oil industry) (see chapter 5).

Finally, the firm level of analysis – the main unit of analysis in this research – allowed us to further our understanding of organisational flexibility by looking at the transformation companies underwent (see chapter 6 to 9).

FIGURE 3.1: MULTIPLE LEVEL OF ANALYSIS IN THIS RESEARCH¹



Different levels of analysis also make it possible to answer different questions and reveal different causal factors. Examination of the outer context (i.e., the national, sector and industry levels of analysis) raises questions about how high levels of competitiveness may affect the capacity of firms to adapt, transform and achieve flexibility. Similarly, levels of regulation may explain whether organisational flexibility is influenced by intermediary agents. The inner context, on the other hand, will reveal the process of transformation within the firm. The analysis of different internal processes such as managerial, structural and cultural transformations may shed light on the determinants of organisational flexibility (Volberda, 1996, 1999; Djelic and Ainamo, 1999).

Temporal interconnectedness becomes a critical part of the analysis in that it helps to explain how the national business environment, the industry and the inner context of the firm interact and interrelate. Pettigrew *et al* (2001:699) indicates that one major question for the researcher is “*how to incorporate time, history, process, and action in the study of organizational change*”.

¹ Source: Pettigrew, 1990; Pettigrew, 1992a

Pettigrew *et al* (2001) also highlight the importance of history in understanding the process of transformation of firms and therefore avoid ahistorical, acontextual and aprocessual approaches characteristic of cross sectional methods that collect and analyse data from a single point of view and time (Pettigrew, 1985; Huber and Van de Ven, 1995; Garvin, 1998). But history should not be understood as a mere chronology or just the telling of a story. History should reveal deeper organisational pathways. Retrospective and real time analyses are necessary to capture time (Pettigrew, 1990; Clark, 2000).

We need to analyse how issues and factors unfold and interact over time to be able to understand the development of the determinants of a firm's flexibility. The examination of the past may reveal the critical role the founder's set of beliefs plays in the future success of the firms. Initial strategic and organisational choices may reveal how and why firms adapted in the way they did. The different strategic initiatives undertaken over time may indicate the firms' possibilities for growth.

In the following sections (3.3 and 3.4) we discuss in detail the sectoral and firm level of analysis. We examine the way industries and firms of this analysis were chosen and the comparative case study undertaken to understand the process of transformation of the firms. This is important because the process of transformation provides insight into the determinants of a firm's flexibility.

3.3 Sectoral level of analysis

Sector sample selection

The pharmaceutical and edible oil industries were both chosen as sites of this research primarily as a result of the strong competitive pressures to which these industries were subject during the 1990s. The level of competition they faced during this period is indicated by the general level of foreign direct investment (FDI) and the degree of regulation (CEP, 1998).

The impact of FDI on the host economy was widely analysed in the literature on multinationals (hereafter MNC) (Hood and Young, 1979; Helleiner, 1990; Porter, 1990; Jenkins, 1991; Dunning, 1993 and 1997; Jones, 1996 among others). Dunning (1993) points out that FDI can contribute as a creator and organiser of technological capacity, as an upgrader of human resources and the general welfare state. Competition might rise if FDI goes to a sector with the aim of enhancing it with innovative activities and capabilities.

However, FDI can also harm indigenous businesses. Porter (1990) demonstrates how foreign companies have driven out local car manufacturers in the British car industry. Sectoral concentration might be another outcome of FDI flowing into a sector (Evans, 1976 a & b; Blomstrom, 1986, Cho, 1989; Aswicahyono *et al*, 1995).

The Argentinian economy received substantial levels of foreign investment which changed the internal dynamic of both the pharmaceutical and edible oil industries in terms of the new companies entering the industry and the levels of competition and efficiency (Helleiner, 1990; Dunning, 1993). In the 1990s, Argentina became the destination for the second largest amount of FDI in Latin America after Mexico (Toulán and Guillén, 1997). The food and pharmaceutical sectors are among those that received most FDI in the country (see table 3.1). Other sectors which received a high level of FDI – such as communication (whose inward investments were more than a quarter of total FDI in the period 1990-1998), banking and TV – were rejected because survival rates of indigenous businesses were too low, thus making comparison very difficult if not impossible (see table 3.1).

TABLE 3.1: RANKING OF INWARD INVESTMENT PER SECTOR 1990-1998²

Industry	Percentage Inward Investment ³
Communication*	25.62%
Banking and Financial Services**	16.60%
Food and Beverages	12.03%
TV*	11.58%
Chemistry and Pharmaceuticals	11.06%
Telephone*	10.82%
Commerce	7.37%
Petrol***	5.31%
Cellulose and Paper	3.70%
Automotive	3.50%

* No Indigenous businesses among the 20 largest companies in terms of turnover

**Only one indigenous bank among the 20 largest companies in terms of turnover

***This does not include the acquisition in 2000 by Repsol of YPF (the Argentinian Petrol Company).

The level of regulation of the industries, on the other hand, illustrates how regulatory agencies act to mediate competitive pressures, thereby protecting the firms from competition and market forces. As the environment in which companies operate becomes more deregulated, it provides them with greater freedom to transform their organisation by adapting to environmental changes. Thus, the level of regulation in an industry can shape the demands for organisational flexibility in a firm (Grabowsky *et al.*, 1978; Mahon and Murray, 1981; Smith and Grimm, 1987). With this in mind, two industries, one regulated but in transition towards deregulation (pharmaceuticals) and one deregulated (edible oils-within the food sector) were selected.

Indicators to identify flexible and less flexible firms

Having decided on the most suitable industries for the analysis, it was also necessary to build a set of indicators to identify the companies in the different industries according to their level of organisational flexibility. We focused our analysis on indigenous family-owned businesses following two criteria: firstly we wanted to analyse firms in which the process of transformation was clearly observable, as in the case of family-owned firms in the 1990s; and secondly, we also wanted to control some of the possible sources of variation in our analysis by having a homogeneous sample of firms such as family-owned firms.

² Source of information: CEP, 1998

³ The percentage takes into account the process of merger undertaken by MNC companies. However, the inflow of foreign investment coming from the privatisation process was not taken into consideration because it was mainly directed towards state owned businesses.

Regarding the first criteria, Pettigrew (1990:275) advises that “*if the phenomena to be observed have to be contained within a single or relatively small number of cases then choose cases where the progress is transparently observable*”. The competitive pressures in Argentina throughout the 1990s affected mainly family-owned businesses. Family-owned firms used to be the main organisational form operating in the country (Kosacoff, 2000; CEP, 1998)⁴. The companies had to transform their core activities to be able to compete efficiently with MNC companies in a market that suddenly opened up (CEP, 1998 and 1999; González García *et al*, 1999).

Concerning the second criteria, we selected a homogenous sample of firms (i.e., indigenous family-owned businesses) as a way of controlling sources of variance stemming from the nature of the firms’ ownership and mission (Ward, 1987). Neubauer and Lank (1998) indicate that the type of ownership and management differentiate family firms from other firms, therefore making family firms distinguishable from other organisations yet comparable with them. Thus, selecting a homogeneous sample (i.e., indigenous family-owned firms) makes it possible to understand and compare the process of transformation of the companies and consequently the determinants of organisational flexibility.

Relying on a single indicator to select the companies for a comparative study can be problematic. Problems arise because of the different nature of the industries in which companies operate, making it difficult to generalise the use of an indicator for different industries. In the light of this argument, this thesis adopted a combined approach in which a set of indicators deriving from the literature on organisational innovativeness and flexibility were chosen. The indicators selected were: product innovation; collaboration and partnerships; and internationalisation and diversification (see table 3.2).

⁴ Poza (1995) states that at the beginning of the 1990s, more than 80% of the firms in Argentina were family-owned.

TABLE 3.2: INDICATORS OF ORGANISATIONAL FLEXIBILITY IN THE PHARMACEUTICAL AND EDIBLE OIL INDUSTRIES

General Indicator	Customised indicators used in the Pharmaceutical industry	Customised indicators used in the edible oil industry	Sources
Product Innovation (Innovation capacity)	-Product innovation in traditional pharmaceutical products -Product innovation in non-traditional pharmaceutical products	-Product innovation (branding)	Eisenhardt and Tabrizi, 1995 Brown and Eisenhardt, 1997 Jonsson, 2000
Collaboration and Partnerships	-Collaboration and partnerships with local competitors of foreign players.	-Collaboration and partnerships with local competitors of foreign players.	Bahrami, 1992 Liebeskind <i>et al</i> , 1996 Regner, 2000; Birkinshaw, 2000 Pettigrew and Fenton, 2000
Internationalisation	-Internationalisation	-Internationalisation	Aaker and Mascarenhas, 1984
Diversification	-Diversification	-Diversification	Ansoff, 1988 Webb and Pettigrew, 1999

In the pharmaceutical industry, the importance of product innovation is self-evident. All the patent law battles in emerging economies aim to protect inventions (Watal and Mathai, 1995). The pharmaceutical industry, as the report of the Boston Consultancy Group (BCG, 1999) points out, has historically based its competitive advantage on discovering blockbuster drugs and innovating and developing new products. This assertion makes it important to clarify that, except for few countries in the world, the vast majority of countries do not have companies that can afford to invest in the research and development (R&D) necessary to discover blockbuster drugs. In 1994, taking into consideration the first ten companies in the industry worldwide in terms of turnover, the average R&D investment was 15.72% of the turnover, representing nearly US\$ 1 billion. In Argentina over a similar period of time, the percentage invested in R&D was 2 % and a leading company was investing approximately US\$ 4 million yearly (BCG, 1999; González García *et al*, 1999).

Product innovation is therefore understood as the ability to develop and release products onto the market. We did not look to companies that create blockbuster drugs. The BCG (1999) report also suggests that the challenge for companies in the future is not only to invest in

traditional pharmaceuticals, but also in other areas. Accordingly, we also sought companies that were increasingly investing outside traditional pharmaceutical products and towards, for example, genomic medicine and biotechnology. The BCG reports that genomic medicine and biotechnology are the future drivers of the pharmaceutical industry.

Partnerships and collaborations are also mentioned by the BCG report (1999) as an important aspect of the pharmaceutical industry, as a way pharmaceutical industries have of improving their ability to manage activities externally. The report, nevertheless, stresses the importance of partnerships for research, while in emerging economies in which research is not the most important activity of pharmaceutical companies, partnerships and collaboration should be defined as commercialisation (González García *et al*, 1999). Therefore, we sought to find companies that collaborated with local and/or foreign counterparts in strategic alliances, licensing or other types of venture.

Internationalisation and diversification were common strategies used in the industry and helped to explain early adoption of strategies (González García *et al*, 1999; Vernengo, 1992). These two strategies were the most regularly cited by the Corporate Research Foundation (1999) as relevant types in the 1990s. While internationalisation means *“to increase the geographic scope of the firm’s activities outside its home nation”* (Webb, 1999:72) (i.e., in the pharmaceutical industry through opening up companies or commercialising a product abroad), diversification *“involves actions that increased or decreased the product/market scope of the firm’s activities within its home nation”* (Webb, 1999:72) (i.e., in the pharmaceutical industry through mergers, acquisitions and investing in businesses along the value chain – such as retail, and biotechnology projects, among others).

In the case of the edible oil industry, product development (branding) is mentioned as an important indicator of innovative ability of firms in the food sector and edible oil industry. Product development in these industries helps companies to achieve more market share and

consumer loyalty. We therefore sought to find companies that had introduced new products onto the market (Heijbroek *et al*, 1995).

Collaboration and partnerships in the edible oil industry should take into consideration the peculiarities of the industry. In the edible oil industry, collaboration between companies is rare. Therefore, we sought to investigate the ties the companies in this industry had at the different stages of the chain of value (i.e., with farmers – such as long term contracts, financing or supplying raw materials; with suppliers – transport, port agreements; and with customers (Kethelhohn *et al*, 1998)).

Diversification and internationalisation also emerged as two strong indicators of organisational flexibility. Regarding the diversification activities of edible companies, vertical integration was the most relevant during the 1990s (Herranz, 1999). The internationalisation character of a food company, on the other hand, is a major feature of the industry, with foreign markets largely responsible for a substantial part of the turnover (Ketelhohn *et al*, 1998). The companies in the edible oil industry were essentially export-oriented. We examined the companies' international strategies through the setting up of new facilities or commercial offices abroad.

A list of the indigenous family-owned companies among the first twenty firms in the pharmaceutical and edible oil industries was compiled and ranked so as to reflect their organisational flexibility according to the indicators shown in table 3.2. Eight companies were indigenous family-owned businesses in the pharmaceutical industry whereas, three companies were family businesses and nationally owned in the edible oil industry (see table 3.3 and 3.4). The indicators revealing organisational flexibility – product innovation, collaboration and partnerships, and internationalisation and diversification – were measured as high, medium and low, and the companies were ranked accordingly. Tables 3.5 and 3.6 show the criteria used to allocate the measures of high, medium and low to the different indicators in the different firms.

TABLE 3.3: A CLASSIFICATION OF INDIGENOUS FAMILY-OWNED BUSINESSES ACCORDING TO THEIR ORGANISATIONAL FLEXIBILITY: THE CASE OF THE PHARMACEUTICAL INDUSTRY

General Indicators	Product Innovation		Collaborations and Partnership	Diversification	Internationalisation	Total
	Traditional Pharma	Non-Traditional Pharma	Collaborations and partnership	Diversification	Internationalisation	Out of 15 possible points
<i>Indicators for pharmaceutical industry</i>						
<i>Companies</i>						
<i>Sidus</i>	High (3)	High (3)	High (3)	High (3)	High (3)	15
<i>Bago</i>	High (3)	Low (1)	High (3)	High (3)	High (3)	13
<i>Roemmers</i>	Medium (2)	Low (1)	High (3)	High (3)	High (3)	12
<i>Temis Lostalo</i>	Medium (2)	Low (1)	High (3)	Medium (2)	Low (1)	9
<i>Phoenix</i>	Medium (2)	Low (1)	High (3)	Medium (2)	Low (1)	9
<i>Casasco</i>	Medium (2)	Low (1)	Medium (2)	Medium (2)	Low (1)	8
<i>Beta</i>	High (3)	Low (1)	Medium (2)	Low (1)	Low (1)	8
<i>Andrómaco</i>	Low (1)	Low (1)	Medium (2)	Low (1)	Medium (2)	7

TABLE 3.4: A CLASSIFICATION OF INDIGENOUS FAMILY-OWNED BUSINESSES ACCORDING TO THEIR ORGANISATIONAL FLEXIBILITY: THE CASE OF THE EDIBLE OIL INDUSTRY

General Indicator	Product Innovation	Collaborations and Partnership	Diversification	Internationalisation	Total
	Branding	Collaborations and partnerships	Diversification	Internationalisation	Out of 12 possible points
<i>Indicators for edible oil industry</i>					
<i>Company</i>					
<i>AGD</i>	High (3)	High (3)	High (3)	High (3)	12
<i>Vicentin</i>	Low (1)	Medium (2)	Medium (2)	Medium (2)	8
<i>Buyatti</i>	Low (1)	Medium (2)	Low (1)	Medium (2)	6

TABLE 3.5: OPERATIONALISATION OF THE INDICATORS USED TO DISCOVER FLEXIBLE FIRMS IN THE PHARMACEUTICAL INDUSTRY

Indicator Measure	High	Medium	Low	Source
<i>Product innovation in traditional pharmaceutical industry</i>	Release of at least one product per therapeutic class per year	Release one product in more than 50% of the therapeutic classes per year	Release one product in 50% or less of the therapeutic classes per year	IMS, 1999
<i>Product innovation in non-traditional pharmaceutical industry</i>	Research and development of biotechnological products	Research and development of biotechnological products in preliminary phase	Do not do research or develop biotechnological products	González García <i>et al</i> , 1999 Claves, 1999
<i>Collaborations and Partnerships</i>	-Strategic alliances or -Licensing agreements and -Commercial agreements in the distribution channel	-Co-Marketing agreements or -Licensing agreements	-No collaborations or partnerships	BCG, 1999 González García <i>et al</i> , 1999 Manzone, 2000
<i>Diversification</i>	Companies participating in the whole chain of value (i.e., production, commercialisation, distribution, retail)	Companies participating in part of the value chain	Companies focus on one activity	IMS, 1999 González García <i>et al</i> , 1999
<i>Internationalisation</i>	-Branches in most important regional markets (i.e., Brazil, Mexico) or -Licensing agreements to sell own products or; -30% or more of the firm's turnover coming from foreign sales	-Branches or investments in medium or small regional markets (i.e., Chile, Uruguay) or; -Between 10 and 30% of turnover stemming from foreign sales	-Lack of foreign investments or; -Less than 10% of turnover in foreign sales	Claves, 1999 González García <i>et al</i> , 1999 BCG, 1999

TABLE 3.6: OPERATIONALISATION OF THE INDICATORS TO DISCOVER FLEXIBLE FIRMS IN THE EDIBLE OIL INDUSTRY

Indicator Measure	High	Medium	Low	Sources
Branding	-Release of brands of edible oils or derived products (i.e., mayonnaise, soya juices) and -Obtaining a market share of 15% or more	-Release of brands of edible oils or derived products (i.e., mayonnaise, soya juices) and -Obtaining a market share between 10% and 15%	-Not participating in the branding market or -Release of brands of edible oils or derived products (i.e., mayonnaise, soya juices) and -Obtaining a market share of less than 10%	Heijbroek <i>et al</i> , 1995 Gutman and Feldman, 1990 CEP, 1999
Collaboration and Partnerships	-Agreements between the company and farmers (i.e., financing or service agreements) and -Agreements between the company and suppliers (i.e., transport and distribution)	-Agreements between the company and farmers or suppliers	-No agreements to collaborate	Heijbroek <i>et al</i> , 1995 CEP, 1999
Diversification	-Company participating in all the stages of the chain of value (i.e., production, crushing, refining, distribution, transport, retail)	-Company participating in some of the stages of the value chain	-Company focusing on one stage of the value chain (i.e., crushing)	Rabobank, 1997 and 1998 CEP, 1999
Internationalisation	-Company that is opening up branches or facilities in foreign countries and -Companies that managed their own trading	-Company that either opened up branches or facilities abroad or that managed their own trading	-Companies that did not have branches or facilities abroad and that outsourced their trading	Verheijen and Jimmink, 1995 Rabobank, 1997 CEP, 1999

In tables 3.5 and 3.6 we show how the measures of high, medium and low were allocated to the indicators in the different companies. In most of the indicators, industry studies showed how these measures should be allocated. However, industry or sectoral reports left some gaps the researcher had to fill using different criteria.

In the pharmaceutical industry, studies are clear about how innovative (high, medium or low) a company should be considered to be in terms of traditional and non-traditional pharmaceutical products, or which company should be considered as highly diversified or not

(IMS, 1999; González García *et al*, 1999; BCG, 1999). However, we had to fill some gaps in the way we allocated the different measures in two of the indicators: collaborations and partnerships, and internationalisation.

Industry reports in the pharmaceutical industry (i.e., BCG, 1999) state that strategic and network alliances are the deepest and most sophisticated type of collaboration in pharmaceutical firms (BCG, 1999:15,26). González García *et al*, (1999) underline that, in the case of the pharmaceutical industry in Argentina, strategic alliances are rare and licence agreements or co-marketing agreements are to be found. González García *et al* (1999) also point out that commercial partnerships are important in Argentina at the level of the distribution channel. If a company had a strategic alliance or licence agreements and also a commercial agreement in the distribution chain we classified the indicator as high. When a firm had co-marketing agreements (because a co-marketing agreement implies a lower level of commitment than a licence agreement) or if the firm had licence agreements we considered that indicator as medium. When we could not find any type of collaboration or partnership we classified the indicator in that company as low.

The case of how to measure the internationalisation of the firms proved to be difficult to solve because there are different ways of doing this. However, the different approaches are not opposed but complement each other. Some studies, for example, suggest that companies with licence agreements to sell their own products can be considered to have a highly international presence (BCG, 1999). Others considered that for Argentinian firms to be considered international, they should have a substantial presence in the most important markets (i.e., Brazil and Mexico) (González García *et al*, 1999). Finally, an industry report (Claves; 1999) suggests that Argentinian pharmaceutical firms can be labelled international if 30% or more than their income stems from foreign sales while firms with less than 10% of their turnover stemming from international sales may be considered local firms with a low level of international exposure. We have taken the different recommendations of the industry reports into consideration when

choosing which firms may be deemed as having high, medium or low levels of internationalisation, as shown in table 3.5.

In the case of the edible oil industry, the only indicator that had to be developed for the researcher was collaboration and partnerships. Ketelhohn *et al's* (1998) study of the industry in the Mercosur area highlighted a tendency for firms to collaborate all along the value chain, with farmers at the beginning of the chain and suppliers at the other end. Some industry reports underline that the most common way of collaborating in the industry is mainly with farmers to avoid problems with the stocks of seeds to process (Ketelhohn *et al*, 1998; Heijbroek *et al*, 1995; CEP, 1999). Firms with collaboration and partnerships with both farmers and suppliers were classified as high; firms with either collaboration (i.e., either farmers or suppliers) were classified as medium. Finally, when we could not find any type of collaboration or partnership we classified the indicator in that company as low.

3.4 Firm level of analysis

Comparative and longitudinal case studies: Polar types

The next stage of our research strategy required an investigation into what has caused the firms to develop a set of flexible capabilities to adapt fast when environmental change occurs. The case study method was selected as the most appropriate approach for exploring the processual and contextual factors that have influenced a firm's organisational flexibility. Moreover, our case studies are accounts of the transformation process of the companies because this process sheds light on the determinants of organisational flexibility (Volberda, 1999).

A case study, as Eisenhardt (1989a:534) states, is "*a research strategy which focuses on understanding the dynamics present within single settings.*" Berg (1979) explains the advantage of using case studies to grasp the complexity of change processes. Since the focus of our case studies is the account of the transformation process of the companies, this is relevant. Berg

(1979) points out that case studies permit a large number of variables to be studied and this is important for understanding the complexity of change and transformation. Secondly, he indicates that because of the political and emotional charge of the process of change and in order to comprehend the full meaning of change within an organisation, case studies allow the researcher to go inside the organisational dynamics and to uncover some of these dynamics.

Yin (1994) suggests that when one is trying to answer 'how' and 'why' questions, the case study method is the most suitable. When 'how' and 'why' questions are being asked, it is because the researcher knows little about the process (Eisenhardt, 1989a; Langley, 1999) or when there is little control over the process (Yin, 1994).

As Eisenhardt argues (1989a), the use of case studies can also help build theory. She points out that the strengths of building theory from case studies are its originality, the testability and empirical validity. Hence, the case study method seems to be the most appropriate to apply to this research due to the fact that so few studies seek to understand the determinants of organisational flexibility.

In line with Pettigrew's (1990) and Eisenhardt's (1989a) advice, in this study we chose to conduct longitudinal and comparative case studies of polar types. Due to the limited number of cases – four in total – it makes sense to choose polar types as case studies as they reflect opposite extremes of the phenomena to be studied (Eisenhardt, 1989a; Pettigrew, 1990). Furthermore, given the time constraints, it would not be feasible to carry out more than four case studies in enough detail for a doctoral thesis.

In the ranking shown in tables 3.3 and 3.4, Sidus (pharmaceuticals) and AGD (edible oils) emerged as the most flexible companies. Andrómico (pharmaceuticals) and Buyatti (edible oils) on the other hand turned out to be the least flexible firms. Buyatti, however, was replaced by Vicentín because in November 2000 Buyatti went bankrupt⁵, therefore making it difficult to gain access to both information and key informants for interviews. Figure 3.2 shows the flexible and

⁵ In *La Nación* Newspaper. 10/11/2000. Section: Economy-Companies

less flexible firms in both the pharmaceutical and edible oil industries. Table 3.7 shows the companies' profile.

FIGURE 3.2: HIGHLY FLEXIBLE AND LESS FLEXIBLE COMPANIES IN THE PHARMACEUTICAL AND EDIBLE OIL INDUSTRIES⁶

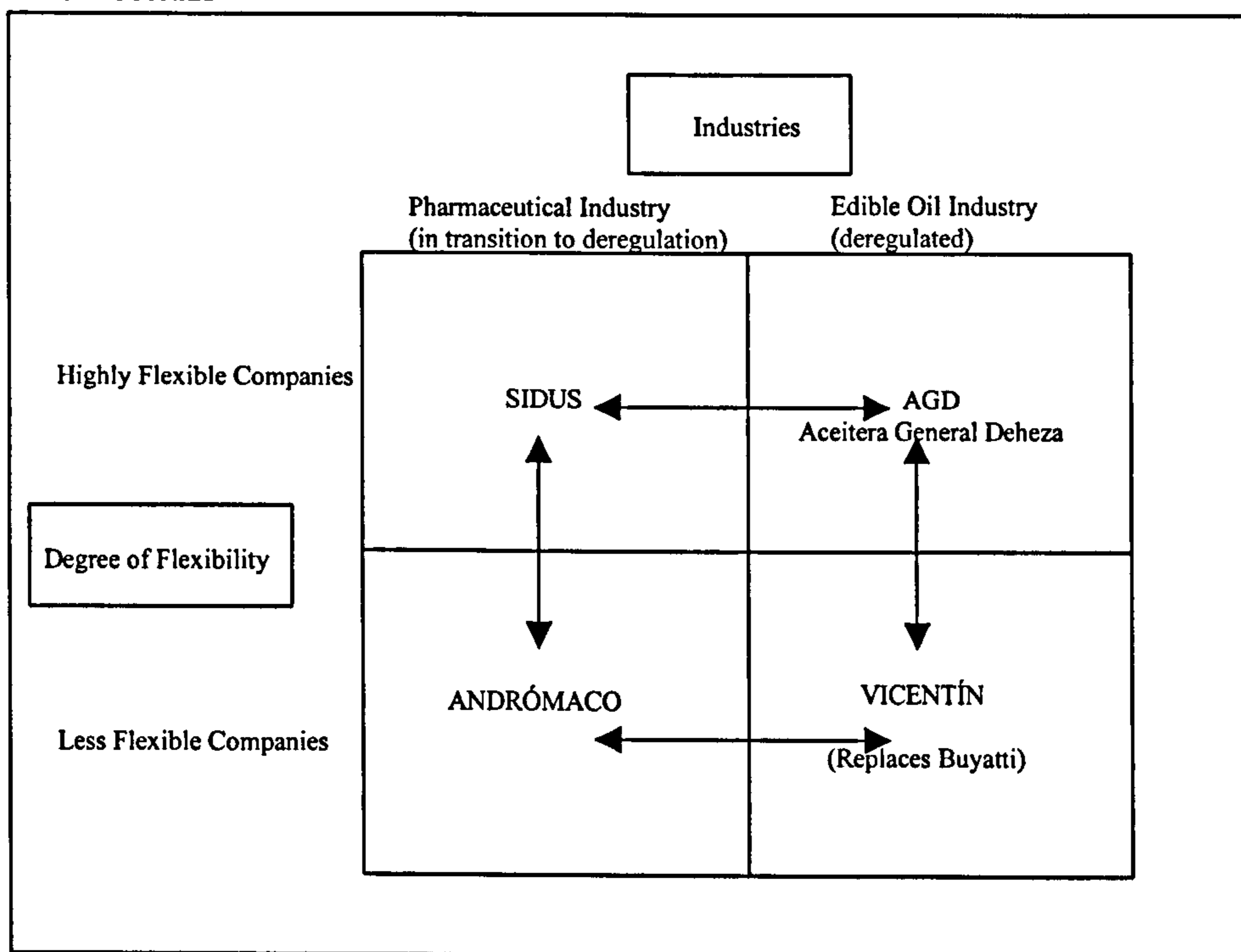


TABLE 3.7: COMPANIES' PROFILE⁷

Company	Industry	Related Businesses	Employees (1999)	Turnover (1999) in US\$ millions
AGD	Edible Oils	Farming Crushing Transport (Railways/Port) Branding Distribution	1,500	1,042
Vicentín	Edible Oils	Crushing Port Branding Cotton ginning	350	578.7
Sidus	Pharmaceuticals	Biotechnology Pharmaceutical products Retail (Pharmacies) Intermediary companies Distribution	950	232
Andrómaco	Pharmaceuticals	Pharmaceutical products (mainly dermatological products)	342	48.2

⁶ The arrows indicates the comparisons undertaken in this research

⁷ Companies' data

Data Collection

Time frame of the study

When did the process of transformation begin in the firms under study? What time frame is the most appropriate to understand the way flexible capabilities developed? Given that there is not an absolute answer, the researcher must be guided by pragmatic considerations in order to clarify the beginning and the end of the analysis. Our time frame focused on major social breakpoints (Pettigrew, 1990; Tushman and Romanelli, 1985). As the national business environment and industry analyses show (Chapter 4 and 5 respectively), 1991 was a period of major social and economic transformation.

Longitudinal data about the transformation process in the four companies was collected covering the firms' activities over the period 1989-1999. While 1991 represents the opening up of the Argentinian economy and the starting point of market liberalisation in Argentina, 1989 is a critical year for the whole economy – the peak of the 1980s economic crisis.

Pettigrew (1990:271) shows the importance of clarifying the beginning and end of the process that will be analysed: *“there is a crucial issue of the time and perspective. Time sets a frame of reference for what changes are seen and how those changes are explained”*. A retrospective analysis of the firms was also carried out so the research could grasp the succession of events that triggered the radical changes in the firms over the 1990s and the factors that made firms adapt to the sudden environmental shifts in the 1990s.

Access

Gaining access turned out to be a challenging experience. The main problem we encountered was the lack of experience companies in Argentina had of cooperating with business researchers. The second problem stemmed from the character of the firms analysed. As Litz (1997) states, one of the problems associated with studying family companies is information

disclosure. Looking at the development of family businesses can be seen by family members as spying on family affairs. This is why much care was taken with the negotiation of access to the companies. The fact that the researcher is working in a leading business school in Latin America facilitated access. That fact reassured the companies of the academic purpose of the study.

In AGD the initial contact was made with one of the Directors that the researcher previously knew. An internal contact was provided to arrange the interviews with the managers. In Sidus the initial contact was a family member who held an important managerial position. The interviewees were arranged by the initial contact.

In Andr omaco, the first contact was the CEO and the one that helped in arranging the interviews. In Vicent n the Finance Manager was the initial contact. This contact was provided by AGD.

Between the two flexible companies, Sidus proved to be more difficult in terms of getting access. The fact that Sidus was competing in an industry that was going through a process of deregulation made the company more suspicious about the aims of the research. A two page statement was sent in July 2000 to the Board of Directors, specifying the objectives of the research and the data needed (see annex 1). Before its approval was received a telephone conference about the proposal was held between the researcher and two members of the Board of Directors. Two days later, an e-mail was received saying that the proposal for the research in Sidus was approved.

Of the less flexible companies, it was most difficult to gain access to Vicent n. Only after AGD provided the researcher with an internal contact was it possible to start the dialogue with Vicent n. Previous attempts to establish contact were ignored or rejected.

An important issue in negotiating access with the firms was what the researcher said about the aims of the project. It would have been impossible for us to disclose the overriding intention of the research project, i.e. analysing the determinants of organisational flexibility in flexible and less flexible firms. The less flexible firms of this study would have surely refused to

participate in the study. Therefore, the researcher conveyed the same message to all four companies, i.e. that the study would focus on the transformation process of the firms over the 1990s. By saying this, it made it possible for Andrómaco and Vicentín (the less flexible firms) to agree to participate in the study.

As Pettigrew (1997) argues, ethics are crucial in all research. We were aware of the importance of disclosing the real aim of the research to the less flexible firms in order to avoid breaching the moral basis of this research. However, it took us time to unveil our real objective and this was done once we were sure that our link with the host case study organisation was strong enough to avoid discouraging the firms from continuing with the research.

On a practical level, access to individuals for the four case studies was negotiated by exploiting networks as fully as possible. While in AGD and Sidus the process was fairly smooth once access to the company had been granted, in the case of Vicentín and Andrómaco it proved more difficult. Secretaries turned out to be extremely useful gatekeepers. The good relationship established by the researcher with the Board's assistants and secretaries in Vicentín and Andrómaco was crucial when it came to arranging the interviews. In most cases, the secretaries arranged appointments without previous contact by the researcher with the interviewee.

While carrying out the interviews the researcher also had the opportunity to participate in managerial meetings (Sidus and AGD), lunch with managers (in all four companies), spend weekends with the family (Sidus), and attend the companies' annual meetings (Sidus and Andrómaco). This type of access was helpful due to the fact that in a relaxed setting, people seemed more predisposed to speak freely.

Data types

The case study phase involved three main sources of data collected from the companies: in-depth interviews; documentary and archival material; and quantitative and statistical material. This triangulated methodology is useful as Pettigrew (1990:277) indicates: *"To draw on the*

particular and different strengths of various data collection methods.” Different types of data can be used as cross checks. The collection of data was an iterative process, with two or more types of data being collected more or less at the same time.

Interviews and Interviewees

One of the most common methods used in fieldwork to further the understanding of a situation is interviewing (Fontana and Frey, 1994). There are various ways of conducting interviews. We decided to use in-depth semi-structured interviews, distinguishing this type of interviews from the structured and unstructured (Berg, 1979; Fontana and Frey, 1994). The table below compares the main differences between the three of them. The description of the semi-structured interviews shown in the table is an indication of the form a semi-structured interview took in this research.

TABLE 3.8: COMPARATIVE ANALYSIS OF STRUCTURED, SEMI-STRUCTURED AND UNSTRUCTURED INTERVIEWS.

	Structured	Semi-Structured	Unstructured
Aim to be achieved	Explain a situation with objectivity. Minimise mistakes.	Grasp and explain complex behaviour or situations.	Understand behaviour or situations without imposing categorisations. The aim is to be completely open to what the data had to say.
Questions	Pre-established. All respondents receive same set of questions.	Open-ended. Set of questions that will guide the interview. Interview pro-forma.	Open-ended. Basic and general questions. Let the interviewee talk. No pre-established techniques.
Answer	Limited set of categories (i.e.; strongly agree, agree, disagree).	Open answers. The researcher can intervene to focus the answer.	No rules. The respondent guides the conversation.
Tape Recording	Yes/No	Yes	Yes/No
Role of Interviewer	-Controlling the pace of the interview. -Do not get involved, neutrality and facelessness. -Follow sequence -No particular features required in the interviewer.	-Somewhat directive and controlling. -Interviewer has to be flexible and at the same time objective. Also a good listener.	-Non-directive and non-controlling. -Immersing and interacting in the field. Involvement.
Examples	Interview generally related to surveys. Research on adaptation and change coming from evolutionary and/or population ecologist (Miller and Friesen, 1980; Carroll and Hannan, 2000).	Contextualist empirical research on organisational change (Pettigrew, 1985; Pettigrew and Whipp, 1991; Newman and Nollen, 1998). Also Gersick, 1994; Berg, 1979).	Ethnographic interview and participant observation. Research on cultural change followed the ethnographic interview tradition (Gregory, 1983, Pettigrew, 1979. See also Van Maanen, 1988).
Limitations	Interviewee behaviour, omission of information (because of the limited categories to answer); features of the questionnaire that can omit important aspects of the field under study.	The questions might not fit or cannot be answered with the depth the research needs in order to undertake an analysis.	Influence of the interviewer may bring bias by exaggerated involvement.

Interviews in the fieldwork

A total of fifty-nine interviews were held in the companies. Pluralism in the selection of the interviewees was considered important because people from different levels of the organisation's hierarchy can offer accounts of the transformation in their companies from different perspectives (Pettigrew, 1990). Accordingly, people affected by the transformation process –managers and employees, family and non-family members – and those initiators of strategic initiatives that entailed a shift in the core activities of the companies were interviewed (see table 3.9).

Although pluralistic, we are aware of some limitations of the sample. The limitations arose from the fact that in some firms the number of family members in the interview process was greater than in others, so the data obtained may be biased by family opinions and perceptions. The size of the sample is also another potential limitation.

Regarding the first limitation, there are important differences between Vicentín, for example, in which we interviewed seven family members, and Andrómaco, in which we interviewed only three family members. However, these differences were difficult to avoid when some of the companies – such as Vicentín – have a high proportion of family members in the operation. The size of the sample (fifteen interviews in each companies, except for Vicentín in which we undertook fourteen) might also be criticised for being too small to deduce significant conclusions regarding the process of transformation and the determinants of organisational flexibility. However we believe that with those interviews that we did, we reached theoretical saturation (Glaser and Strauss, 1967) because we were able to obtain data about the transformation of the firms from different points of views and levels of the organisation. More interviews would not have enhanced our data or changed it.

TABLE 3.9: INTERVIEWS IN THE DIFFERENT COMPANIES ANALYSED

Company	Board of Directors	Top Management	Middle Management	Consultants Others	Total Interviews	Family members	Non-Family members
<i>AGD</i>	4	6	4	1	15	5	10
<i>Sidus</i>	2	6	5	2	15	6	9
<i>Andrómaco</i>	3	6	6	0	15	3	12
<i>Vicentín</i>	6	3*	8	0	14	7	7

*These are also part of the Board of Directors

Before starting the interview the nature of the research project and the purpose of the interview were explained. In presenting the research aims we guaranteed the academic purpose of the interviews and the confidentiality of the information to be recorded. It was also a deliberate attempt to start to break the ice before the interview started. As Fontana and Frey

(1994) point out, the initial introduction leaves a profound impression on the interviewee and can determine the successful outcome of the interview.

The first part of the interview was also deliberately organised so as to gain the interviewee's trust. Trust was considered essential to the success of the interview. We bore this in mind throughout the whole interview. Asking general questions about the background of the interviewee, his/her career and position in the company, and even past experience was helpful as a warm-up.

Subsequently, questions were asked relating to the importance of the challenges faced by the industry (i.e., pharmaceuticals and edible oils) after the economic changes that took place in the early 1990s. Questions about the antecedents and history of the company and the strategy and changes that the company underwent before and after the 1990s followed. Thereafter, more specific questions concerning the organisational structure, the strategic initiatives created by the firm and the culture and values of the company were asked.

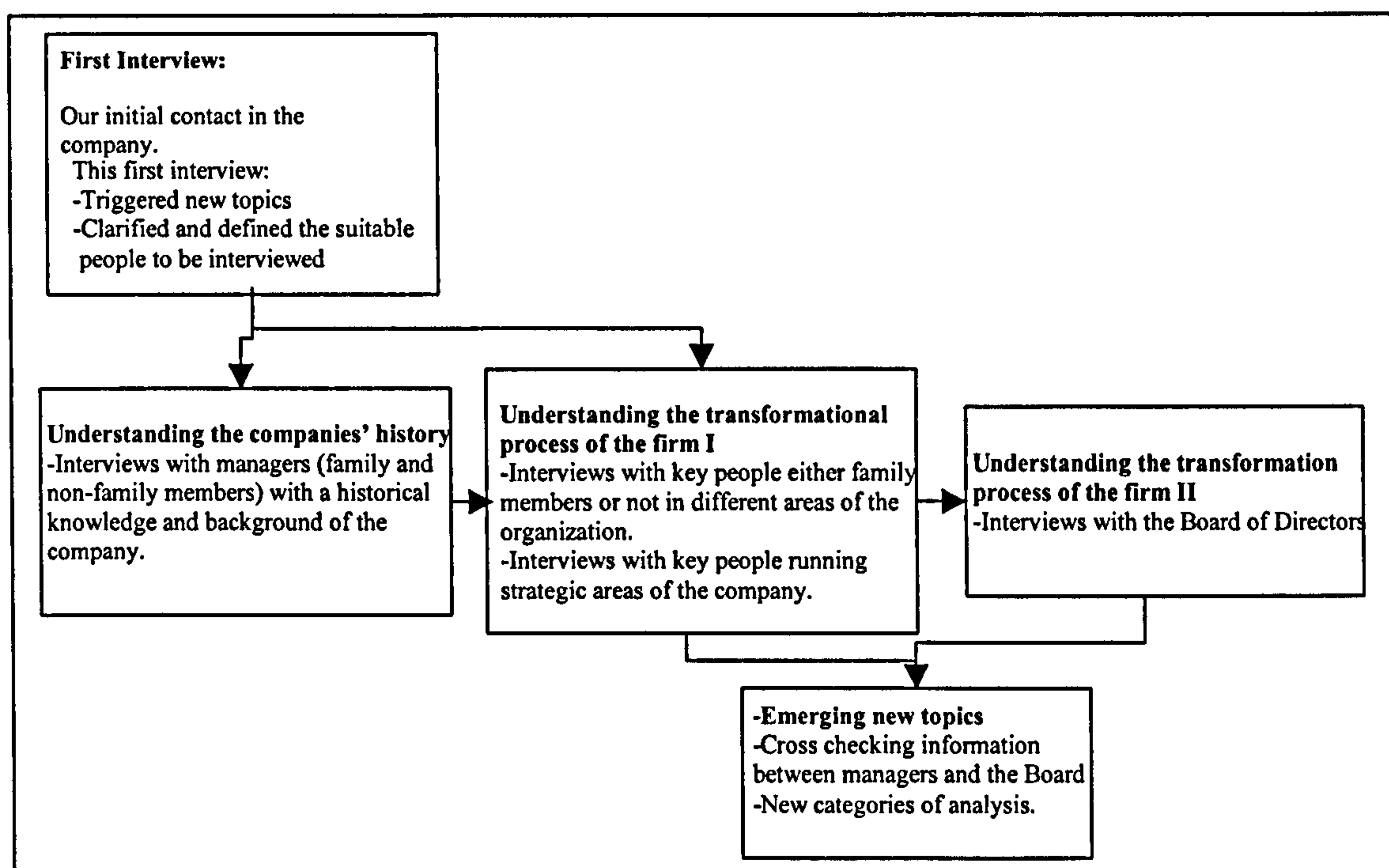
In the final stages of the interview, the interviewee was asked to mention those aspects that the company still needed to improve or those tasks still underway. Raising this question proved interesting because it showed different levels of perception of the challenges the company had to face in the future.

While we had pre-established questions, these were used as a guide to different topics the researcher wanted to explore. Many questions were open-ended with the deliberate idea of linking those answers to other related topics. Open-ended questions also allowed new topics to emerge, thus oiling the deductive-inductive process of analysis that would enrich the case study. The interview pro-forma used in this study is located in annex 2.

Interviews were scheduled as follows: firstly, interviews with key informants and especially those with precise knowledge of the history of the company; secondly, interviews with those involved in strategic initiatives that entailed a transformation of the core businesses of the firms; and finally, the Directors of the companies were interviewed to round off the process.

The decision to space out the interviews in the way explained above was taken so as to avoid asking the directors more mundane background questions about the company. The sequence chosen was important because we firstly learnt about the history of the company, then about the process of transformation and finally we went to the Directors to get their perception of critical organisational issues.

FIGURE 3.3: INTERVIEWING PROCESS



Tape recording, transcription and translation

Fifty-one out of fifty nine interviews were tape-recorded. Tape recording allowed the researcher to fix his attention on the interviewee's comments rather than taking notes. Nevertheless, tape recording the interviews proved, in some cases, to impose some restrictions on the extent to which interviews were prepared to speak frankly. The youngest managers interviewed were more wary in their answers and comments. Two cases illustrate this problem. One interviewee in AGD and another in Sidus were very cautious in their answers and suspicious

of the researcher's questions. They appeared stressed and looked at the tape recorder machine all the time. In these cases more information was obtained off the record than in the formal tape-recorded interview.

However, I experienced most problems in Vicentín whose managers were reluctant to be recorded. Six interviews in that company were not tape-recorded. As many managers and employees interviewed pointed out, the company had a strict policy of not disclosing information to anyone except with permission from the Board, so although the Board agreed with the interview process, managers preferred not to have the interviews recorded. The researcher took notes instead of recording the interviews. Not having the pressure of knowing that all they said was going to be recorded, the interviews spoke freely about different issues.

The interviews were transcribed and translated into English. For the transcription a professional service was hired and closely supervised by the researcher. The researcher himself, nevertheless, did the translation. This guaranteed the correctness of the translation. In so doing we avoided possible linguistic biases and retained the real meaning and spirit of the interview.

Interview pro-forma

An interview pro-forma was developed following the analysis carried out in the literature review. A set of triggering questions were grouped by themes and used as a guide in the interview process (see annex 2).

The questions were grouped according to nine topics that sought to unravel issues about the historical background of the companies and industries (i.e., the importance of the industry and economy, and the antecedents and history of the firms) and issues related to the transformation of the companies from a holistic point of view (i.e., by means of an understanding of the strategy of the companies before the transformation process; changes throughout the 1990s; structure of the organisation; market and products; management; governance; and, finally,

values and culture). All the questions sought to understand the context, content and process of transformation of the firms (Pettigrew, 1985 and 1997 and Pettigrew *et al*, 1989).

The pro-forma was also useful in that it provided a consistent format for the interviews, thus conferring a certain coherence on the different interviews. The pro-forma, nevertheless, was used as a guide, not as a strict pattern to follow. The questions were used or rejected by the researcher according to the interviewee's responses. The pro-forma also proved its effectiveness in realigning the interview when the focus of the interview was lost and when there were breaks in the discussion. The pro-forma not only helped the researcher to add or reject questions, but also enabled him to explore new issues and themes that emerged from the interviews.

Documentary data

In order to enhance, triangulate (Stake, 1994), and validate (Yin, 1994) the information from the interviews, documentary and archival material were needed. The archive data ranged from histories of the companies, internal documents, institutional information and external reports.

The validity and reliability of documentary data is the subject of considerable debate (Hodder, 1994). Pettigrew (1990:277) underlines the importance of documentary and archive material in longitudinal research, but also warns about its weaknesses. He says that while documents can provide facts, they are also "*subject to dangers of selective deposit and survival.*" However, if treated with appropriate caution, documentary data can complement the information obtained from interviews and provide insight into the context in which decisions were taken. In this research we used four types of documents: internal documents; company histories; industry reports; and, in some cases, consultant reports.

In the Argentinian context, the fact that these companies are privately owned meant that they had no need to produce public information such as annual reports. Hence, the process of collecting information involved a great deal of background work such as seeking out information

in the companies' headquarters and in the companies' archives in different locations throughout the country.

In AGD the documents provided by external consultants were helpful in that they detailed the changes in the structure and the aims behind those changes. Data provided by industry reports, such as the one on the pharmaceutical industry, made it possible to compare the historical evolution of both Sidus and Andrómaco. Andrómaco's CEO's passion for his family history, on the other hand, allowed us to gather a lot of documents from the founders' period such as the personal diary of Raúl Roviralta and a chronology of family events. Documents setting out the strategic aims of the companies short and long term were also useful in that they showed the companies' long-term visions and the means they used to achieve them.

To obtain access to the different archives, the researcher firstly asked each interviewee whether they had any document or knew of any document in which some of the processes they were describing were explained. Archive material was also obtained by asking the Board of Directors of the four companies for permission to have a copy of some documents. This was the case with speeches given by founders and current Directors, and strategic plans and some reports given to the Board by business units, among others.

Statistical data

Finally, statistical and quantitative data provided the necessary background information about the evolution of the company. The following table shows the most relevant quantitative data collected and the aims achieved with that information.

TABLE 3.10: EXAMPLE OF STATISTICAL/QUANTITATIVE DATA REQUIRED FROM THE COMPANIES

Statistical/Quantitative Data Required	In order to understand...
Market Share	Evolution Products/Evolution of the company and its participation in the market
Sales, Volume	Growth over time
Sales per product/area or division	Diversification process
Average Price	Competitiveness
Liabilities	How the companies funded their growth
Average ages, tenure and experience of top management team	Evolution of companies' demographic features

The statistical and quantitative data collected supported the investigation of different aspects of the transformation of the companies, such as the firms' strategic shifts (through data related to the diversification process, evolution of products and average price), and managerial changes (through data on demographic features).

Data Analysis

So far, the research design and data collection have been explained. But what are the most appropriate methods of analysing the determinants of organisational flexibility? The purpose of this section is to clarify how the data were analysed so as to reveal the determinants of organisational flexibility.

Huberman and Miles (1994) indicate that analysing data is an interactive operation that starts from the moment of data collection and includes also data reduction, data display, and drawing and verifying conclusions. The following table shows our framework for analysing the data.

TABLE 3.11: DATA ANALYSIS: AN INTERACTIVE MODEL

Main aspects	Main activities	Operationalisation of the activity through...	Aims
<i>Data reduction</i>	-Coding and storage of data.	-Storage of data in broad categories of analysis. -Data storage on own database.	-Try to avoid “ <i>death through data asphyxiation</i> ” (Pettigrew, 1990:281).
<i>Data display</i>	-Writing up analytical chronologies.	-Analytical chronologies using suitable categories for the different companies (Pettigrew, 1990). These chronologies bear the seeds of the analysis.	-Understand the backdrop and key transformational changes in the organisations’ development -Shaping the determinants of organisational flexibility.
<i>Cross case analysis</i>	-Comparison between the four companies using the five determinants of organisational flexibility found.	-Comparative analysis between flexible and less firms and also highlighting the differences between highly flexible firms, and between less flexible firms. -A series of methods pinned down in different literatures supporting the determinants used.	-Understanding how companies built organisational flexibility. -To find common patterns between flexible and non-flexible firms.

Data Reduction

A process of reducing and storage of information helped to avoid what Pettigrew (1990:281) called “*death through data asphyxiation*” or what Morse (1994:229) called “*drowning in data*”. This is the case when data accrues without a proper method of reducing it, overwhelming the most skilful researcher.

We coded the data under broad categories – the same categories used in our interview pro-forma (i.e., importance of the sector and the economy; antecedents and history of the company; strategy of the companies before 1990; changes throughout the 1990s; changes in the structure of the organisation; strategic initiatives; culture, values and family- See annex 2). The data was stored using a database designed specifically for the task, therefore rejecting existing software packages such as NUD*IST. Although helpful, software such as NUD*IST proved to be time consuming and not as malleable as our own database.

Data Display

Writing down descriptive, wide-ranging and issue-organised chronologies was the method used to display the data and to start shaping possible determinants of organisational flexibility.

To write the case studies, Pettigrew's suggestion of the case as analytical chronology was used (Pettigrew, 1990). Writing chronological, extensive, descriptive and issue-organised case studies of each firm, as Eisenhardt (1989a) and Huberman and Miles (1994) propose, was a very helpful tool for the generation of insights. In the analytical chronologies, both the story and the story across levels of analysis were told. The analytical chronologies contained the seeds of the analysis itself (Pettigrew, 1990; Naumes and Naumes, 1999).

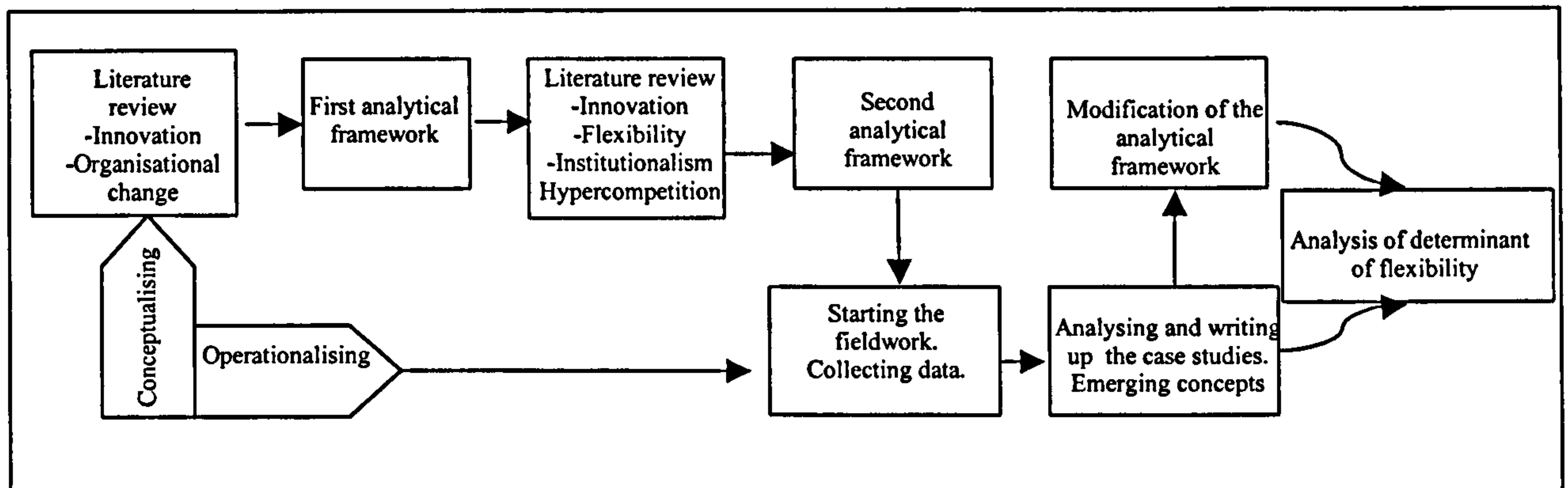
The case studies in this research, as Langley (1999:697) stresses, have embedded "*plots*" and "*themes*" through the selection of issues to be analysed. Five issues or "*themes*" were considered in relation to the case studies in this research as a way of approaching the transformation process of the four companies in this study: strategic initiatives (for the most flexible firms) or markets and products (for the less flexible firms); changes in the structure of the companies; changes in management; changes in governance; and unresolved issues.

In moving from description to explanation, the sequence became a vital aspect of the narrative (Pentland, 1999; Langley, 1999). The narrative of events and its sequence provided valuable data relating to patterns of events, roles, social networks, relationships, power, cultural values and other contextual aspects. Examples of these in this study are changes in the status of members of the firms after major strategic shifts or restructuring, the roles and place of both family and non-family managers over time, and main culture changes affecting organisational life.

Following Huberman and Miles' ideas (1994), one can argue that there is an iterative relationship between induction (data-driven) and deduction (theory-driven) forms of analysis. In the course of this research we shifted between induction and deduction as a way of testing and

verifying the information gathered. Figure 3.4 shows how the analysis is a process that combines the literature review and refinements in the analytical framework and fieldwork.

FIGURE 3.4: DEDUCTIVE AND INDUCTIVE ANALYSIS IN THE RESEARCH PROCESS



As Figure 3.4 indicates, the analytical process of this research was a constant forward and backward relationship between the case data and the literature to ensure an appropriate analytical framework and the validation of findings. This process corresponds to what Eisenhardt (1989a) calls “*enfolding literature*”, that is to say the comparison of emergent concepts with those already existing in the literature.

Cross-case analysis

After the single case analysis, I move on to the cross-case analysis. The purpose of the cross case analysis was to explain the different determinants of organisational flexibility in the more and less flexible firms (see chapter 10). In so doing, it was possible to compare patterns of behaviour between a highly flexible and a less flexible firm, between two highly flexible firms, and between two less flexible firms. This phase was triggered by writing a conference paper based on empirical data obtained from the two flexible companies (Hatun and Pettigrew, 2001). Writing the paper proved beneficial in clarifying both methods and categories of analysis used in the research. Subsequent reviewer feedback has also been useful.

Different methods were selected to analyse the determinants of organisational flexibility. Each method was drawn from the empirical literature on each determinant. For example, demographic analysis was used to analyse the heterogeneity of the dominant coalition; coding analysis for centralisation and formalisation of decision making, low macroculture embeddedness and environmental scanning. Significance tests were used for heterogeneity of the dominant coalition and centralisation and formalisation of decision making. Finally, discourse analysis was used to understand the identity of the organisation.

The following table briefly shows the different methods used in analysing the determinants of flexibility and their sources. The operationalisation of the different methods is explained in detail in chapter 10 where the different determinants of organisational flexibility are also analysed.

TABLE 3.12: DETERMINANTS AND METHODS OF ANALYSIS USED

Determinant	Data Sources and Method/s	Sources
Heterogeneity of the dominant coalition	-Demographic analysis (quantitative variables and qualitative indicators) -Significance test -Use of qualitative data obtained from the fieldwork	Hambrick and Mason, 1984; Wiersema and Bantel, 1992; Bantel and Jackson, 1989; Murray, 1989; Webb, 1999; Hambrick, 1989
Low Centralisation and Formalisation of decision making	-Coding analysis -Significance test -Use of qualitative data obtained from the fieldwork	Webb and Pettigrew (1999) Webb, 1999
Low macroculture embeddedness	-Coding analysis -Tracking strategic initiatives -Use of qualitative data obtained from the fieldwork	Webb and Pettigrew, 1999; Damanpour, 1991
Environmental Scanning	-Coding analysis -Use of qualitative data obtained from the fieldwork	Daft <i>et al.</i> , 1988; Beal 2000; Choo 1999; Pettigrew and Whipp, 1991
A strong organisational identity	-Analysis of speeches, discourses and letters.	Collins and Porras, 2000; Webb <i>et al.</i> , 1966; Lee, 2000; Hardy, 2001

3.5 Limitations of the research

While the positivist view is that social reality can be observed and recorded by the observer, the interpretivists have come to recognise that the researcher interacts with reality and thus may introduce values and preferences (Easterby-Smith *et al*, 1991).

The researcher thus needed to take steps to minimise any biases that might have inadvertently crept into the social interaction process of collecting case study material or conducting semi-structured interviews. It is important for the researcher not to introduce his own opinions yet remain receptive to the views of the informant (Eisenhardt, 1989a). To ward off this problem, data triangulation was used to validate and give credibility to the findings at the different levels of the research process (i.e., research design, data collection and data analysis), thus lessening the limitations and problems presented by this research.

Guba and Lincoln (1994) and Bryman (2001) suggest three alternative criteria for evaluating the trustworthiness in research. They suggest that trustworthiness is made up of credibility, transferability and dependability. Credibility or feasibility of the researcher's accounts can be obtained by submitting research findings to the companies in which the original research was undertaken to achieve respondent validation. Transferability of findings to other contexts (what is also called generalisability) can be obtained by thick descriptions to *“provide others with what they refer to as a database for making judgements about the possible transferability of findings to other milieux”* (Bryman, 2001:272). Finally, dependability entails the reliability of the process and can be achieved by adopting an audit approach, ensuring that complete records are kept at all stages of the research process. The following table shows the steps undertaken for ensuring trustworthiness of this research.

TABLE 3.13: ELEMENTS TO ENSURE TRUSTWORTHINESS IN THIS STUDY

Stage of the Research	Elements to ensure credibility (C), transferability (T) and dependability (D)
<i>Research Design</i>	<ul style="list-style-type: none"> • Purposeful selection of the industries and cases (C) • Use of multiple case studies (C) • Use of research protocol (C, D)
<i>Data Collection</i>	<ul style="list-style-type: none"> • Use of multiple sources of evidence (C, D) • Pluralism of informants (C) • Tape recording and transcription (D) • Have key informants to review the draft case report (Respondent validation) (C)
<i>Data Analysis</i>	<ul style="list-style-type: none"> • Deductive and Inductive process between theory and practice (T) • Presentations, papers and conference papers (C, T) • Report and discussion with companies of analytical outcomes of the research (C)

However important the steps undertaken to avoid biases and improve the accuracy of the results, this research was still subject to limitations. At the research design level we have used a particular set of indicators to select flexible firms. Further research needs to show whether a selection of other indicators would produce similar results regarding the sample of companies to be analysed.

Questions also arise as to what would have happened in a very stable context (i.e., high levels of regulation). Would the firms participating in a very stable context develop flexible capabilities? What type of organisational capabilities would be deemed important in such a context? Our study relies on an industry in the process of deregulation (i.e., pharmaceutical) and a deregulated industry (i.e., edible oils). However, the results of our research say little about a highly regulated industry. The social reality may vary significantly across other firms and industries, thus more case studies and analysis in other industries are needed.

The selection of the determinants of organisational flexibility as categories of analysis may also have limited the findings of this research. In choosing the five determinants we may have ruled out other possible determinants of organisational flexibility, thus restricting the outcomes of the analysis. We may have foreclosed the possibility of understanding other ways flexibility can be achieved in an organisation.

It is also difficult to apply our findings more generally to companies other than indigenous family firms in emerging markets. While the sample of family firms gave the research control over some of the variation in its findings, it has also constrained the possibility of generalising the findings of the research beyond family firms because of the particular nature of such firms, as explained in section four in this chapter and introduction of chapter 10. More research is needed in which a different sample of companies are analysed (such as MNCs, or indigenous businesses in emerging and developed countries) so as to bring into the analysis other possible determinants of organisational flexibility stemming from different environmental realities. Different methods of analysis would also add value to an area that is characterised by a dearth of empirical studies.

3.6 Conclusions

This chapter has considered the methodology adopted for answering the questions stated in Chapter 2. We portrayed our epistemological assumptions as informed by Giddens' (1979, 1984) structuration theory and Sztompka's (1993) 'social becoming'. We also tried to wed our epistemological assumptions to the contextualist theory of methods. These underpinnings influenced the selection of our research methods: we needed to collect qualitative and quantitative data from different levels of analysis, and we also needed to collect longitudinal data about the process of transformation of the companies as this process sheds light on the determinants of organisational flexibility (Volberda, 1999).

In the light of what has been said, we adopted a two-phase approach. In the first phase, we needed to discover the most suitable industries for the study and rank the companies according to a series of indicators of organisational flexibility. The second phase necessitated the use of comparative case studies to explore the internal process of transformation of the firms and to start to highlight the determinants of organisational flexibility.

However, following our contextualist method of inquiry, we need to start our exploration with three different levels of analysis. Accordingly, chapter 4 is an analysis of the Argentinian business environment over the period 1989-1999. What were the main socio-economic and cultural processes affecting indigenous firms in Argentina? What were the challenges the national context posed the firms in the 1990s? These questions are answered in chapter 4. In chapter 5, we go on to deal with the industry level of analysis. We describe and analyse the main challenges the pharmaceutical and edible oil industries faced over the period 1989-1999. What were the consequences of the economic opening up in the 1990s for the industries analysed? How did the economic changes affect the competitiveness of the indigenous firms in the industries under study? These questions are addressed in chapter 5. In Chapters 6 to 9 we explore the organisational inner context of the four firms in this study. What were the main transformations undertaken by the firms to adapt to the sudden changes of the environment? What strategic initiatives were favoured by the firms under conditions of environmental change? And what organisational and managerial capabilities were considered critical in such circumstances? These questions are tackled in chapters 6 to 9.

Chapter 4: Argentinian Business Environment

4.1 Introduction

Studies of organisation have often omitted the importance of national differences as shapers of the organisational action of firms (Clark, 2000; Whittington and Mayer, 2000; Pettigrew *et al*, 2001). Clark (2000:8) argues that this may have happened due to the fact that many organisational theorists are located in the USA and therefore tend to consider the context of their findings (i.e. the American context) as "*an undiscussed background*" and consequently universalise them. National and regional specificities are, however, becoming increasingly acknowledged as factors affecting the ways in which firms in emerging economies respond to competitive pressures (Pettigrew *et al*, 2001; Hoskisson *et al*, 2000). As this study demonstrates, particular features of the Argentinian business environment had a deep impact on the character and transformation of indigenous firms over time.

Argentina, the country on which this analysis focuses, has been considered a newly industrialised country (Helleiner, 1990), a developing country (Lal, 1975), an emergent country (Contractor, 1998) or a less developed country (Kirkpatrick, 1987; Buckley and Casson, 1985). We consider Argentina to be an emergent country or as having an economy different from that of developed countries.

Hoskisson *et al* (2000) indicate that an emerging market economy can be defined as one that satisfies two main criteria: a rapid pace of economic development and government policies favouring economic liberalisation. The term "*emerging country*", for Zahra *et al* (2000) and Ramamurti (2000), also presupposes economic, social, institutional and political instability compared to economically developed countries.

But what are the particular national features that distinguish the Argentinian national context from others? To what extent have the unique characteristics of the national context shaped indigenous businesses? (Porter, 1990; Clark and Muller, 1996; Clark, 2000). And how

have the national business characteristics impacted on the way indigenous businesses organise themselves, transform and respond under competitive pressures? (Hoskisson *et al*, 2000). Aiming to understand these questions, this chapter is set up as follows: after this brief introduction, section two sets out to understand the different theoretical strands in discussing the importance of the country level of analysis. Two main perspectives are briefly presented and examined: the institutionalist approach and the culturalist approach. Section three introduces the framework we use to understand the National Business Environment (NBE), and section four develops the analysis of the Argentinian business environment. Finally, in section five, we present some concluding remarks.

4.2 Country level of analysis

The structure and operation of firms and markets differ from country to country. These differences stem from variations in dominant social institutions such as the state and the financial systems (Whitley, 1992a). As Whitley (1992a) points out, a country level analysis has to be carried out in order to deal with relations between the national, institutional and firm levels of analysis. Similarly, Sorge (1991) considers that the national level of analysis is important in clarifying the “*affinity*” between the national pattern of organising and the sectors and firms that succeed in the economy.

National factors play an important role in explaining differences in business organisations. The logic behind stressing the national level analysis, as Clark and Muller (1996) state, is that nationally dominant socio-economic configurations, which include attitudes and behaviours, will persist over long periods. The institutional and cultural constraints under which the organisation operates are explained by looking at national features.

Porter (1990) stresses the role of the nation by saying that national attributes and competitive advantage affect the performance of companies in a particular country. The home base is where “*strategy is set, core product and process development takes place, and the*

essential and proprietary skills reside” (Porter, 1990:69). The national context is the source of the main technologies and skills that underpin competitive advantage. Industries will succeed in those nations in which four determinants of national advantage are more present. The four determinants are: the firm’s strategy, structure and rivalry; the factor conditions (i.e., the nation’s position in factors of production such as skilled labour and infrastructure); the demand conditions; and, finally, the related and supporting industries.

The literature has developed different frameworks to explain and analyse how institutions, historical evolution, and the culture of different nations can influence a firm’s behaviour. The debate regarding the level of national influence at the firm level is an old one and is evident in both sociological and organisation theories (Clark and Muller, 1996). The debate in the literature can be divided into two main strands: the “*institutionalist*” and the “*culturalist*”.

As Lane (1989) explains, the “*culturalist*” approach provides an explanation of national diversity that is vital to understanding a particular business organisation. It has concentrated its attention on the practices and values shared by a national community. By contrast, the “*institutionalist*” approach has stressed the social and institutional determinants of business organisation in order to explain business organisation in a specific national context. The institutionalist approach to understanding the interaction between firms and markets, on the one hand, and other social-economic institutions, on the other, has been conceptualised in terms of national business systems (Whitley, 1992a; Ferner and Quintanilla, 1998; Ferner *et al*, 2001), industrial orders (Lane, 1989), or national institutions (Whittington and Mayer, 2000).

In the next section we address the debate between institutionalist and culturalist approaches. The objective is to show how elements of national business systems can influence the life of different organisations and in particular the indigenous businesses of a country.

The institutional and cultural approach

The institutional approach is based on the premise that action, in this case business organisation action, is largely shaped by institutions. Writers who explicitly or implicitly adopt this approach have explored institutions such as the state, the financial institutions, the labour system, the system of general education, vocational education and training, industrial relations, the employment system, and the system of social stratification (Ferner *et al*, 2001; Whitley, 1996 and 2000; Lane, 1989 and 1992; Zysman, 1983). An important group of researchers has examined how long-lasting national patterns were generated by crucial episodes in historical development, including the process of industrialisation (Sylla and Toniolo, 1991).

As Whitley (1992b) states, the dominant institutions of a country and the institutional context in that country influence the business environment by conditioning firms' activities. As examples of these ideas, Whitley's (2000) study of divergent capitalism in East Asia and Eastern Europe shows that in contexts in which the state or other 'systems of collective organization' do not help the market to reduce uncertainty in the long-term, innovation strategies are difficult to develop and sustain (i.e., Eastern European countries in Whitley's analysis).

The point about systems is their cohesion. In this kind of social system, firms, the state, culture and education systems interlock creating distinctive business systems. Whitley (1994) makes predictions about the pattern of business organisation in Europe. He distinguishes types of business systems, ascribing France to the category of 'state co-ordinated', Germany the 'collaborative' and the United Kingdom the 'partitioned'. Whitley (1994) suggests that these business organisation peculiarities lead to particular business strategies and structures in the different countries. In Germany, he expects decentralisation of economic power and owners' involvement in management. In France, Whitley expects centralisation and the owners to be fairly involved. The British partitioned system, on the other hand, is quite distinct: business systems are characterised by being highly decentralised and the owners are detached from the management of firms.

The institutionalist approach has, however, been criticised by the lack of understanding of factors other than institutions. Sorge's (1991) study of systems of organising in Germany and France demonstrates that besides institutions studied by national institutionalists, there are other socio-economic features that help to understand the way countries organise. Among such systems are the systems of recruitment, training and career mobility.

One of the most critical assessments of national institutionalism comes from Whittington and Mayer (2000). On the basis of their study of the evolution of the strategy and structure of corporations in France, Germany and the UK over forty years, Whittington and Mayer (2000) could not match the experience of the corporations analysed with the specific predictions of Whitley's (1994) business systems. They found that businesses in all three countries diversified their strategy and decentralised their structure regardless of the different institutional arrangements: *"The engineering-oriented and bank-connected Germans are just as diversified as the financially driven British. The statist, hierarchical French are even more divisionalized than the federal Germans"* (Whittington and Mayer, 2000:219). Whittington and Mayer (2000) challenged the distinctive business systems institutionalists proposed and put forward a different idea – i.e. convergence based on efficiency.

The influence of cultural attitudes and behaviour on business and management styles complements the approach introduced by national institutionalism. The concept of cultural effect takes account of the fact that societies vary in the arrangement of how their institutions and organisations are composed, and these variations reflect their distinctive traditions, values, attitudes and historical experience. Grasping the local culture can offer indigenous businesses a competitive advantage when competing with foreign newcomers (Sorge, 1991; Hofstede, 1991).

Bartlett and Ghoshal (1989:42) point out that a nation's history, infrastructure and culture influence the country's life *"including the norms, values, and behaviors of managers in its national companies."* The national culture impregnates the way things are done in local firms. Bartlett and Ghoshal (1989) also show how the pioneering spirit and egalitarian values of

American society were less tolerant of the elitism and paternalism found in family-dominated companies in Britain until World War II. These cultural values swayed the managerial culture of the USA by underlining the importance of a corporate meritocracy that fostered a new class of professional managers, to whom owners in turn delegated authority for the running the business.

An important strand of the cultural perspective is based on Hofstede's (1980, 1991) four dimensions of the consequences of culture. The four dimensions he postulates in his examination of dominant value patterns in different countries are: power distance; uncertainty avoidance; individualism/collectivism; and masculinity/femininity. Hofstede suggests that cultural patterns are rooted in the value systems of substantial groupings of the population and that they are also stabilised over long periods in history. These notions can be useful in analysing and understanding managerial behaviour and reactions. This means that managers have cultural differences engraved in their minds, and these in turn reinforce particular values and guide managerial action and choices.

Trompenaars (1992:6) defines culture as "*the way in which people solve problems.*" The impact of this way of solving problems will be seen at three levels: the national, the corporate and professional culture. Trompenaars (1992) considers the cultural differences of one hundred countries and how those differences affect the organisational life of companies in those countries. For example, he indicates the differences between individualistic and communitarian cultures. At the firm level of analysis, this difference impacts on the way people view organisations. Thus, individualistic cultures (e.g., American or British) essentially view organisations as instruments. In such a culture, the ties generated by a firm's structure are abstract, legal ones, regulated by contract. Conversely, in communitarian cultures (e.g., Argentina or Brazil in Trompenaars' typology) organisations are viewed as being part of a social context all members share. Organisations are likened to a large family community that may live longer than its members.

Trompenaars (1992) also differentiates between 'specific culture attribute' (when we engage with others in specific areas of life) or 'diffuse culture' (when we engage in multiple areas of our lives). Therefore, specific cultures such as the American and Northern European ones would prefer systems such as management by objectives and performance-related pay to motivate employees. However, more diffuse societies such as those in Latin America would reject these mechanisms. Performance-related pay is viewed as affecting personal relationships and increasing competition between people with whom you might share not only work but also personal feelings and affection.

An important risk of culturalist approaches is the tendency to over-simplify national cultures and construct cross-culture comparative analyses on the basis of exaggerated cultural stereotypes. Child and Kiesser (1979:269) have indicated that a methodological problem of cultural variables is that these have not been incorporated into "*a model which systematically links together the analytical levels of context, structure, role and behaviour.*" Cultural variables are treated in an ahistorical and static fashion as immanent properties of nations, rather than emergent features of it (Ferner and Quintanilla 1998).

Characterising the national business environment (henceforth, NBE) entails theorising from a multidimensional viewpoint. In so doing we are avoiding the inherent determinism of the institutional approach (Whittington and Mayer, 2000) and the over-simplification of the cultural approach that relies exaggeratedly on cultural stereotypes (Ferner and Quintanilla, 1998).

While institutional arrangements usually shed light on key phases and formative events in the evolution of the nation state, such as the industrialisation process, cultural elements can bring into the discussion and facilitate the understanding of the implications of culture in managerial practices and business organisational behaviour over time (Hofstede, 1991). Our analysis of the NBE therefore examines both institutional and cultural elements to understand the context in which firms have to operate.

But, what are the institutions that can help us to understand the evolution of indigenous firms? How have these institutions shaped the development of national enterprise? And what national cultural elements influence the managerial behaviour of indigenous firms? The next section aims to answer these questions.

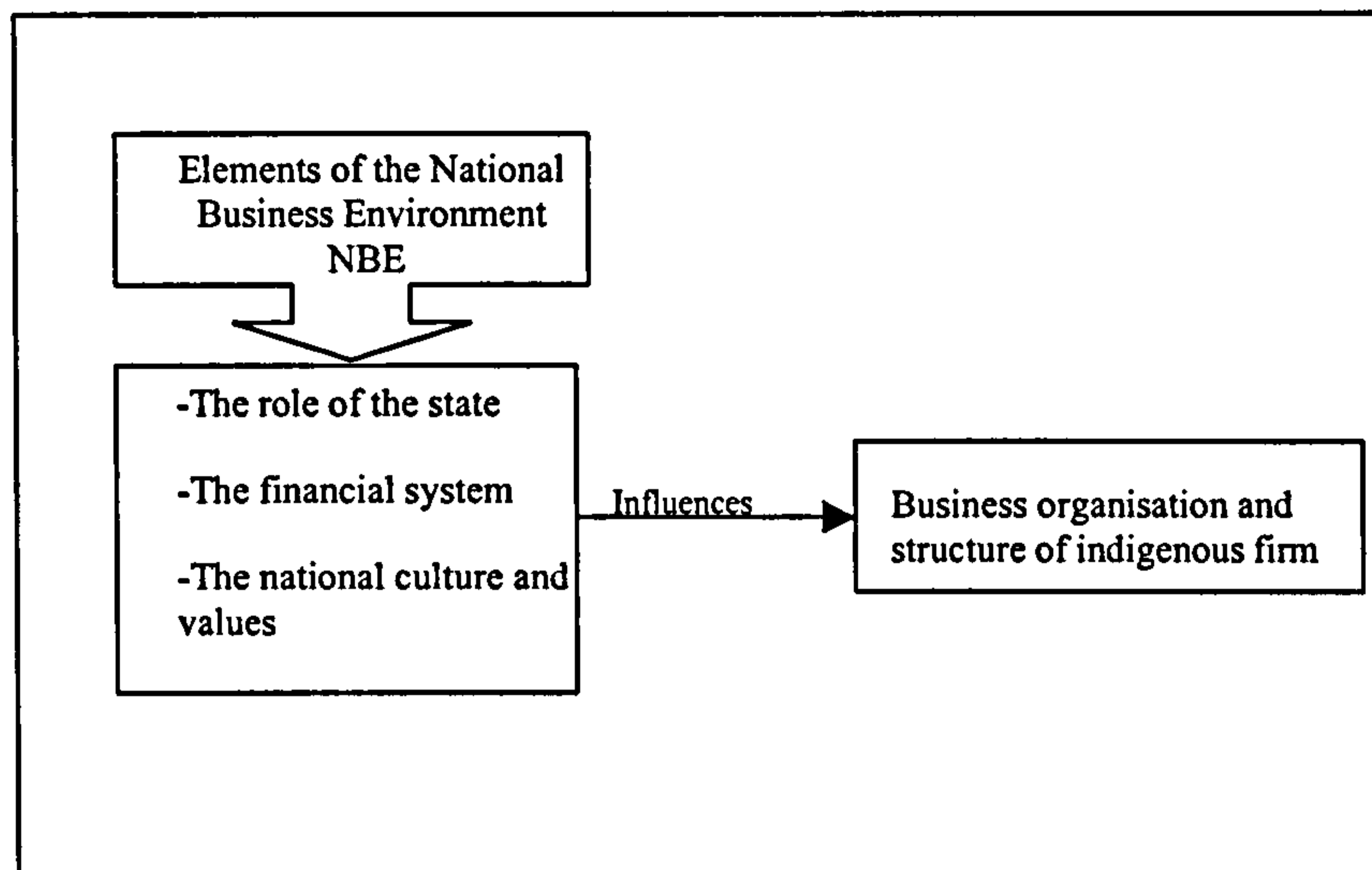
4.3 National Business Environment (NBE)

Drawing on the findings that emerge from the foregoing analysis of the literature, our intention now is to develop a framework called 'national business environment' to provide an understanding of the extent to which the national business features of Argentina have influenced both the development and structure of indigenous businesses in the country.

Our framework of analysis needs to shed light on the process of industrialisation in the country so as to spell out the competitive pressures indigenous businesses faced over time and the radical changes Argentina underwent in the 1990s when its business organisations were transformed. It is by understanding the process of industrialisation of a country that one becomes aware of the evolution of indigenous businesses (Kosacoff, 2000). Sylla and Toniolo (1991) emphasise that it is important to take into consideration the role of the state and the financial institutions. We will also consider the national culture as it can complement and enhance our analysis of the evolution and organisation of indigenous firms. It is not possible to understand organisational and managerial arrangements in isolation from the culture that influences them (Hofstede, 1991).

The following figure displays the framework used in this research to understand the Argentinian business environment. Thereafter, the main aspects of the framework are explained.

FIGURE 4.1: NBE AND THE STRUCTURE AND DEVELOPMENT OF INDIGENOUS FIRMS



The *NBE*: The nation state is considered to be the central factor in the analysis. The nation state demarcates the boundaries for the study of the specific processes of industrialisation, economy, politics and social conventions.

The NBE consists of the social, cultural, economic, political and legal framework in which business activities take place. Understanding the main features of the NBE sheds light on the structure and development of firms in that particular context (Whitley, 2000).

The role of the state: The role of the state is seen to be particularly influential in shaping business systems as well as exerting a direct and an indirect influence on other institutions (Lane, 1992). The state, as the last resort for the legal framework, has a direct influence on the organisation of many of the crucial institutions which shape economic activities, education, the financial system, IR systems, as well as itself constituting one of the major influences on the structure and behaviour of firms (Whitley, 1992 a, b).

The state, as a key potential agent of industrialisation and development, can influence the economy of a nation in a variety of ways. On a broader level, the state can promote, or not, political and social stability that may contribute to economic development by stabilising

expectations and reducing the risk of private economic decision making (Sylla and Toniolo, 1991).

Whitley (2000) gives examples of how the role of the state varies in different countries and affects the structuring of business systems. He contrasts the case of Anglo-Saxon countries in which the state prepares the ground for the private sector to invest (i.e., through legal and institutional arrangements) but prefers to avoid the risk of sharing such an investment, and South Korea in which the state commits significant resources to sharing private-sector investment risks. Through regulation of the market boundaries (i.e., tariff and subsidies) in some countries (Whitley's refers here to Taiwan and Korea) the state remains a dominant collective agent of decision-making compared to less regulated American or European economies. These examples allow Whitley to state that the level of state integration and autonomy influences businesses' dependence on the state and the need for firms to co-ordinate their strategies with state policies (Whitley, 2000).

The role of financial systems: Sylla and Toniolo (1991) argue that the role of financial institutions is critically important as an agent of industrialisation. They exemplify this with reference to how German banks helped to boost industry, while in Britain the accumulation and the profits of pioneer industrialists were enough to meet the long-term financial needs of modern industry, and the bank played a less prominent role in financing industrial growth (See also Whittington and Mayer, 2000; Lewin *et al*, 1999).

A broader interpretation of the importance of the financial system is offered by Zysman (1983) who distinguishes between three types of financial systems, each of them affecting the relationship between banks, industries and firms, and each with different political implications. The three financial systems are: firstly, a financial system based on capital markets where the resources are allocated in competitive markets based on prices; secondly, a credit-based financial system that encourages state intervention; and, finally, a credit-based system that is dominated by

financial institutions. In financial systems based on capital markets, such as in Britain and the USA, the access to capital is dependent upon cost and terms imposed by financial institutions. Stock markets are highly developed. The role of the state is predominantly regulatory. Financial institutions do not usually influence firms internally and the relationship between banks and firms is described as short-term oriented.

In Zysman's classification of financial systems, there are two credit-based systems according to the role that the state assumes. In some cases, the state becomes a player with different degrees of intervention, as in the cases of the French and Japanese. In other systems, as in the case of Germany, a limited number of financial institutions dominate the market independently from government intervention. In both cases capital markets are weaker. In the latter case, most investment credit is provided by banks, which in some cases also own significant amounts of shares in their clients' firms.

The national culture and values: Hofstede (1985 and 1991) argues that organisations have their own culture and prevalent value system, both of which are influenced by the national culture. National values and culture are reflected in organisational life even if the organisation spreads to international markets. He suggests four dimensions in his examination of dominant culture patterns across countries. These are: power distance; uncertainty avoidance; individualism/collectivism; and masculinity/femininity.⁸ The combination of the first two leads people to view an organisation as hierarchical, pyramidal and bureaucratic (i.e., France and other Latin countries) or as an impersonal bureaucracy (such as the Germanic vision of organisations). The outcome of the combination of the other two can give rise to organisations in which people prefer to collaborate with others (i.e., Swedish car factories) or organisations in which people reject this idea and want to work on their own and set their own goals (i.e., American car

⁸ These are the original terms used by Hofstede in his analysis. The researcher acknowledges that they may be unpalatable for the modern reader. Nevertheless, Hofstede's work has proved useful in conceptualising the differences between national cultures and has been influential in the field of cultural studies.

factories). Hofstede concludes that the differences of models in people's minds will not only condition the way they work but also the basic organisational features. Particular cultural differences, which reinforce specific values, guide managerial actions and choice.

One of the main criticisms of Hofstede's approach is related to the creation of abstract dimensions to understand national culture. Alvesson (2000) points out that the rich interpretive capacities of culture can only be utilised if a study takes into account social practices and meanings in the organisation. Abstract cultural explanations or patterns, such as those suggested by Hofstede, fail to capture the complexity that culture entails. Alvesson (2000), however, considers that a specific dimension is appropriate if it is not uncoupled from observable social practice.

Business organisation and development of indigenous firms: The objective here is to analyse the interaction between previous socio-institutional complexes and the nature and structure of firms. These socio-economic institutions allow a closer understanding of the complexities of change and choice faced by indigenous firms and managers operating in the country. Thus, the role of the state in the economy tells us about the market organisation (i.e., if the state regulates the economy, state-owned businesses may dominate the market); the financial system discloses aspects of the predominant ownership in the NBE studied (e.g., whether there is a direct control of owners or whether market-type control dominates); and cultural arrangements reveal aspects of trust and authority relations in an organisation (i.e., trust in formal institutions, social and moral distance between leaders and led, type of authority and corporate governance among others) (Whittington and Mayer, 2000; Whitley, 2000 and 1996; Kristensen, 1996).

So far, the analysis of the literature has revealed different perspectives on the analysis of business systems. Institutionalists have argued in favour of the analysis of what they considered critical specific national factors in explaining differences in business organisation: the

institutions. Culturalists, on the other hand, have stressed differences in national culture as the main element in understanding how firms organise and how managers react.

National particularities are, without doubt, a critical element in shaping the competitive advantage of firms and industries. These peculiarities may have led some companies to adapt and transform their organisations and strategy to achieve organisational flexibility (Lewin *et al*, 1999).

We suggest that without using a pluralistic framework, within which elements from both the institutional and culturalist approaches are taken into account, it is not possible to examine countries and understand the dynamics of their national business system. In the particular case of the framework introduced above, we aim to state both the socio-institutional arrangements of the NBE (through the role of the state, financial institutions and national cultural values) and to understand the link between these arrangements and the development and structure of indigenous businesses in the country. The following section explores and develops elements of our framework of analysis in the case of Argentina.

4.4 The Argentinian Business Environment

The role of the state

There are different theories about the stages of development of Argentinian industry (Kosacoff, 2000; Gerchunoff and Llach, 1998; Llach, 1997; Di Tella and Zimelmann, 1977; Ferrer, 1971). In broad terms, however, three major periods can be identified in Argentina's industrialisation process. In each period, the role of the state was a key factor in boosting that process.

The first period was from around 1880 till the crisis of 1930 when the country became integrated with the rest of the world as an agro-export economy. The second period extended from 1930 to 1989, the chief feature of which was the application of so-called import substituting

industrialisation (henceforth ISI) within a semi-closed economic framework. Finally, a new era for the industrialisation process of the country started in 1989 with a stabilisation plan and the structural reforms of the Convertibility Plan.⁹

First period: the agro-export model (1880-1930): Once its institutional structure was settled, Argentina won a place in the international economy as a dynamic exporter of primary goods and importer of capital and manufacturer goods (Kosacoff, 2000). From 1880 to 1914, the economy was open to foreign investments. The economy was based on the agricultural production of the Pampas. A few major products were developed for export (meat, leather, seeds and wool). There was national and foreign investment in railways, roads, harbours and everything related to the infrastructure. Kosacoff (2000) indicates that during this period, economic fluctuations were linked with both the weather conditions (since the main exports were agricultural products) and the British business cycle (since Britain was the main international trading partner).

During this period the growth of the economy was based on the production of raw materials and the sale of these products to the external market. Exports and imports represented 50% of the GDP (fifty years later this figure had fallen to 20%) (Fodor and O'Connell, 1972; Gerchunoff and Llach, 1998). In 1913 Argentina ranked 11th in the world in terms of GDP *per capita* (Llach, 1997).

The First World War forced the country to develop some industries in an attempt to replace the imports that were no longer arriving from Europe. Textile, shoe and furniture industries appeared at that time. The peak of the industrial activity was reached between 1914 and 1929, during which period industrial production grew 127%. Between 1926 and 1929 steel production rose by 48%. Nevertheless industrial growth was in traditional agro-industries and light industries following the pre-war trend. Productivity gains in agriculture played a major role

⁹ The economic crisis in Argentina that began towards the end of 2001 may imply the beginning of a new economic era in the country. These are, however, early days to make predictions about the economic future of the country. Economic and social stability is needed to understand the far-reaching consequences of the recent crisis.

in inducing industrial growth as well as in increasing *per capita* incomes (Gerchunoff and Llach, 1998).

The state intervened little in the economy and preferred to follow a liberal policy, leaving economic decisions to market forces. However, successive governments during this first stage tried to encourage the export of agricultural products and the special trade relationship with Britain (Floria and García Belsunce, 1992).

The end of the expansion of the agricultural frontier, together with the 1930 international crisis, caused the demise of the agro-export model.

Second period: Import Substituting Industrialisation (ISI) and a semi-closed economy (1930-1989): After the crisis of 1929, the government imposed an exchange control in 1931 and import permits in 1933. As a consequence import tariffs rose. These measures are illustrative of the new way in which the economy operated. The process of substitution of imports was helped by the incipient industrialisation already achieved during the first phase. Furthermore, World War II made it more difficult for imports to reach the country. This was another incentive for the governments of the 1940s to encourage industrialisation in the country.

Industrialisation proceeded rapidly under the auspices of the Peronist regime (1946-1955). Perón saw in industry the potential for high employment and consumption. Three mechanisms were used by the government: restriction of imports; a credit policy for new industries through the Banco de Crédito Industrial; and the promotion of specific industrial sectors through the IAPI (Argentine Institute for Industrial Promotion). Nationalisation of private companies such as the British railways, telecommunications and electricity, among others, marked this stage.

One problem associated with this attempt at industrialisation, which had long-term consequences for Argentinian industry as a whole, was the lack of focus and diversification of industries that developed. The government did not seek advantages in the different sectors. A lot

of the industries that developed were not large enough to benefit from economies of scale. The result was a manufacturing industry with high costs, high salaries and few possibilities of exporting (García Vazquez, 1995).

In 1958, the last ISI sub-period began. The most prominent of all the plans during this sub-period was the one launched by President Frondizi (1958-1961). Heavy industry – such as petrol, gas, paper, chemicals, plastics, metals, machines and cars – was stimulated. Restrictions on imports were very severe. Subsidiaries of MNCs started to participate extensively to fill the gap left by national industries. All this process took place within the framework of a highly protected economy and was a response to the explicit policy goal of raising the level of national economic self-sufficiency (Gerchunoff and Llach, 1998; García Vázquez, 1995).

The 1980s would be critical for Argentinian industry. The ISI stage ended in the late seventies. From 1976 onwards industry passed through a phase of sharp decline. From 1976 to 1982 employment in industry dropped by 37%.

The economic crisis peaked in 1982 but the Military Junta found a way of diverting attention away from the internal problems: it launched the invasion of the Falkland Islands (taken over by Britain in 1833).¹⁰ After a short conflict, the British ousted Argentinian forces. Public outrage alerted the military to the fact that its rule was coming to an end, and signalled the start of a new democratic era in the country (Hinkelman, 1998).

After the re-establishment of democratic government in 1983, led by President Alfonsín (the Military Juntas were in power from 1976 to 1983), the economy began to suffer severe problems. The interest on foreign debt represented 9.4% of GDP (compared to only 2.2% in 1980) which, combined with increasing inflation, fiscal problems and the stagnation of the economy, meant that the new and inexperienced democratic government got off to a difficult start. Although the government implemented some measures (the so-called “Plan Austral”), inflation rose dramatically in 1989. In that year, Argentina experienced a record level of 5,000%

¹⁰ The Falkland Islands are called Islas Malvinas by Spanish speaker.

hyperinflation. In the period 1980-1989, the country suffered an economic contraction close to 14.3% (Gerchunoff and Llach, 1998).

Third period: Economic openness, structural reforms and the role of foreign direct investments (FDI): In 1989, the new government led by President Menem embarked on a process of far-reaching changes in the economy. In the course of five years (1989-1994), the country went from being a tightly regulated and protected economy to an open one, where free competition was allowed. The economic plan, which affected virtually every aspect of the economy, was based on three pillars of reform: monetary; fiscal; and trade and regulatory reforms.

Monetary reform – from which the convertibility of the currency was developed¹¹– and fiscal reforms were necessary to tackle an old Argentinian problem: inflation. Inflation was slashed from its peak of 5,000% in 1989 to 0.7% in 1997. Privatising the state-owned companies and bringing down subsidies helped to reduce government expenditure (Toulán and Guillén, 1997; INDEC, 1998).

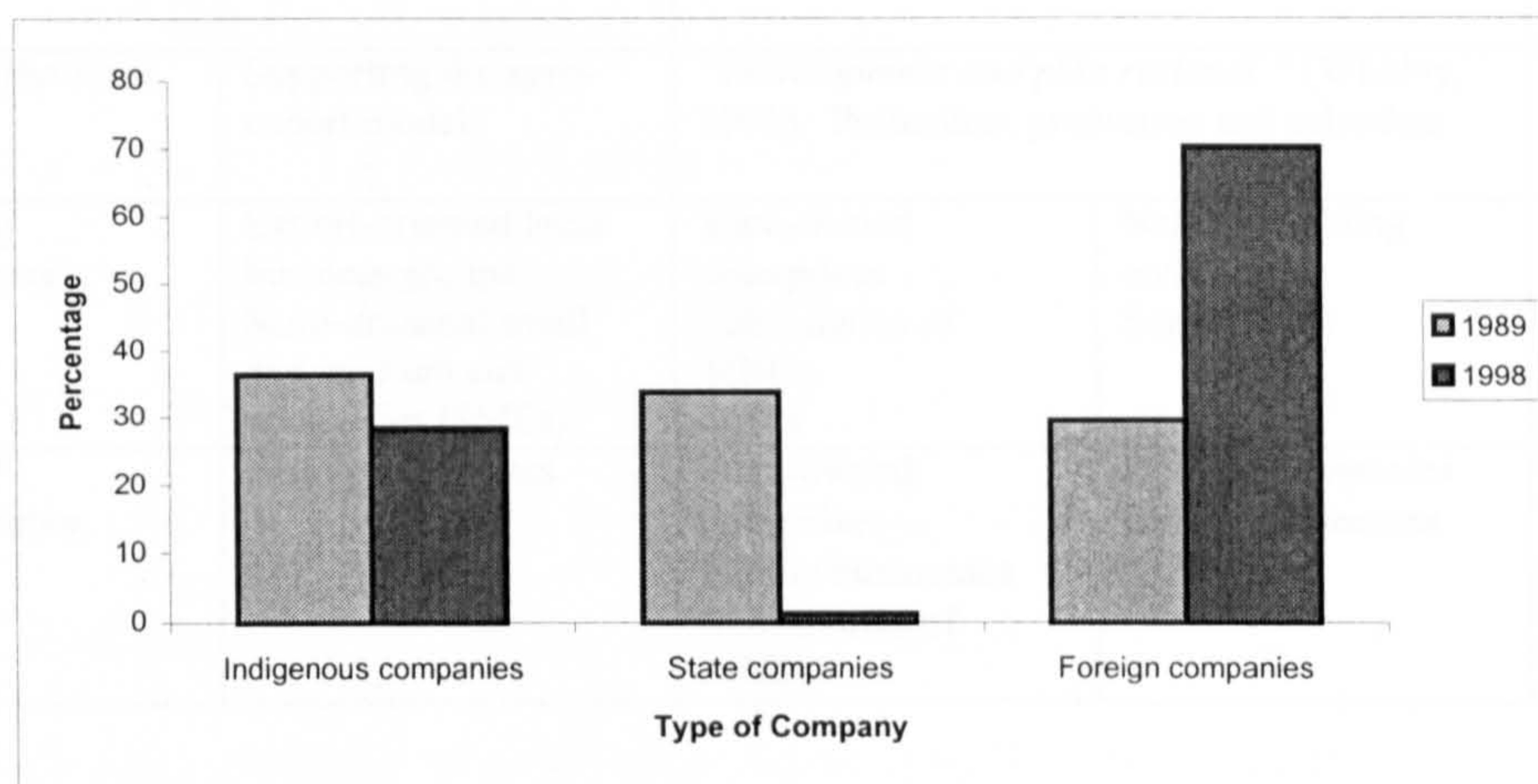
While the monetary and fiscal reforms were important for the stability of the country, it was regulatory reform and the opening up of the economy to foreign trade and investment that impacted on the level of competitiveness of the indigenous companies. In one year (1990-1991), the import tariff was reduced from 18.4% to 11.6%. Additionally, deregulation in different sectors of the economy caused the price of services to plummet (Llach, 1997).

As a result of the privatisation process and the opening up of the economy, the participation of the state diminished throughout the whole economy. Until 1989 the state was the sole supplier of the basic services: gas, oil, telecommunications and electricity were state-owned enterprises. In 1988, the state controlled seven of the first fifteen enterprises (ranked according to turnover). By 1997, the presence of the state in that ranking was reduced to thirteenth position

¹¹ The convertibility plan created a currency board that pegged the Argentinian peso with the US dollar in a one to one parity.

(The National Lottery). In 1992, the state accounted for 17% of companies among the top 100 companies (ranked according to turnover). In 1996 this figure was further reduced to 2%. (Revista Mercado, 1992 and 1997) (see figure 4.2).

FIGURE 4.2: INDIGENOUS, STATE AND FOREIGN COMPANIES 1989-1998 AMONG THE TOP 100 FIRMS¹²



The role of state in the structure and development of Argentinian firms

The participation of the state in the industrialisation process of Argentina had a great impact on the genesis of indigenous firms, their growth and decline in the national market. The following table shows the links between the role of the state in the economy and the type of organisations that were emerging at the different stages of the industrialisation process.

¹² Source: Revista Mercado (November 1999). This ranking takes into account the first hundred companies in the country in terms of turnover. The ranking shows the variations among these companies in terms of ownership structure.

TABLE 4.1: STAGES OF ARGENTINIAN INDUSTRIAL DEVELOPMENT AND THE EVOLUTION OF BUSINESS ORGANISATIONS¹³

Type of context and firm	Agro-export model 1880-1930	ISI and closed economy model 1930-1989		Economic openness 1989 onwards
		1930-1976	1976-1989 ¹⁴	
<i>General framework</i>	Industrial consolidation. British hegemony	Protected market. Industrial self-sufficiency	Protected market	Stabilisation-privatisation-openness and deregulation. Higher competitive pressures
<i>FDI</i>	Mainly directed to infrastructure	Directed to production for the protected market		Directed to privatisations, merger and acquisitions of indigenous businesses
<i>Role of the State</i>	Supporting the agro-export model.	"Development and plan rational." (Whitley, 1991). Protection, promotion and subsidies		Diminished. Focus on deepening structural reforms.
<i>Leading companies</i>	Export-oriented local business groups. Semi-artisanal small and medium size companies (SMEs)	State-owned enterprises Subsidiaries of MNCs. SMEs	National holding companies Some SMEs	Subsidiaries of MNCs
<i>Type of organisation</i>	Family businesses	State-owned enterprises Family businesses Subsidiaries of MNCs	Holding companies Family Businesses	Incipient development of partnerships and collaboration between indigenous groups and MNCs.

At the start of the industrial process, when the state supported the agro-export model, indigenous family firms emerged as the most important presence in the economy. The export of agriculture and meat products was managed by family run farms (*estancias*) (Kosacoff, 2000). After the 1930s, state intervention in the economy in the form of the nationalisation of private companies caused a new type of organisation to emerge: the state-owned company. The protectionism that prevailed at that moment caused small and medium size companies (hereafter, SMEs) to consolidate. In fact, SMEs acquired their main operating features during the period of ISI (Yoguel, 2000). In the 1980s, indigenous holding companies emerged to fill gaps in activities in which the state did not participate (such as the food sector, among others (Bisang, 2000)).

The deep structural changes that took place during the 1990s, however, merit a longer explanation to account for the decline of indigenous family-owned businesses in the country and the role of the state in that process. Three main processes over the decade analysed shed light on

¹³ Different sources: Llach, 1997; Fracchia and Spinetto, 1998; Gerchunoff and Llach, 1998.

¹⁴ Except by the period 1979-1981 in which external openness was attempted (Llach, 1997).

the influence state decisions had on the fate of indigenous businesses: firstly, it is important to mention the impact of structural reforms on strategic thinking and planning; secondly, the sudden withdrawal of the state as one of the most important agents in the economy; and finally, the importance MNC companies acquired over time through the process of privatisation and the merger and acquisition (henceforth, M&A) of indigenous firms.

The structural reforms in Argentina during the 1990s brought economic stability but at the same time competitive pressures and uncertainty for indigenous businesses. The days when nominal macroeconomic indicators were volatile were over. Indigenous businesses were now able to operate in a more stable macro-economic environment. However, indigenous firms had to confront high levels of uncertainty because of the competitive pressures introduced by foreign firms following the opening up of the economy. As a result of this, indigenous firms had to take strategic decisions of a different nature than they had hitherto been used to. These decisions were based on longer planning horizons – a new concept for indigenous companies used to a small and protected market with low levels of competition (Dal Bo and Kosafoff, 2000; Toulán and Guillén, 1997).

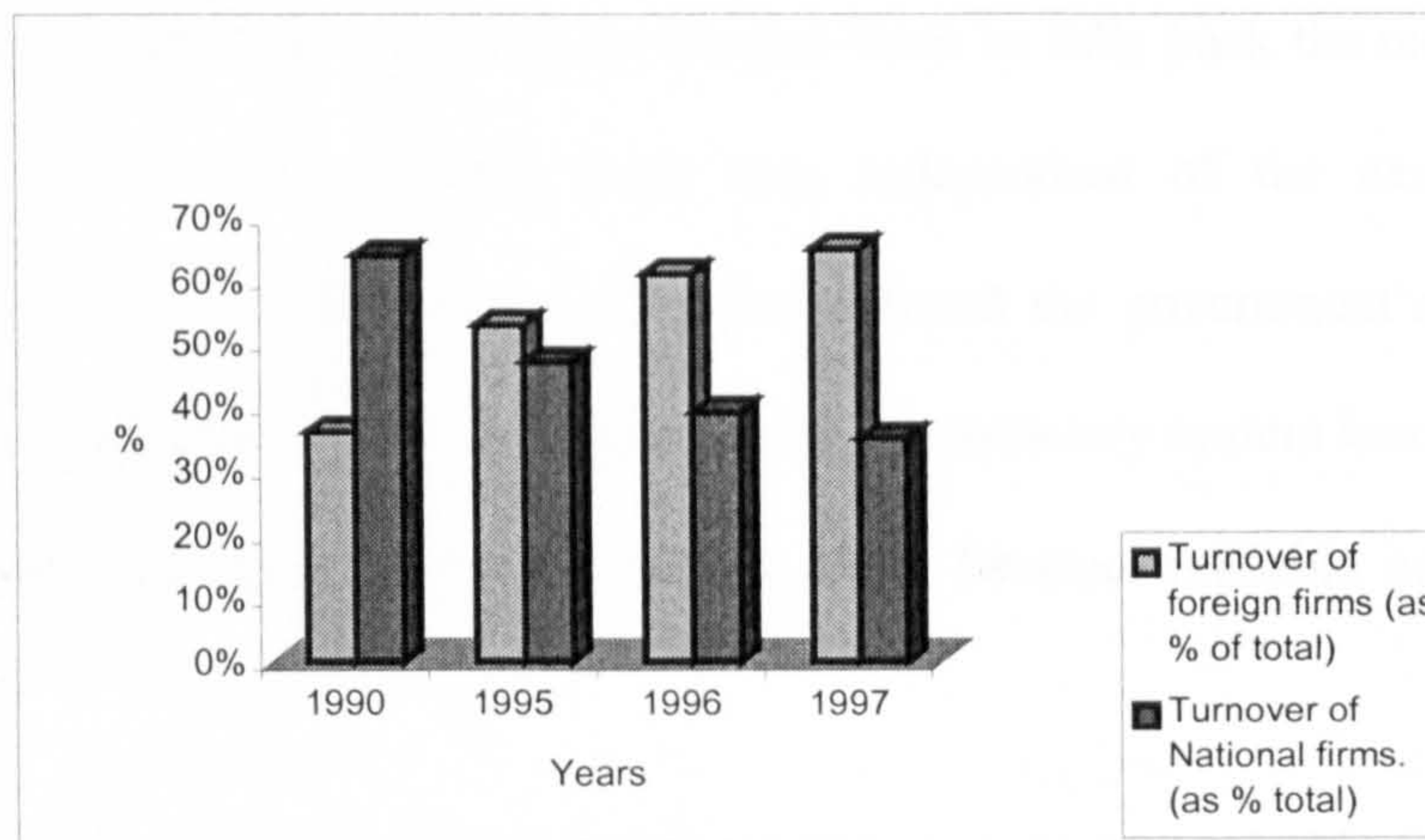
The withdrawal of the state from the economy also had a great impact on indigenous firms. However, the strengthening of indigenous businesses did not naturally follow the withdrawal of the state after the process of privatisation (1991-1994). The state did not favour indigenous businesses in the privatisation process. Foreign firms with the managerial capacity to run the critical state-owned companies were given preference in that process. The state was therefore replaced by foreign firms instead of indigenous firms.

After the withdrawal of the state from the economy, once the privatisation process ended, a process of M&As began in which foreign companies acquired a large number of family businesses. This process changed the map of local competition. The arrival of new participants brought pressure to bear on local firms ruled by a less efficient dynamic. The implementation of

new business strategies and productive techniques by MNCs implied a breakthrough for the local firms which were by no means as efficient as their foreign counterparts (CEP,1998).

Foreign companies were responsible for initiating 66% of the M&As over the period 1990-1998. With the privatisation process, MNCs occupied the role of the state, and by buying indigenous businesses they consolidated their influence in the national economy. Many traditional family businesses decided to sell their companies to a MNC, while others started to play on a different ground. The survivors were companies that could adapt their firm to the new market requirements. This process of selling off national companies (see figure 4.3) influenced the market structure, changing the balance between national and foreign companies within the different sectors (CEP,1998).

FIGURE 4.3: THE SELLING OFF OF INDIGENOUS BUSINESSES IN ARGENTINA¹⁵



The financial system

According to Zysman's (1983) classification, the Argentinian financial system is closer to the credit-based model rather than the market-based type. Underdevelopment of capital markets and a limited number of financial institutions traditionally dominated the system. The dominant institutions in Argentina were banks of different sorts (mainly commercial and stated-owned

¹⁵ Source: CEP (1998) and Revista Mercado (1990), over a sample of the first 160 companies in terms of turnover

banks). This was complemented by strong state intervention that generated a closed financial system for many decades and only began to change after 1990. Throughout the second period of industrialisation (1930-1989), the financial system was used by the state as an instrument of development. During that period, the Central Bank was a regulator of the government's industrial policy (CEP,1998).

In periods of inflation or hyperinflation, commercial credit was not affordable. The lack of loans during inflationary phases necessitated a different business logic. In periods of hyperinflation little working capital was needed (or affordable): buyers had to pay in advance, production was carried out with this money, and the difference due to indexation was collected once the merchandise was delivered (CEP, 1998).

The advent of stability has put a totally different financial system in place. Monetary reform was the most important aspect of transformation of the Argentinian financial systems. The convertibility plan required the Central Bank to fully back the monetary base in the form of foreign assets. The Central Bank was independent of the executive branch, making it accountable only to Congress. This fact reduced the government's ability to use the Central Bank as a last-resort lender. The changes in the monetary system increased the amount of money in the financial system, so commercial credit became available again (CEP,1998; Kosacoff, 2000).

The opening up of the capital markets was accompanied by a shift in their composition. Government banks began to play a smaller role, having been replaced by private lenders, both domestic and foreigner (see table 4.2).

TABLE 4.2: NUMBER OF ENTITIES IN THE FINANCIAL SYSTEM. TOTAL FOR THE COUNTRY (1993-1997)¹⁶

Group of entities	1993	1994	1995	1996	1997
<i>Total number in the system</i>	206	205	158	147	138
<i>National banks</i>	6	3	3	3	3
<i>Provincial and municipal</i>	28	29	27	17	17
<i>Private banks</i>	63	67	57	64	50
<i>Foreign banks</i>	31	31	30	28	37
<i>Cooperative banks</i>	39	38	10	8	6
<i>Non-banking entities</i>	39	37	31	27	25

The role of the financial system in the development and structure of indigenous firms

The credit policy of the state (through its various mechanisms such as the creation of the Banco de Crédito Industrial in the 1950s, IAPI, and the Development Bank, among others) plus the underdevelopment of the capital markets have strongly influenced the type of ownership of firms in Argentina over time. It is no coincidence that the family structure of the firms in the country lasted so long. Given that it was impossible to rely on commercial credit from the local banks (due to high interest rates or the lack of policy to support certain activities) Argentinian entrepreneurs preferred to draw on family savings to fund their enterprises (CEP, 1998).

Over time, Argentinian companies suffered from capital shortages during periods of high growth and/or the state control of interest rates to support economic development. As a result, banks (private or state funded) allocated money to particular sectors and activities such as export industries (during the Perón Presidency) or the heavy manufacturing sector (throughout the 1960s and 1970s). Consequently, indigenous firms found it was more reliable to depend on family funding than to trust in the financial system. Whitley (2000) indicates that direct ownership – as was the case in Argentina – is a direct consequence of low levels of trust in the formal institutions.

¹⁶ Source: INDEC, 1998

The deregulation and liberalisation that has occurred since 1990 has produced a radical transformation and modernisation of the Argentinian banking system. However, as the CEP (1998) reports, access to commercial credit has varied according to the financial capacity of the firms. While SMEs tend to depend to a large extent on national banks, large indigenous businesses tend to be customers of private and international banks. However, the main source of funding for investments is still family savings and net worth (CEP,1998).

The national culture and values

To undertake the analysis of national culture and values in Argentina, we used Hofstede's (1980, 1985 and 1991) analysis, which proposed four national culture dimensions: power distance; uncertainty avoidance; individualism and collectivism; and masculinity-femininity. This is the only study in which Argentinian culture, among others, is analysed on a quantitative basis.¹⁷ Moreover, the study provides a framework for understanding how Argentinian culture has changed over time.

TABLE 4.3: THE ARGENTINIAN NATIONAL CULTURE COMPARED WITH LATIN AMERICAN COUNTRIES AND AMERICA¹⁸

Country	Power Distance*	Uncertainty Avoidance	Individualism*	Masculinity
Mexico	81/70	82	30/33	69
Venezuela	81/66	76	12/28	73
Brazil	69/72	76	38/37	49
Colombia	67/75	80	13/18	64
Peru	64/69	87	16/22	42
Chile	63/56	86	23/38	28
United States	40	46	91	62
Argentina	49/56	86	46/47	56

*The second value in the table corresponds to predictions of the evolution of the value over time (Hofstede, 1991)

¹⁷ Other existent quantitative research in which Argentina was analysed is mainly based on Hofstede model of analysis (see Trompenaars, 1992).

¹⁸ The scores presented in this table corresponds to the findings of Hofstede's work (1980, 1991)

Power distance score: the higher the score the higher the power distance. Scores above 44 are considered to be an indication of a high level of power distance.

Uncertainty avoidance: the higher the score the higher the uncertainty avoidance. Scores above 56 are an indication of a high level of uncertainty avoidance.

Individualism: the higher the score, the higher the individualism. Scores above 50 are considered an indication of a high level of individualism

Masculinity: the higher the score, the higher the masculinity. Scores above 50 are considered to be an indication of a high level of masculinity

Power distance is the extent to which people believe that power and status are distributed unequally and indicates their readiness to accept an unequal distribution of power as the proper way for social systems to be organised (Hofstede, 1991). Power distance in Argentina is increasing over time (Hofstede, 1991). This increase in the power distance score may be explained by Argentinians' attitude towards authority. They do not like authority and do not trust figures of authority. Authority deriving from the state is therefore looked upon with suspicion and state actions are seen as corrupt (The Economist, June 30th 2001).

A recent study carried out by Gallup (see Escribano, 2001) confirms that Argentinians have little faith in their institutions. Only 38% of the people interviewed said they trust institutions in general. The Church and educational institutions were considered the most trustworthy institutions (with 60% and 74% respectively). Political institutions such as Parliament and political parties are not trusted by Argentinians (only 11% and 10% of interviewees respectively considered those institutions to be trustworthy). Another study by Paladino and Willi (2000) considered the particular case of Argentinian managers and concluded that Argentinian managers do not rely on political and legal institutions.¹⁹

Collectivism versus individualism is the extent to which individual identity derives from the collectivity as opposed to the self. Individual cultures are loosely coupled. Individuals are expected to look out for themselves and their immediate families. Status derives from individual accomplishment. Collective cultures rely on membership in groups – social classes, companies, communities, or extended families – for identity and status. People are protected by the group, depend on the group, and are expected to act in the group's best interests (Hofstede, 1980 and 1985).

Argentina is more collective than individualistic, owing, in part, to the high number of immigrants of Spanish and Italian extraction. Hofstede (1991), however, indicates that there is a slight tendency towards more individualism among future generations. The collectivist culture

¹⁹ In the World Economic Forum Report of Competitiveness, Argentina is ranked 51st out of 59 countries in terms of corruption. The average ranking for Latin America was 46.3 (in Paladino and Willi, 2000).

prevalent in Argentina is perceived to derive from a sense of duty and obligation to the family. This is understandable in a society that rejects the state as a reliable authority and falls back on the family or other social institutions (such as the Catholic Church) as trustworthy (Floria and García Belsunce, 1992; Escribano, 2001).

Uncertainty avoidance is the extent to which people are threatened by uncertain, unknown, or unstructured situations (Hofstede, 1980). Uncertainty avoidance is high among Argentinians who are tired of economic and political turmoil. Argentinians always search for the right way to make transitions as quickly as possible. The lack of clear-cut answers and the number of years required for complete transitions encouraged people to retreat into old habits such as avoiding initiative and innovation. These attitudes have been clearly reflected throughout Argentinian history when strong opposition from society has flared up after long periods of economic turmoil (Gerchunoff and Llach, 1998; Muchnik, 1998; García Vázquez, 1995).

Finally, Argentinians have a tendency towards masculinity in Hofstede's (1991) dimension masculinity-femininity dimension. Masculine cultures are characterised by doing and acquiring, rather than thinking and observing. They value affiliation and view failure as much less important. Hofstede (1991) illustrates the masculine character of a society in terms of the way countries resolve international conflicts. He states that feminine countries compromise and negotiate. However, masculine countries fight. As an example of this, Hofstede (1991:100) cites the way the Falkland crisis was handled. The Argentinian military government occupied the islands in April 1982 as a result of which British sent an expeditionary force to rebuff the occupiers. Argentina and the UK are both masculine countries in Hofstede's dimensions, and fighting and acquiring was the way both countries preferred to handle the conflict.

The role of national culture and values in the structure and development of Argentinian firms

How can the features of Argentinian culture and values affect the business organisation?
The national culture and values mainly affect the governance structure of the firms, the ways in

which people deal with each other and other organisations, and the patterns of work organisation and control (Whitley, 2000).

In organisations, power distance, as shown by Argentina, increases the extent of formal hierarchy and the degree of centralisation. On the other hand, it decreases the level of participation in decision-making (Hofstede, 1980; Trompenaars, 1992). Trust and authority relations are also affected. Argentinian managers' unwillingness to delegate authority and employees' unwillingness to take the initiative are emblematic of a higher power distance. In Argentina, the organisation is seen as "*a pyramid of people*" (Hofstede, 1991:141).

Indigenous businesses in societies with high power distance are characterised by a paternalistic culture. However, due to the increasing power distance in Argentinian society, paternalism is remote rather than reciprocal (Whitley, 2000). Remote paternalism implies a high degree of social and moral distance between leaders and led. This paternalistic culture influences the corporate governance structure of indigenous firms. These structures are characterised by a low level of managerial participation and the lack of clear boundaries between the role of ownership and management (Whitley, 2000; Carney and Gedajlovic, 2002).

Argentinian employees' reluctance to take individual responsibility is partly a reflection of their collectivism. The clarity of rules, procedures, job security and systems organisations that companies try to build up, on the other hand, is a clear sign of uncertainty avoidance. Reliance on clear procedures, well understood rules, and detailed job descriptions helps employees reduce uncertainty and cope with their discomfort with unknown situations. Finally, the masculinity and collectivity of Argentinian society will attach importance to group rewards and group empowerment rather than individual performance rewards (Hofstede, 1991) (see table 4.4 for more details).

Hofstede's categories of analysis are taken up by Hamed and Miconnet (1999) in their study of the diffusion of process management practices in the Swedish company Ericsson in three different countries: Sweden, New Zealand and Argentina. Regarding the case of Argentina and

its uncertainty avoidance, Hamed and Miconnet (1999) provide evidence of how employees in Ericsson Argentina are more likely to accept clearly defined reporting systems and responsibilities than their counterparts in New Zealand and Sweden. In addition, reward systems associated with the idea of taking risk, for instance performance-related pay systems, are rejected by Argentinian employees who are sensitive to uncertainty. They also suggest that Argentinian employees are less individualistic than their counterparts in New Zealand and Sweden, making it easier to foster teamwork, as the research fieldwork in Ericsson Argentina showed.

TABLE 4.4: IMPLICATIONS OF NATIONAL CULTURE FOR ARGENTINIAN BUSINESSES²⁰

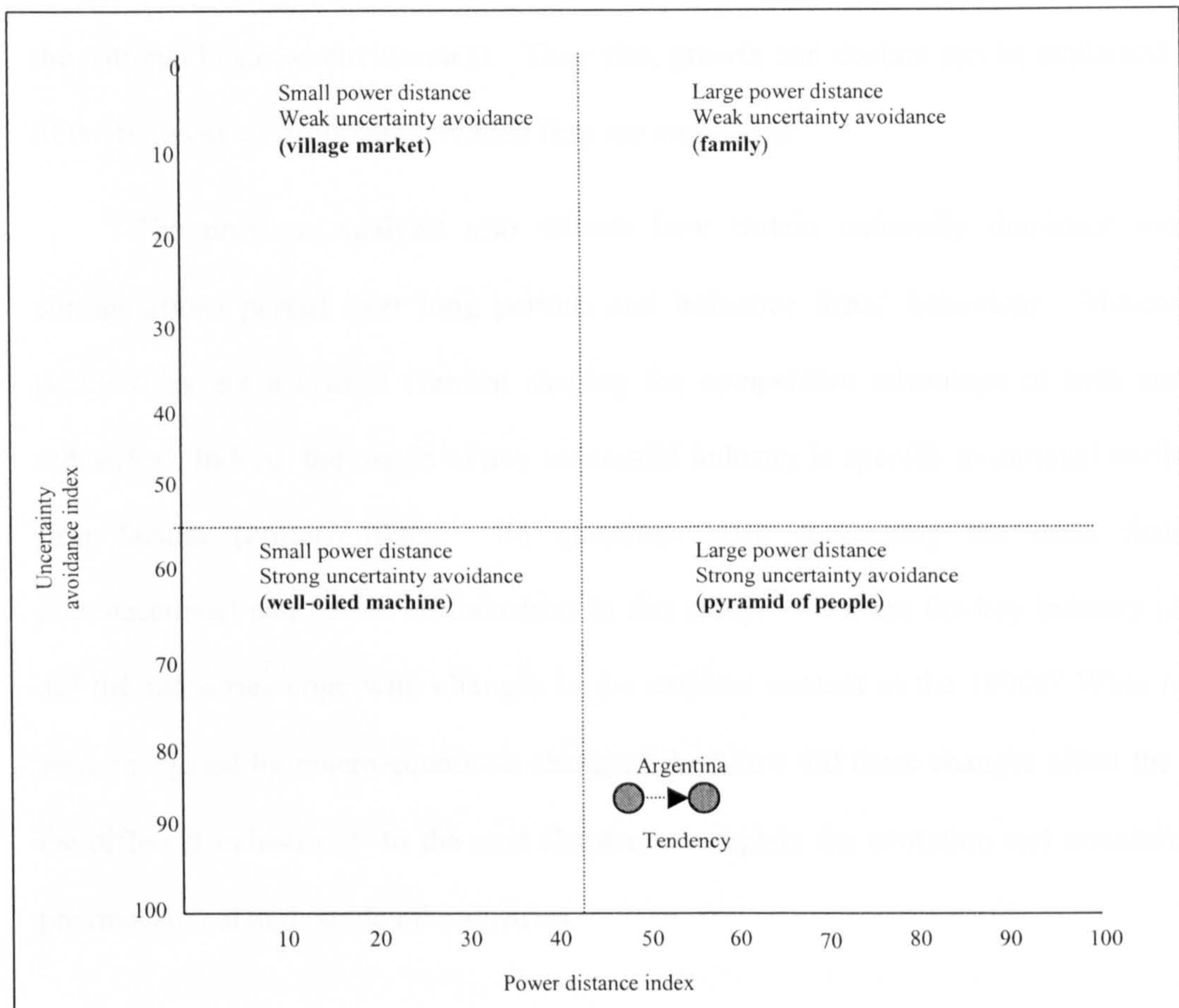
National culture factors affecting firms (Whitley, 2000)	High Power Distance	High Uncertainty Avoidance	Collectivism	Masculinity
Governance	-Top-down leadership -Paternalist-remote governance	-Important to know who has the authority over who, and who to obey	-Tendency towards multiple reporting	
Relations (within the organisations)	-Hierarchy is important -Distant relation between top management and employees -Favours upward delegation -Employees with low level of participation of decision-making.	-Well defined hierarchy -Consensus important -Avoid conflict -Rules and procedures needed to be clear	-Hierarchy reflects personal status rather than achievement -Emphasis on relationships rather than tasks -Appeal to collective identity	-Group empowerment
Work organisation and control	-High levels of centralisation of decision making - People do not feel responsible for results -Risk-taking at the top -Change is a top-down process -High resistance to change	-Formalisation of decision-making -Tight control, based on well-established rules and standards -Emphasis on precision and routines -Innovation avoidance -Change perceived as a threat. High resistance	-Requires more control and dedication to norms of behaviour -Responsibility tends to become diluted within the group -Change is seen as a challenge to the group -Change is slow and shared	-Rewards for status difference not for performance difference

²⁰ Sources: Hofstede (1980, 1985 and 1991); Laurent (1986); Trompenaars (1992); Granell *et al*, 1997

The power distance and uncertainty avoidance dimensions emerge as important ones in understanding how organisations undertake processes of change (Granell *et al*, 1997). According to Hofstede (1991), faced with a situation or decision, an organisation has to ask itself two questions: who are the people with the power to decide? And what are the rules or procedures to be followed in order to achieve the desired objectives? The answer to the first question is closely linked to the way power is distributed in the organisation. In the case of high power distance, there are few people in the organisation who can start the process of change. Where there is low power distance, the process of change is much more of a joint effort. The answer to the second question is linked to uncertainty avoidance: when uncertainty avoidance is high, people look for clearly defined and standardised procedures, whilst when uncertainty avoidance is low, things tend to be simpler and more informal. The change process, however, is bound to be easier when uncertainty avoidance is low. Figure 4.4 shows the models of organisation proposed by Hofstede (1991) as a result of combining the two dimensions previously analysed (power distance and uncertainty avoidance).

Regarding the organisation as a pyramid of people (as in the case of Argentina, see figure 4.4) makes change a difficult process. Employees may therefore perceive change as threat. In such an organisation, resistance to change is bound to happen (Granell *et al*, 1997). Granell *et al*'s (1997) study in Venezuela (which, in terms of Hofstede's uncertainty and power distance dimensions, has similar characteristics to Argentina) suggests that in countries with similar characteristics to Venezuela, the process of change will be successful when employees know the changes planned in advance. To be successful, Granell *et al* (1997) suggest, change processes require time and patience. Change must be slow and gradual. In such a culture, Granell *et al* (1997:151) continue, "*anticipating change is better than having to react to it.*"

FIGURE 4.4: IMPLICIT MODELS OF ORGANISATIONS IN HOFSTEDE (1991). THE CASE OF ARGENTINA²¹



4.5 Conclusions

The structure and development of indigenous firms are to a large extent the reflection of the institutions, values and assumptions of different societies. The analysis of the Argentinian business environment in terms of the role of the state and financial institutions in the industrialisation process and national culture and values reinforces the fact that specific national factors play an important role in explaining differences in business organisations.

The Argentinian case is a good example of a country and a business system that, despite undergoing a radical transformation and modernisation in a very short period, is significantly

²¹ Source: Hofstede (1991)

imprinted by its past institutional legacy. Indigenous firms were also shaped by the changes in the national business environment. Their rise, growth and decline can be explained as a product of the business environment in which they are embedded.

The previous analysis also reflects how certain nationally dominant socio-economic configurations persist over long periods and influence firms' behaviour. Moreover, national peculiarities are a critical element shaping the competitive advantage of both companies and industries. Indeed, the origin of any successful industry is specific to national attributes and not firm factors (Porter, 1990). So questions arise concerning the main features of the pharmaceutical and edible oil industries in this study. What are the key industry phases? How did the industries cope with changes in the national context in the 1990s? What new practices were instigated by macro-economic changes? And how did these changes affect the firms within the different industries? In the next chapter, we explain the evolution and transformation of the pharmaceutical and edible oil industries.

Chapter 5: The pharmaceutical and edible oil industries

5.1 Introduction

This study draws a clear distinction between the terms ‘sector’ and ‘industry’. Analysing the innovation process at the car manufacturer Rover, Whipp and Clark (1986:26) define ‘sector’ as a notion that *“applies to collections of enterprises which provide similar goods and services, possibly in competition with each other, though the degree of competition may well be regulated in practice.”* In his model for assessing competition within an industry, Bain (1968) distinguishes sector from industry. He points out that we are dealing with a sector when different firms engage in a productive activity that has some common functions. At the same time these firms also have differences, and the differences frequently stem from firms that *“in the same sector may produce quite different goods or services, fulfilling different needs of buyers and perhaps catering to entirely different groups of buyers”* (Bain, 1968:6). In this case, following Bain’s definition, we are in the presence of an industry. Thus, we can talk about the food sector but we may also distinguish between the different industries within this sector such as dairy products, edible oils, and food processing, among others.

Another possible definition is one that sees the industry as related to the concept of market. The market exists when *“there is an exchange of goods or services between sellers and buyers, shaped by the forces of supply and demand and co-ordinated by the price mechanism”* (Gospel, 1992:2). Based on Gospel, it is possible to say that an industry is a group of many actors, who interact with the same kind of product or services according to a distinctive logic of action and interest. Every industry is unique, with its own nature and dynamics and also its own evolutionary path.

In their theoretical work on strategic groups, McGee and Howard (1986) also take the market into account in order to define industrial boundaries. Furthermore, they include another criterion –that is, technology – that stresses the similarities in the processes the industry uses.

The academic literature has analysed the influence of industries on firm's behaviour from different angles. In some fields, such as Industrial Organisation (IO), a whole body of research is devoted to the factors determining performance in an industry, and to explaining why, in some industries, companies obtain consistently higher returns on investments than in other industries. The basic idea postulated by this approach is that the structural characteristics of industries influence the conduct of organisations and, in turn, this behaviour affects performance (Bain, 1968). More recently, McGahan and Porter (1997) argued that industry effects are more persistent over time than other kinds of effects such as business or the corporate-parent effect. They found no support for the idea that a rapid change in the economy diminishes the importance of industry effects.

The notion of fit between environment (in a broad sense), industry requirements, a firm's strategy, and its structure has played a key role in developing the strategic management literature. The fit between industry features and the firm's strategy has also been used extensively to explain why some firms do better than others (Chandler, 1962). Another stream of the IO approach argues that the firm's strategy has a feedback effect on the market structure. Porter (1981 and 1985) points out that the industry is not a cage in which the firm is held prisoner. Through their strategies, firms can influence the forces that determine industry profitability. Firms can shape an industry's structure, changing its attractiveness for better or worse. Moreover, a firm's innovation can increase or reduce entry barriers.

From the institutional perspective, isomorphism as an effect is stressed. Having ties with the institutional environment can help companies to be less vulnerable (Baum and Oliver, 1991). Industry experience benefits the organisation because the industry reflects "*the interdependencies between competitors*" (Ingram and Baum, 1997:97)

The contextualist approach has also taken into account the importance of the sectoral level of analysis. Pettigrew (1990) states the importance of multiple levels of analysis when studying processes of change. The firm, sector and national economy are the three levels of

analysis that need to be taken into account because the context in which firms are embedded consists of an intertwined set of relationships and links between the firms, sectors and the national economy.

Different studies have been carried out from this perspective. Pettigrew and Whipp (1991), for example, analysed the competitive and strategic behaviour of eight firms in four different industries. For them, a firm's strategy, competition and strategic change are related to the sectoral and national environment in which it is immersed. A similar analysis can be found in Berg (1979), who studied the process of change in a glass manufacturing company, in Whipp and Clark (1986), who studied the process of innovation in the automotive industry in Britain (Rover in particular), and in Child and Smith (1987), who examined the transformation process at Cadbury.

The above review shows that the sectoral or industry level of analysis is a crucial element in the understanding of a firm's behaviour. Companies do not operate in a vacuum, but always conduct their business in a particular configuration of an industry within a nation state. Furthermore, sectors and industries are the main element within which the country features are operationalised. The industry level of analysis is seen as a crucial mediator, a meso-level, which allows us to link the micro-level of the individual firm with the macro-level of the nation state.

The key questions that emerge from the previous review are: what were the main characteristics of the pharmaceutical and edible oil industries over time? What were the main changes during the 1990s? Why have these industries changed radically over the period 1989-1999? And finally, what were the main competitive pressures for indigenous businesses stemming from the industries' transformation?

After this introduction, sections two and three aim to answer the above question in relation to both the pharmaceutical and edible oil industries. To facilitate the analysis of the industries we have followed the following sequence: firstly, the market structures are examined. Secondly, the historical development of each industry is explained. Thirdly, the changes in the

industries throughout the 1990s are highlighted. Finally, the competitive pressures for indigenous firms stemming from changes in the industries are also underlined. In section four, we explain the main characteristics of both the pharmaceutical and edible oil industries as hypercompetitive environments.

5.2 The pharmaceutical industry

The pharmaceutical industry is one of the most dynamic industries in Argentina, representing 1.1% of the GDP and sales of US\$ 3,557 million with an average annual growth of 6% (INDEC, 1998 and Financial Times, March 4th 1999). Total spending on health care in Argentina represents 7.21% of GDP, while in Latin America this figure is 5.7% on average (Claves, 1999). Argentina, one of the few countries with pharmaceutical innovative capabilities (Katz, 1992; Ballance *et al*, 1992) is the 10th largest market in the world and represents 1.5% of world sales (see table 5.1). This fact makes the market very competitive with nearly all renowned MNCs having a presence in the Argentinian market.

TABLE 5.1: WORLD RETAIL PHARMACY PURCHASES (US\$ MILLION)²²

Countries	Total sales	World ranking	% change 1998-1999
<i>USA</i>	74,095	1	11
<i>Japan</i>	38,764	2	-1
<i>Germany</i>	15,470	3	6
<i>France</i>	14,165	4	4
<i>Italy</i>	9,123	5	8
<i>UK</i>	8,385	6	8
<i>Brazil</i>	6,536	7	-5
<i>Spain</i>	5,284	8	11
<i>Canada</i>	4,276	9	11
<i>Argentina</i>	3,557	10	6
<i>Mexico</i>	3,263	11	11
<i>Australia/New Zealand</i>	2,464	12	8

This chapter sets out to describe the structure and development of the industry over the period 1989-1999 in which the pharmaceutical industry shifted dramatically. The particularities

²² Source: Financial Times, March 4th, 1999. The information provided is for sales of prescription drugs. It excludes the OTC (over-the-counter) market sales.

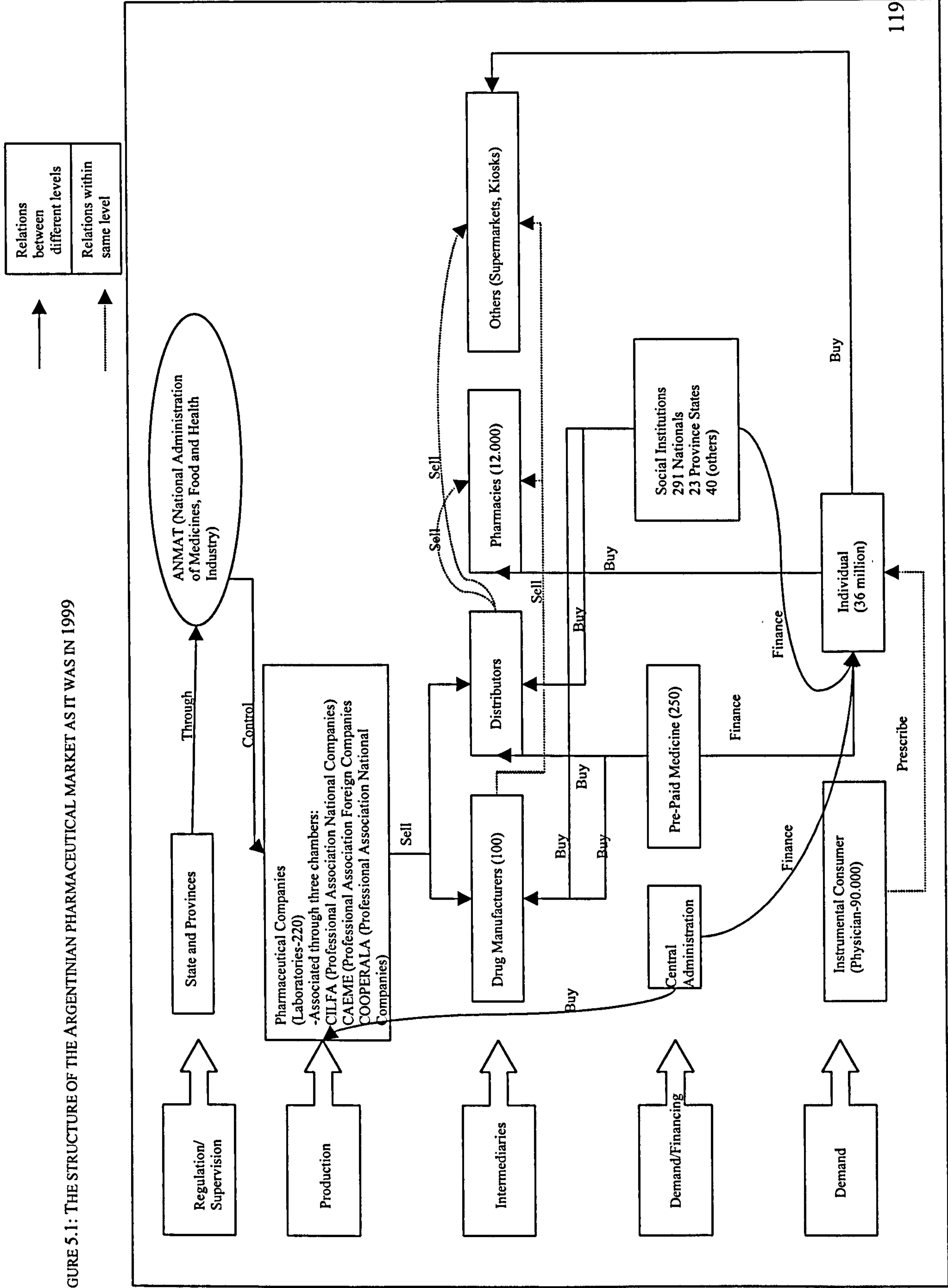
of the industry, the regulations in force, and changes in the national economy played a critical role in the changes the industry underwent. These aspects are considered in the analysis.

The pharmaceutical market structure

Describing the structure of the market can be a complex process due to the different actors and regulations in force in the market. Figure 5.1 is an attempt to simplify the structure of the pharmaceutical industry in Argentina.

**PAGE
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FIGURE 5.1: THE STRUCTURE OF THE ARGENTINIAN PHARMACEUTICAL MARKET AS IT WAS IN 1999



Agents and Roles

The pharmaceutical market in Argentina involves a set of production, distribution, financing, consumption and regulation functions. There is a group of players or agents that assume different roles in these functions.

The agents that act in production are fundamentally medicine laboratories and, on a smaller scale, drug manufacturers and pharmacies. There are also some provincial public laboratories in charge of producing medicines to be supplied to the public health system (González García *et al*, 1999; IMS, 1999).

Although there are 220 active companies, the largest laboratories are responsible for most sales. In the prescription drug market, the ten largest companies account for 40% of sales, and the forty largest companies are responsible for more than 80% of the sales (IMS, 1999 and Claves, 1999). The market concentration is increasing for the prescription drug market, which represents more than 90% of sales. Indigenous businesses represent 51% of the total sales in the sector (IMS, 1999).

The industry's main professional bodies are CAEME and CILFA. The former, defending intellectual property and the patent system, gathers together MNC companies; the latter, defending the national industry, unites indigenous businesses. COOPERALA brings together indigenous medium and small size companies (Claves, 1999).

The commercialisation agents are distributors, drug manufacturers and pharmacies. Among distributors there are four large companies with domestic capital and a few small regional distributors. Drug manufacturers, on the other hand, number more than one hundred. Finally, there are almost 12,000 pharmacies in Argentina that are responsible for retailing. Furthermore, kiosks and supermarkets are becoming increasingly important in the sale of over-the-counter (henceforth, OTC) medicines (Manzone, 2000).

With regard to demand, there are different financing agents. On the one hand, there are the institutional agents: social institutions,²³ prepaid plans, and the central administration. On the other hand, there are private citizens who buy medicines financing the purchase in total or in part by means of a direct payment.

There are two kinds of consumers of medicines. The instrumental one – the physician – who decides when and which medicines must be used, and the consumer, who actually consumes the product. Unlike most product markets, the demand for drugs does not depend exclusively on consumer tastes. In many instances, pharmaceuticals are chosen by doctors or pharmacists and are paid for subsequent to their purchase by health insurance schemes other than final consumers. In the best case, the final consumer can choose where to buy the medicines, request substitutes and even decide to suspend the medication. On the other hand, physicians (instrumental consumers) often prescribe the brand directly, limiting the possibility the end consumer might have to request a substitute product (Manzone, 2000; Claves, 1999).

The regulation and supervision of the industry is a responsibility shared by the Central Government and the Provinces. The industry as a whole has been subject to government regulations. Within the inter-jurisdictional division of the work, Provinces have maintained supervision functions while the Central Government, through the National Administration of Medicines, Foods and Health Technology (ANMAT) has retained the quality control and registration of products (Katz, 1997).

The historical development of the pharmaceutical industry in Argentina

The Argentinian pharmaceutical industry was and still is characterised by a strong national identity. A number of factors can help to explain the relative success of domestic enterprise, including the reduced rate of innovation in the 1960s and 1970s in the drug industry worldwide and the fact that most of foreign firms showed a lack of interest in the Argentinian

²³ Called 'obras sociales' in Argentina.

market (UNCTC, 1984). However, the success of Argentina's drug firms cannot be attributed to these factors alone. The success of domestic pharmaceutical companies in Argentina, as Chudnovsky (1979) points out, was also due to their distinctive strategy, which was made up of the following elements: a) emphasis on marketing skills and product differentiation activities; b) the use of licenses to gain access to difficult sub-markets; c) opposition to a strong patent system in order to obtain active ingredients from non-patented sources; and d) a certain degree of local technology.

During the phase in which this industry was set up, it adopted an industrial organisational model that benefited indigenous firms through a relatively favourable institutional and regulatory framework that granted them a rapid expansion *vis-à-vis* the subsidiaries of MNC companies.

Katz and Burachik (1992) state that throughout the 1960s and 1980s three types of companies were found in the Argentinian market: firstly, indigenous firms vertically integrated towards local production of pharmaceutical raw material; secondly, it was also possible to find indigenous firms that imported all active principles they used in the local manufacture of medicines. And finally, there were subsidiaries of MNC companies that bought the raw material necessary for production from their own headquarters.

The companies that operated with imported pharmaceutical raw materials were supplied by non-patentist countries such as Italy, Spain or Hungary, and therefore paid prime prices significantly lower than those charged by multinational firms' headquarters. Another group of companies decided to integrate their local operation vertically by manufacturing active principles or raw materials. With that purpose, they had set up small multipurpose chemical plants in which they manufactured reduced quantities of the chemical product required. Unlike national companies, the subsidiaries paid a transfer price which was significantly higher than those in the non-patentist world, thereby reducing the possibility of competing by lower price (Chudnovsky, 1979; Katz, 1992; Bogo, 1994).

It is important to understand that the coexistence of these three different production organisations was only possible in a particular institutional and regulatory framework that was characterised by three main aspects:

1-The government gave priority to indigenous firms in the registration of new pharmaceutical products (Vernengo, 1992);

2-National legislation did not recognise product patents in the field of pharmaceuticals (Chudnovsky, 1979);

3-The maintenance of a high level of tariff-protection for domestic production of pharmaceutical raw materials (Chudnovsky, 1979; Bogo, 1994).

The institutional framework described above fostered the expansion of indigenous business throughout the 1960s, 1970s and 1980s.

Changes in the pharmaceutical industry in the 1990s

In the 1960s, 1970s and 1980s the pharmaceutical industry was protected and stable, and based on an institutional framework that allowed that. The 1990s, when the regulatory framework on which the industry relied was lifted, represented a major shift.

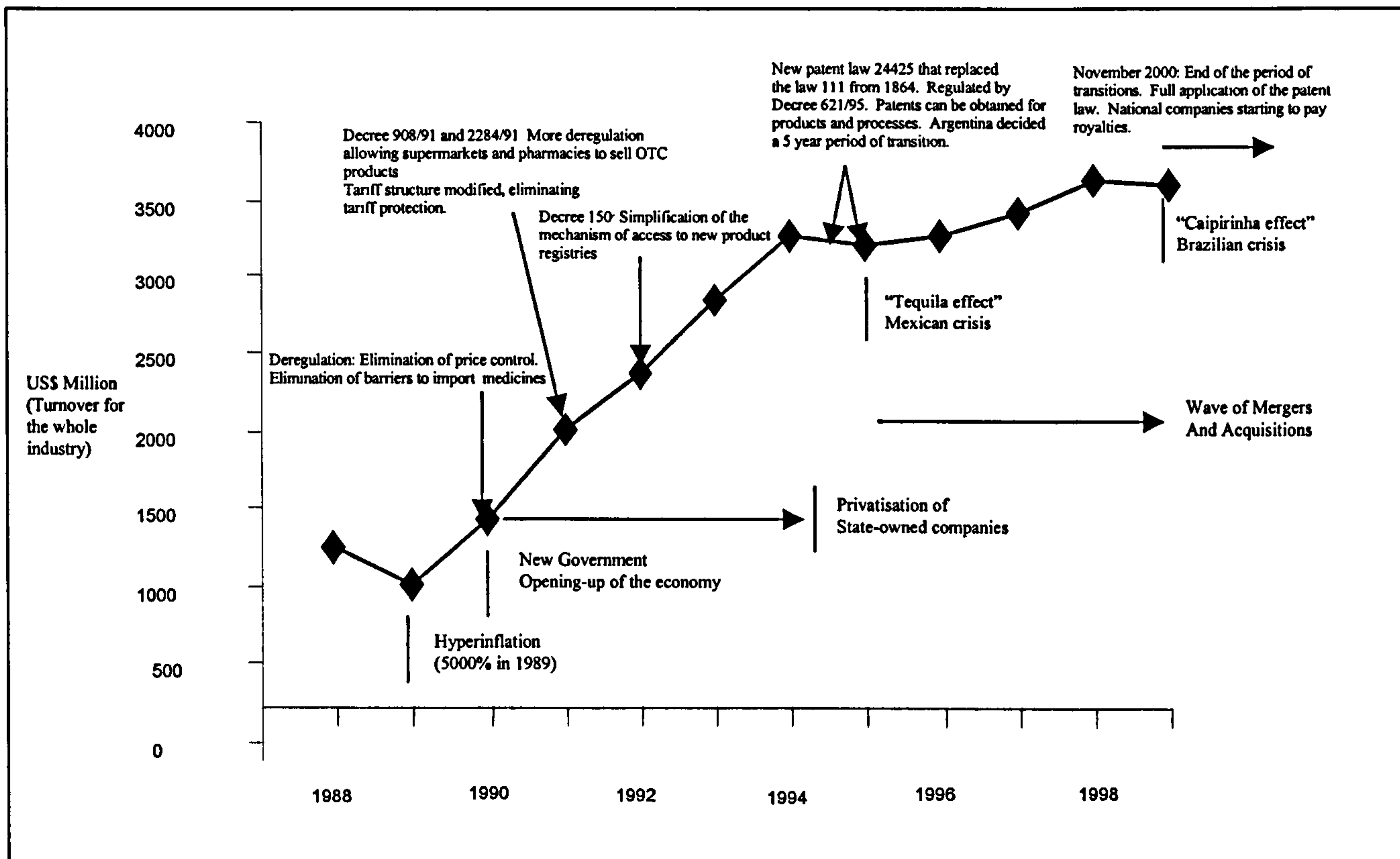
The structure and regulatory framework of the pharmaceutical industry changed dramatically during the 1990s. The external openness of the economy, the deregulation of economic activity and revitalised competition became the basic philosophical pillars on which the new pattern for the industry was established (see figure 5.2).

At least three major elements of the new regulatory scenario affected the pharmaceutical industry, representing, as Katz (1992) points out, a shift away from the former system that had prevailed in the industry over almost three decades. The three issues were:

a) The elimination of price control over medicines;

- b) The simplification of the access mechanism for the registration of new products;
- c) The modification of patent law.

FIGURE 5.2: CONTEXTUAL INFLUENCES IN THE PHARMACEUTICAL INDUSTRY IN ARGENTINA 1989-1999



Elimination of price control in medicines

At the end of 1989 and the beginning of 1990, the policies of deregulation of the economy resulted in the elimination of the regime of price control in the industry and its subsequent liberalisation, breaking the tradition of more than a decade of prices controlled in various ways (maximum, regulated or agreed prices) (Katz and Burachik, 1992).

Another measure for decreasing the price of the medicine was the elimination of barriers to the importation of medicines and active principles coming from countries with similar or greater quality controls than domestic ones (Decree 908/91).

However, the mechanism implemented failed completely to achieve the objectives sought, and in 1991 Decree N° 2284/91 was sanctioned. This decree opened a new phase in the deregulation programme, and came to play a leading role within short-and long-term public policies. This Decree –insofar as it related specifically to the pharmaceutical market – authorised the sale of OTC specialties in shops other than pharmacies and also made it possible to set up new pharmacies (Decree 2284, 1991).

The tariff structure was also modified, eliminating tariff protection for most products, that is, raw materials or end products. Only a reduced group of products have remained subject to a tariff of 11% (González García *et al*, 1999).

Simplification of the mechanism for the registration of new products

One of the most important innovations introduced by Decree 150/92 consisted of granting automatic entry in the Registry of the Ministry of Health to all those medicines authorised in the following countries: countries of the European Union, Canada, United States, Japan, and Israel. The implicit objectives of such a policy were: firstly, to speed up authorisation to commercialise medicines of domestic or foreign origin thus taking advantage of the assessment and control capability of the health authorities of leading countries; and, secondly, to favour the competitiveness and transparency of a market that continued to resist attempts to establish stability (Katz, 1997).

The Decree also introduced modifications in the commercialisation of generics. The modification of the regulatory framework pretended to fulfil a double purpose: first, to promote the use of generic over branded products and to keep costs down within the health sector; second, to provide more information to physicians, pharmacists and the consumer-patient.

Modification of the patent law

This is probably one of the most controversial changes made and one that had consequences in the long term for the industry as a whole. The changes in the legislation regarding patents, nonetheless, must be analysed within the context of what happened in the international arena, and specifically with reference to the debates held during the Uruguay Round of the GATT, TRIPs (Trade Related Aspects of Intellectual Property Rights) and, TRIMS (Trade Related Investment Measures). The final object of this body of institutions and rules was to strengthen the protection of property rights over technological knowledge by extending that protection to fields that have traditionally been very weakly covered, like that of pharmaceutical products and genetic innovations (Katz and Burachik, 1992).

This process ended with the TRIPS (Trade-Related Aspects of Intellectual Property) – GATT Treaty on April 1994, called the Marrakech Multilateral Agreement. It was ratified by Argentina through Law 24425 in December 1994 and regulated by Decree 621/95. The treaty consisted, among others, of the following aspects:

- a) Patents can be obtained for all inventions of products or procedures in every technological field as long as they are new, entail an inventive activity and have an industrial application;
- b) Written data or other compilations of material that, due to reasons of selection and layout of their contents, constitute creations of intellectual nature, will be protected as such;
- c) The protection conferred by a patent will not expire before a twenty-year period has elapsed, calculated from the date on which the application was presented (Law 24425, 1994; Decree 621, 1995).

For indigenous companies, the patent law represented a breakthrough regarding the running of their businesses. Before the patent law, indigenous firms copied products that were originally developed by MNCs and commercialised them without paying any royalty to the owners of the formulae. The patent law meant that the payment of royalties was compulsory and that before launching any new product, indigenous firms would have to deal with the owner of

the patent. This also implied that the market position of foreign firms (which developed drug patents) was strengthened compared to indigenous firms (which produced or commercialised products) (Katz, 1997; González García *et al*, 1999; Claves, 1999).

Competitive pressures in the pharmaceutical industry 1989-1999

The changes the industry went through during the 1990s in terms of its regulatory framework prepared the ground for more competition. The deregulation process made it possible for foreign companies to compete in a market attractive for its size and potential development. For indigenous firms, the changes in the regulatory norms gave rise to levels of competition to which they were not accustomed. The period 1994-1997 saw the biggest investment ever in the industry with approximately US\$ 1,200 million of foreign and national investments (Claves, 1999; Manzone, 2000).

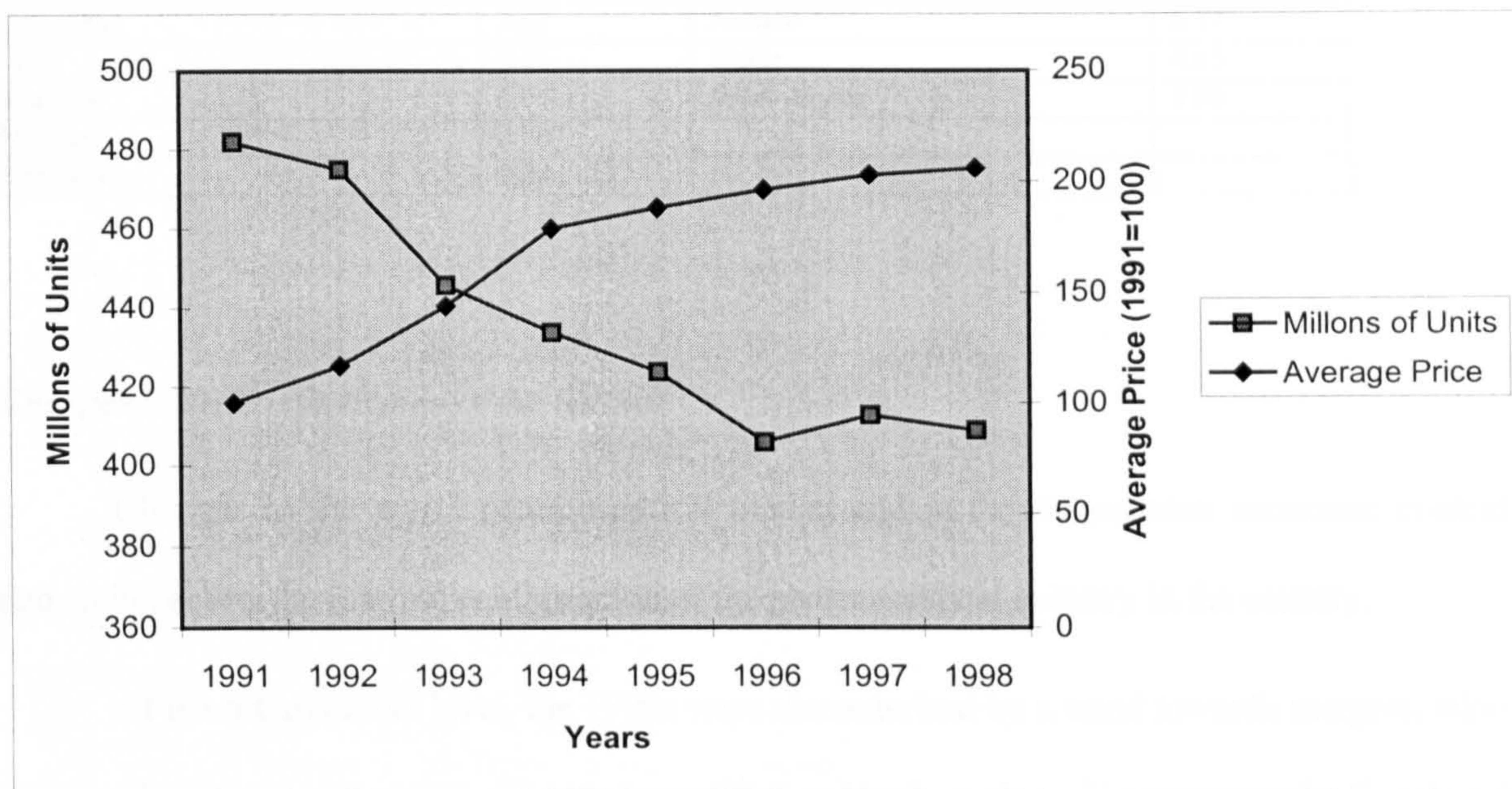
But, what factors besides the changes in regulations brought about an increase in the competitive pressures in the industry? Firstly, the average prices of medicines – after the deregulation process began – were the highest in the region. That meant that Argentina was considered a high consumption group (Claves, 1999). Secondly, a process of M&As began in the industry, replicating a similar process in the international market. Both processes, as the subsequent analysis shows, brought into the industry new international companies and thereby increased competition.

Volume of sales and average price of medicines in the Argentinian market

Argentina is the country with the highest average prices in Latin America. In the decade since 1990, when the process of liberalisation and deregulation began in the pharmaceutical market, the average price of medicines rose by 105%. At the same time the volume of products sold in the market diminished (see figure 5.3 for evolution of average price and volume). All this

made Argentina a high consumption group. The average yearly consumption *per capita* in 1999 was US\$ 165 – the highest in Latin America (González García *et al*, 1999; Manzone, 2000).

FIGURE 5.3: EVOLUTION OF VOLUME OF UNITS AND AVERAGE PRICE²⁴



The sustained growth of prices was closely linked to the competitive strategy of the companies. It consisted of the permanent introduction of new products that were generally sold at higher prices than those under commercialisation. An example of this is what happened in 1995 when the average price of new products in Argentina was US\$ 14.76, which represented an increase of 69% over the average price in the market at that moment (Claves, 1999).

Taking into account the foregoing explanation and the huge difference between Argentina and the other Latin American countries in terms of market size and average price it is easy to see why foreign companies became interested in the market (see table 5.2).

²⁴ IMS Health, various issues 1991-1999; Claves, 1999

TABLE 5.2: AVERAGE PRICES IN DIFFERENT COUNTRIES IN 1995 (IN US\$)²⁵

Latin America	Average price	Other countries	Average price
<i>Argentina</i>	8.63	<i>United States</i>	13.51
<i>Uruguay</i>	5.27	<i>Germany</i>	11.74
<i>Dominican Rep.</i>	5.14	<i>Canada</i>	10.98
<i>Peru</i>	4.38	<i>United Kingdom</i>	8.27
<i>Brazil</i>	4.23	<i>Australia</i>	6.55
<i>Central America</i>	4.19	<i>Italy</i>	6.12
<i>Colombia</i>	3.27	<i>France</i>	6.11
<i>Chile</i>	3.11	<i>Spain</i>	4.95
<i>Ecuador</i>	3.07	<i>South Korea</i>	3.00
<i>Mexico</i>	2.74		
<i>Venezuela</i>	2.24		

Changes in the configuration of the market

Changes in the world pharmaceutical market and in the Argentinian economic context had an impact on the internal configuration of the pharmaceutical industry in the country.

At the international level, the 1990s were characterised by a trend towards mergers, take-overs and strategic agreements. The strategic aim was to win scale and improve production, boost commercialisation and marketing strategies and, to a lesser extent, to enhance research and development (Mirasol, 2000). The following table shows the most significant M&As over time in the world pharmaceutical market.

²⁵ Sources: González García *et al*, 1999; Claves, 1999; La Nación Newspaper, various issues

TABLE 5.3: MERGERS AND ACQUISITIONS IN THE INTERNATIONAL MARKET THROUGHOUT THE 1980S AND 1990S²⁶

Year	Merger and Acquisition
1985	Rorer and US/Armour Monsanto and Searle
1986	Schering Plough and Key
1988	Kodak and Sterling
1989	Dow and Mrion Bristol-Myers and Squibb American Home and A.H.Robins
1990	Boots and Flint Pharmacia and Kabi Rhone-Poulenc and Rorer
1991	Smith Kline and Beecham
1994	Smith Kline and Beecham and Sterling (over –the-counter pharmaceutical unit) Sanofi and Sterling (prescription drug operation) Pharmacia and Erbamont Hoffman-La Roche and Syntex American Home and American Cynamid
1995	Schwarz Pharma and Reed 7 Carnrick Rhone-Poulenc Rorer and Fisons Pharmacia and Upjohn Hoech-Roussel and Marion Merrel Dow Gynopharma and Ortho-McNeil Glaxo and Burrough Wellcome Knoll and Boots
1996	Ciba-Geigy and Sandoz (created Novartis) Elan and Athena Neurosciences
1997	Roche-Boheringer Manheim
1998	Astra and Zeneca (created AstraZeneca PLC) Hoechst AG and Rhone Poulenc S.A (created Aventis) Sanofi and Synthelabo
1999	Abbot and Alza corp Roche and Genentech Warner Lambert and Agouron Pharmaceuticals Pharmacia & Upjohn and Unimed Pharmaceuticals

How did the international upsurge of M&As affect the pharmaceutical industry in Argentina?

The international wave of mergers and acquisitions had an important influence on the re-positioning of MNCs in the pharmaceutical market in Argentina, as can be seen in table 5.4. Over the period 1994-1999 the market saw a noticeable trend in the acquisition of indigenous companies by MNC firms. Furthermore, the regulatory changes in the industry in Argentina and the economic openness made MNCs reconsider their strategy in the country. Some foreign companies that left the market in the 1980s entered again, re-buying the licence given to

²⁶ Various sources: The Economist, Jan 22nd, 2000; Goetzl, 2000; Rogers, 2000 (a ,b); Barret *et al*, 1999; Nasri, 1999; Torres, 1999.

indigenous companies (such as Rhone Poulenc to Elvetium or ICN-Syncro to Roemmers). Other MNCs bought indigenous businesses. The following table shows the most relevant acquisitions and the entry of foreign firms into the pharmaceutical market.

TABLE 5.4: CHANGES IN THE PHARMACEUTICAL MARKET IN ARGENTINA: RELEVANT ACQUISITIONS OR GREENFIELD²⁷

Company that enters the market by acquisition or by Greenfield	Local company bought/Greenfield	Origin of capital
Bristol Myers Squibb	Argentia	USA
Roche	Boheringer Manheinn	Switzerland
Allergan Loa	Bonru Perel	USA
Alcon	Plos	USA
Merk	Volpino	Germany
R.P.Scherer	Diversification	USA
Procter and Gamble	Diversification	USA
Laboratorios Chile	Armstrong	Chile
Ivax Corp	Elvetium and Alet	USA
Columbia	Diprovent	Mexico
Laboratorios Chile	Syncro	Chile
I.C.N	Enters	UK
Grifols	Enters	Spain
T.R.B	Enters	Switzerland
Teva Tuteur	Enters	France
Ferring	Enters	Sweden
Otsuka Pharmaceutical	Enters	Japan
UCB Pharma	Enters	Belgium
Baxtermuno	Enters	USA
Knoll	Enters	Germany
Novo Nordisk	Enters	Denmark
Mallinckrodt	Enters	USA
Eli Lilly	Re-Enters	USA
Rhone Pulenc	Re-Enters	France
Monsanto	Re-Enters buying Syntial	USA
Smithkline Beechman	Re-Enters	UK

The entrance of new companies into the market through greenfield or acquisitions had two main consequences for the local industry and indigenous businesses. It firstly increased the market share for foreign companies. Secondly, it also boosted market concentration in the industry. Figure 5.4 and table 5.5 show both the market distribution and concentration levels in the industry respectively over the period 1989-1999.

²⁷ Various sources: Newspapers: La Nación and Clarín (various issues); Magazine: Revista Mercado (various issues).

FIGURE 5.4: MARKET DISTRIBUTION 1988-1999²⁸

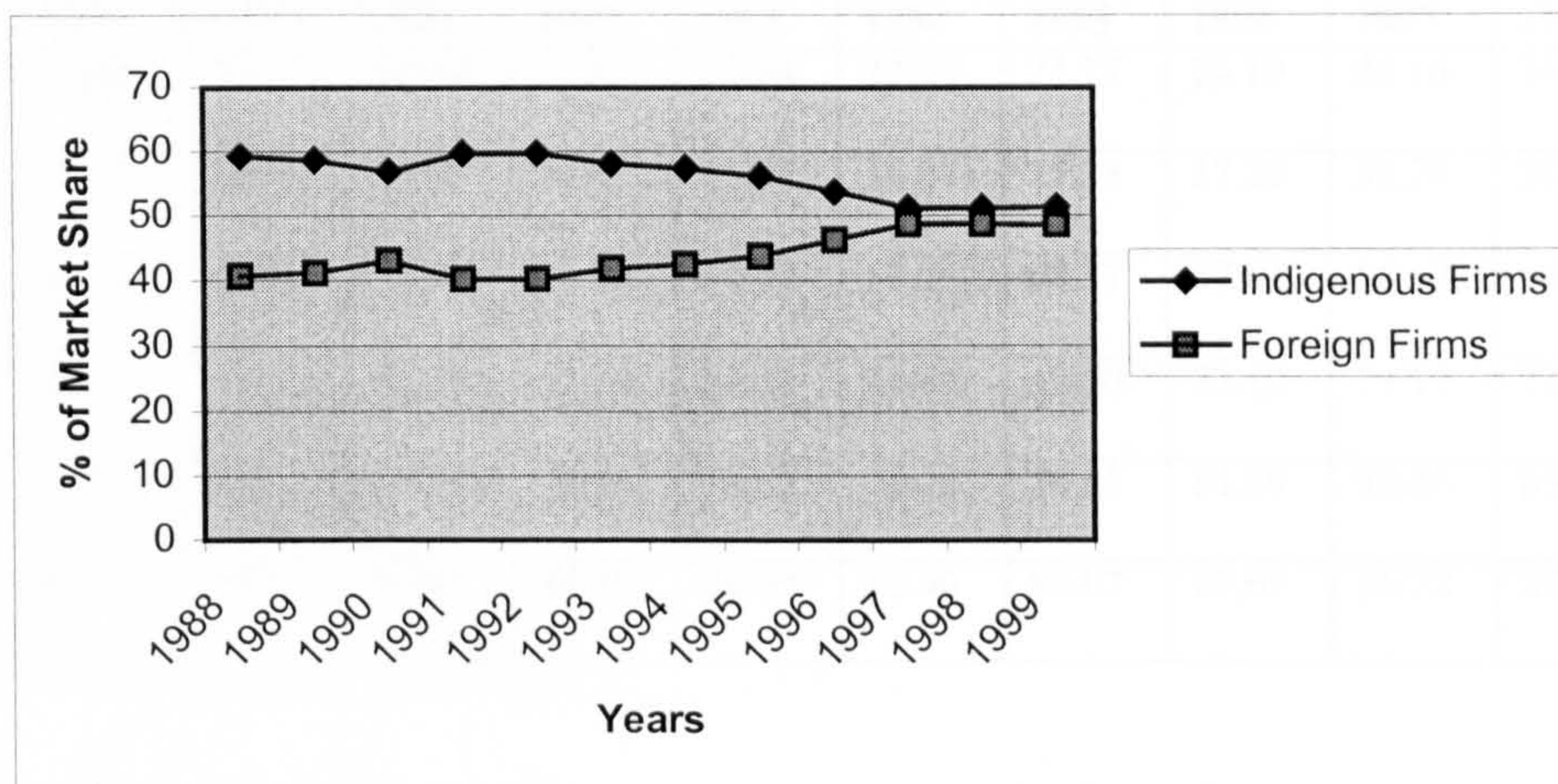


Figure 5.4 shows how the participation of MNCs in the market has increased from 40.8 to 48.6% over the ten years analysed. This can be explained by reference to the entrance of companies in the market and acquisitions made over that period. In 1989, the pharmaceutical industry accounted for twelve family-owned businesses among the first twenty. By 1999 only seven indigenous family-owned firms remained among the first twenty (IMS, 1989-1999).

The second consequence of the process of M&A experienced in the pharmaceutical industry in Argentina is reflected in the levels of concentration in the industry. Concentration levels rose throughout the 1990s. The following table shows the tendency towards concentration in the pharmaceutical industry in Argentina.

²⁸ This figure was prepared with data supplied by IMS reports 1988-1999

TABLE 5.5: CONCENTRATION LEVELS IN THE PHARMACEUTICAL INDUSTRY OVER THE PERIOD 1989-1999²⁹

Companies	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	1999/1989
First 5 companies	24.68	23.17	22.14	21.88	23.64	22.70	23.17	24.19	24.10	24.77	24.64	-1.62%
First 10 companies	36.38	34.95	33.80	33.47	35.35	34.07	35.33	37.29	38.20	38.48	38.08	4.67 %
First 20 companies	55.29	54.90	53.61	52.80	54.87	53.25	55.37	57.63	58.69	60.14	59.80	8.16%
First 30 companies	70.31	70.63	68.95	67.94	69.38	68.69	69.90	72.12	73.19	73.96	73.55	4.60%
First 40 companies	79.69	80.58	79.19	78.11	78.82	79.25	79.65	81.89	83.40	83.49	82.53	3.56%
First 50 companies	85.69	86.75	85.47	84.56	84.90	85.96	86.07	87.67	86.72	89.10	88.57	3.36%

Summary

The foregoing analysis has described and explained the most important factors contributing to the competitive pressures in the pharmaceutical market in Argentina. Two factors were identified as influencing the increasing competitive pressures over time: firstly, during the 1990s the average price of products in the industry became the highest in the region, making Argentina a high consumption market. The second factor is linked with an international trend of M&As that also took place in the pharmaceutical market in Argentina.

The consequence of the processes described above is that over the period 1989-1999 competitive pressures increased. Foreign companies achieved more market share and market concentration rose.

5.3 The Edible Oil Industry

Agro-industries were one of the earliest industrial sectors to develop in Argentina. The agrifood sector has historically played a core role in the development of the country. Gutman (1993) points out that this sector had a triple function for the industrialisation process in the country. Firstly it was a producer of food for the internal market; secondly, it was a major

²⁹ Sources: IMS (various issues)-Ballance *et al* (1992) Revista Mercado (various issues).

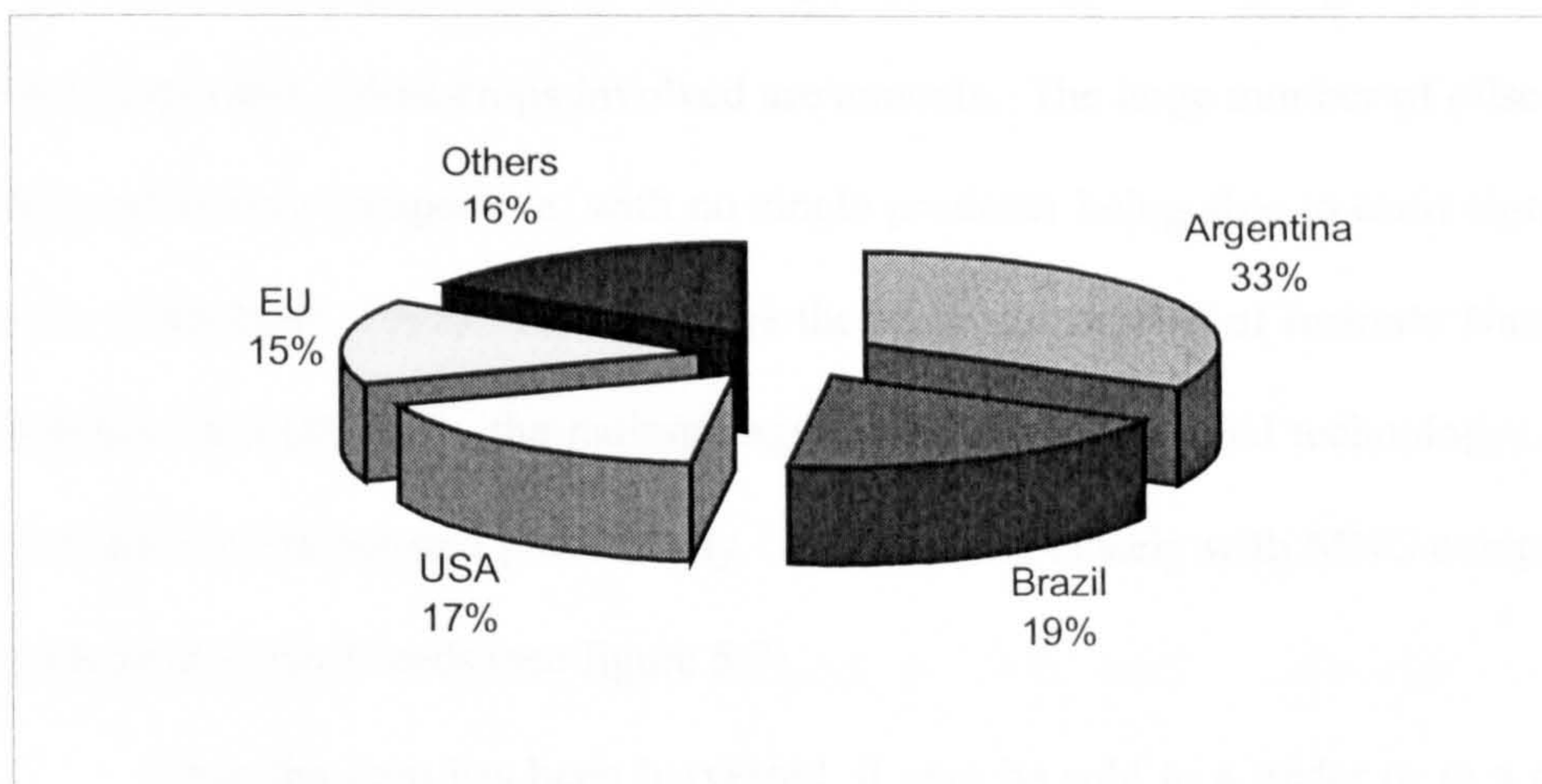
exporter; and finally, it was one of the main sources of tax resources for the state, and thereby provided the necessary currency to carry out the industrialisation process.

The agrifood sector as a whole has gone through various changes in the last two decades. These changes were mainly in the areas of production and technology, and in the internationalisation process that nowadays characterises the sector. The whole sector received 32% of foreign direct investment in the country over the period 1990-1999, becoming the largest beneficiary of foreign investment (CEP, 1999).

The edible oil industry is one of the most dynamic industries within the sector. This has experienced the highest rate of growth among agribusinesses over the last decade. It has been largely based on strong export performance. During this period it has become an export leader, earning US\$ 5.2 billion in annual foreign sales (Herrantz, 1999), becoming the largest exporting industry in 1984 and holding that position even since (Gutman and Feldman, 1990; INDEC, 1998).

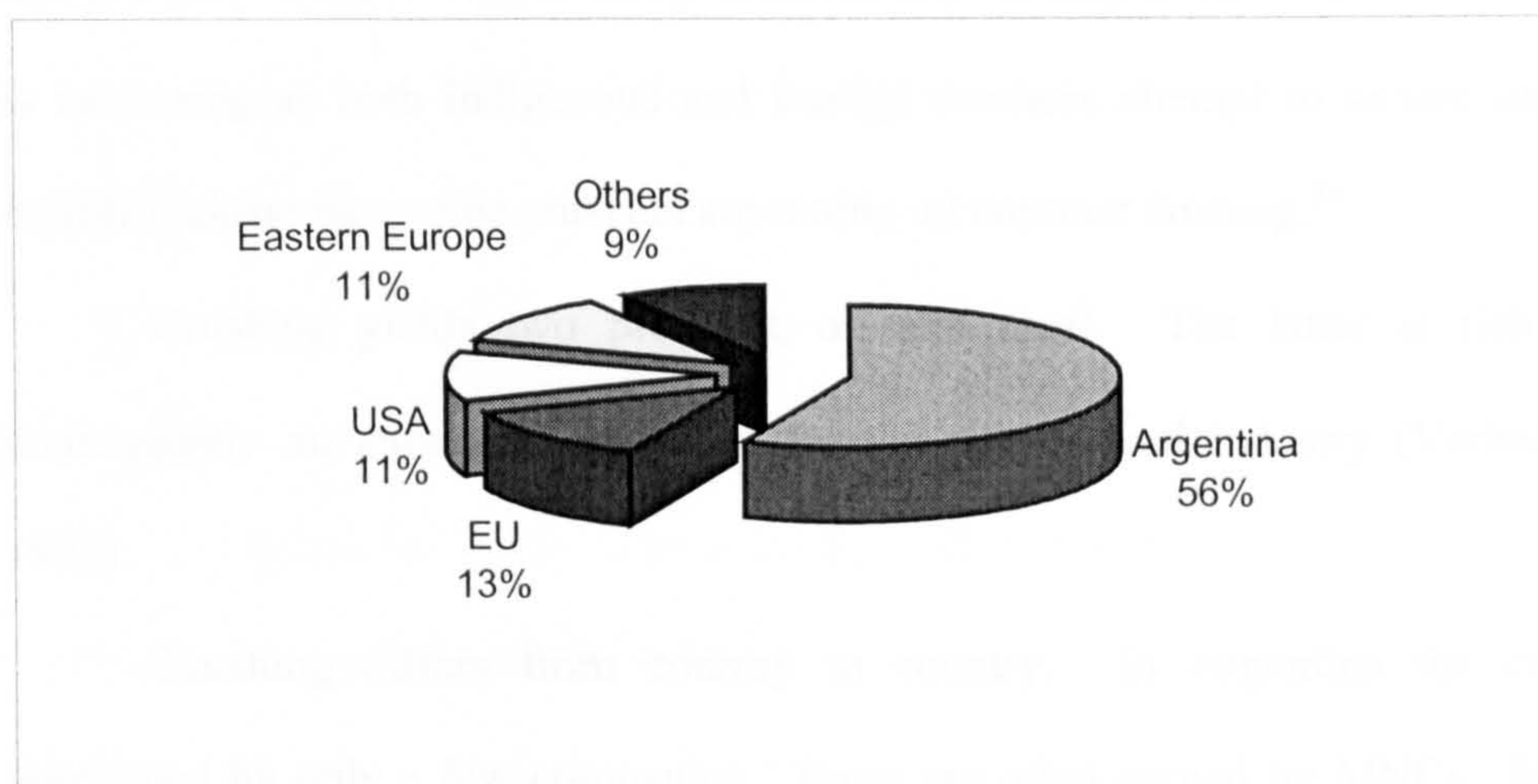
Argentina is the main exporter of soybean and sunflower oil – two of the three most widely traded oils worldwide (see figure 5.5 and 5.6). Argentina is also the fifth largest producer of oilseeds and the sixth crusher (i.e., it processes the oilseeds into edible oil) (Rabobank, 1998).

FIGURE 5.5: MAJOR EXPORTERS OF SOYBEAN OIL IN 1998³⁰



³⁰ Source: Rabobank, 1998

FIGURE 5.6: MAJOR EXPORTERS OF SUNFLOWER OIL IN 1998³¹



The complex of edible oils: The main aspects of the industry and its structure

Agents and roles

Some edible oils are vegetable in origin while others are derived from animal sources. Vegetable oils and fats are the most significant among the commercialised edible oils, accounting for 80% of oil consumption. For the purpose of this study and due to its importance in the Argentinian market, soy, sunflower, peanut, cotton and flax grains will make up the vegetable oil subsystem (Gutman and Feldman, 1990).

Oilseed is grown by small scale, private enterprises among which family businesses are most important. Most crops involved are annuals. The large number of oilseed producers makes the market very competitive, with no single producer being able to exert significant influence on price (Rabobank, 1998). Farmers have the technical support of Instituto Nacional de Tecnología Agropecuaria (INTA) – the national agency for agriculture and technology. Their research into seed quality has boosted productivity. INTA works closely with MNC companies, which are the main producers of seeds (see figure 5.7).

Once the crop has been harvested, it may be sold to a trader or to a collector. The latter collect the oilseeds, store them if necessary, and sell them on to the crushing or processing

³¹ Source: Rabobank, 1998

companies.³² In some instances the crushers buy directly from the producer – a phenomenon that is increasing as both indigenous and foreign crushers attempt to secure supplies. In order to establish closer ties, some crushers are setting up contract farming.³³

Crushing yields two products, oil and meal. The latter is rich in protein and is consequently an attractive ingredient for the animal feed industry (Verheijnen and Jimmink, 1995).

Crushing differs from country to country. In Argentina the crushing business is dominated by only a few companies. These are often owned by MNCs. Margins are low and market entry is difficult because the initial investment required is high. Quitting the industry can also be difficult because of the difficulty of selling the assets (Ketelhohn *et al*, 1998). The crushers are the most important part of the edible oil industry because they represent approximately 50% of the value added of oilseed products (Ketelhohn *et al*, 1998; Verheijnen and Jimmink, 1995).

Crushers joined forces and created CIARA, the professional association that represents both national and MNC companies. CIARA has an active role, both internally and externally. Internally, it lobbies for the industry (in matters such as taxation, and export reimbursements among others); externally, it participates in negotiations with Mercosur and the World Trade Organisation. The government seeks advice from CIARA for technical matters in the industry. CIARA's role is therefore more that of a board of advisors and lobbyist for the whole industry (Ketelhohn *et al*, 1998).

Once crushing has taken place, the value chain splits into two. The crude oil produced by the crushers can be either exported in bulk or refined and in some cases hardened (hydrogenated) for the baking and frying industry. Refining is also characterised by economies of scale. In many cases both crushing and refining are integrated. Although crushing and refining

³² For the purpose of this study we use both crushing or processing interchangeably

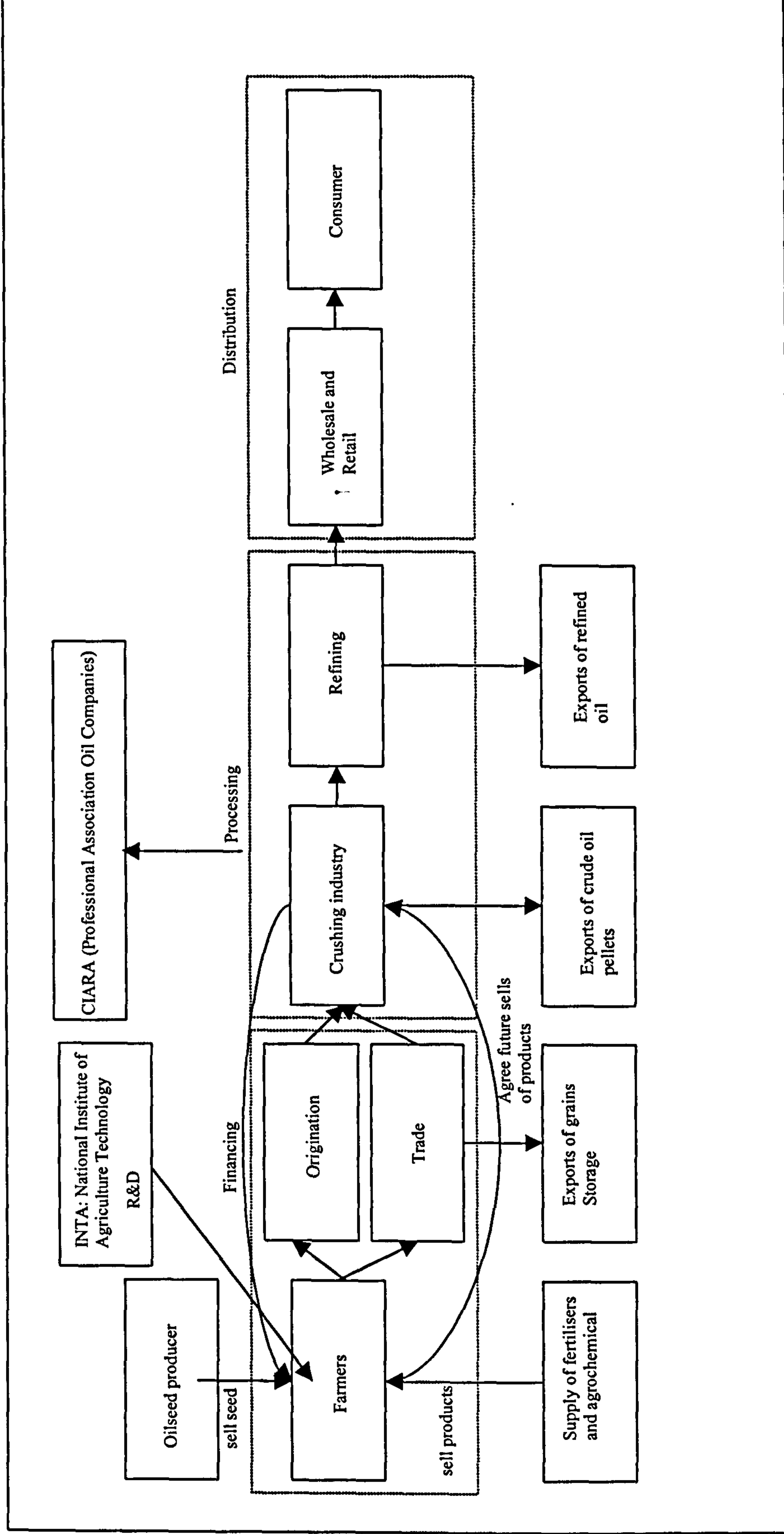
³³ Information provided by crushing companies in Argentina, 1999 (Interviews in AGD, Vicentín) and CIARA, the professional association of the industry.

traditionally took place in different locations, there is now a trend to bring them closer together (Verheijnen and Jimmink, 1995) (see figure 5.7).

The last part of the value chain is the distribution and consumption of branded products. A wide range of products can be obtained from oils and fats (edible oils, mayonnaise, and soya juices, among others).

The following figure is an attempt to show the different features of the value chain for vegetable oils as previously described.

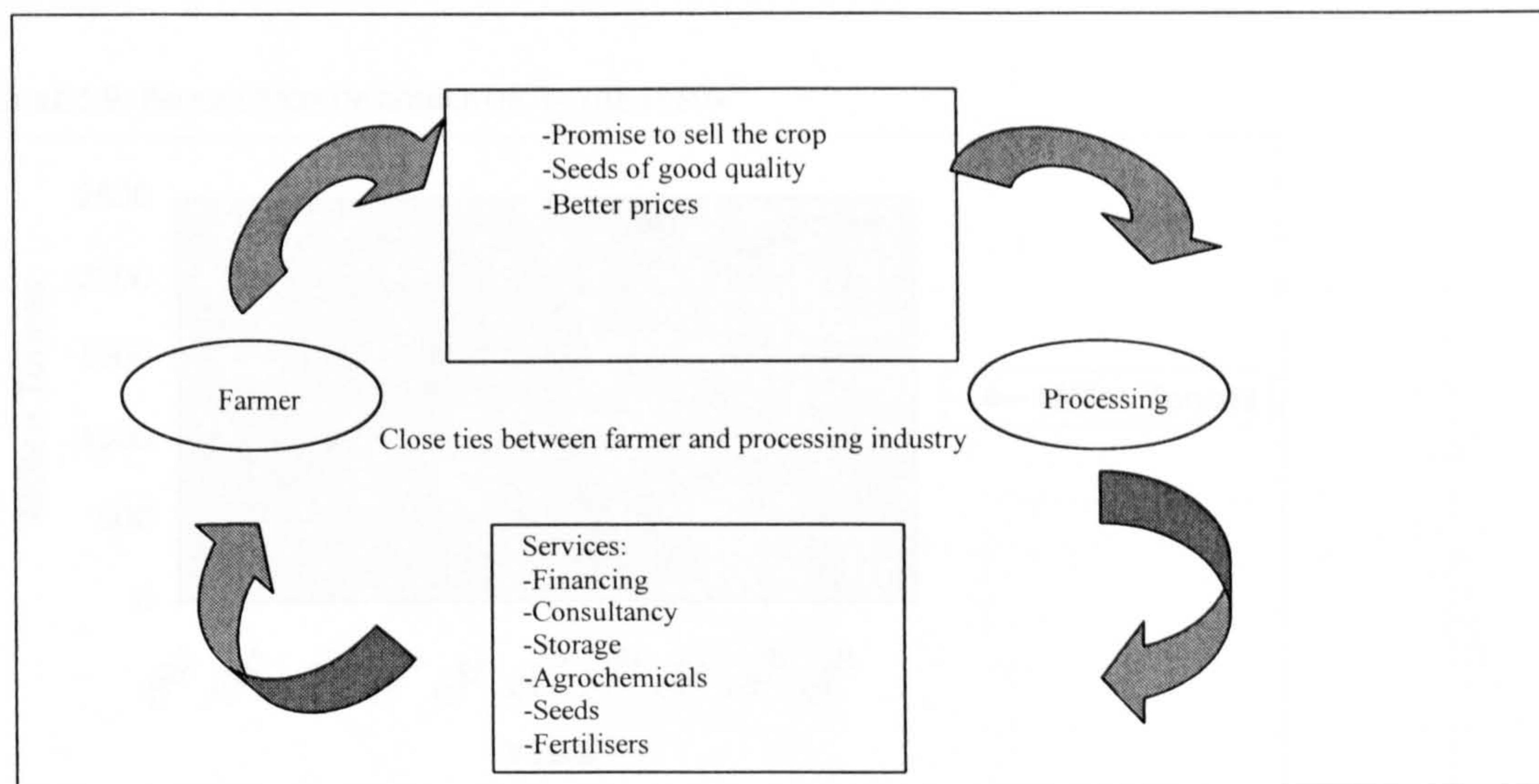
FIGURE 5.7: THE STRUCTURE OF THE ARGENTINIAN EDIBLE OIL MARKET AS IT WAS IN 1999



It is the processing of oilseeds (crushing-refining), as can be seen in the figure above, that occupies a key position in the oilseed complex, providing the interface between the producer of seeds and the consumers of oils and meals. It is on this part of the chain of value that this research concentrates its analysis since the processing activity has been the most dynamic over time and has also received most of the foreign investments in the edible oil industry (CEP, 1999).

Processing companies also fulfilled the role of the state in financing different parts of the edible oil chain. There is a strong relation between the producer and the crushers. The producers rely on the crushers not only for selling their products, but also for financing.

FIGURE 5.8: PRODUCERS AND CRUSHERS: A LONG-LASTING CONVENIENT RELATIONSHIP



The historical development of the edible oil industry in Argentina

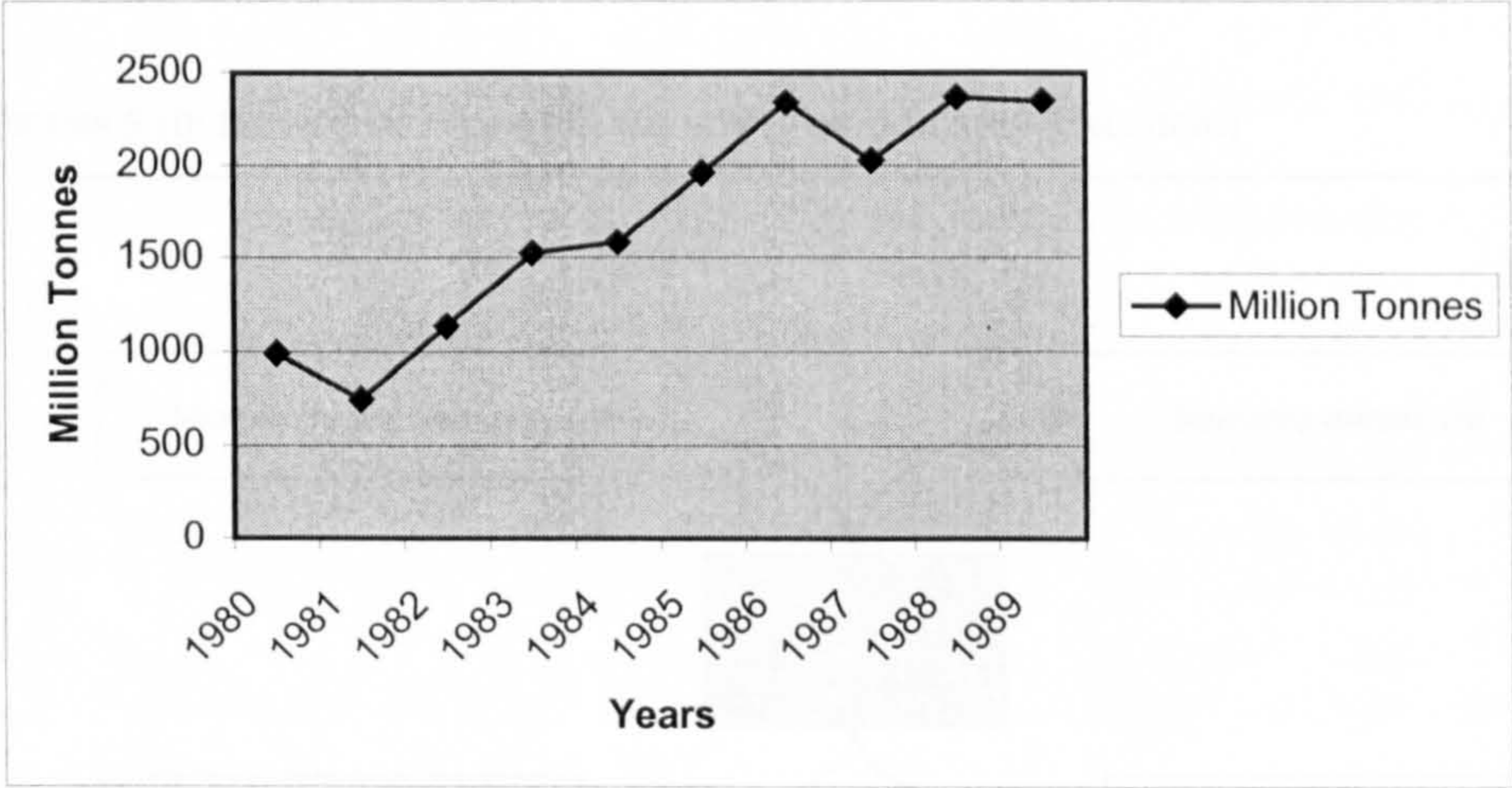
The industry has historically been of permanent interest for politicians and businessmen alike due to its strategic role in economic growth and its capacity to increase foreign income through exports. The technological change in the industry in the 1970s, the strong international competition in the markets for these goods, and the protectionist

measures established by European countries altered the comparative advantage Argentina had enjoyed for a long time (Gatto and Gutman, 1993).

The Argentine oil industry arose in the mid-nineteenth century and enjoyed periods of intense development during the 1930s and the 1960s. By the middle of the 1970s, the oil industry had become the most dynamic one in the country. Nowadays, Argentina is the primary world exporter of oil and is ranked second in pellet exports (CEP, 1999).

Oil production multiplied sixfold during the period 1970-1997. Over the period 1972-1979, the industry exported oil worth on average US\$ 216 million annually. In 1997 the exports amounted to US\$ 4.029 billion and in 1999 US\$ 5.2 billion. This rise can also be seen in production, which rose from more than 2 billion tonnes in 1989, to near 4.6 billion tonnes in 1998, that is a 94% rise (CEP, 1999; Herranz, 1999).

FIGURE 5.9: PRODUCTION OF EDIBLE OIL IN THE 1980S³⁴



The dynamism of the 1970s and 1980s encouraged the companies to increase their production capacity to meet export demands. This is one of the most important factors that determined the rise in the level of concentration of the companies over these two decades. From 57 companies operating in the sector in the 1970s, there were only 40 in 1984 (CEP,

³⁴ Source: ISI Emerging Countries, 1999

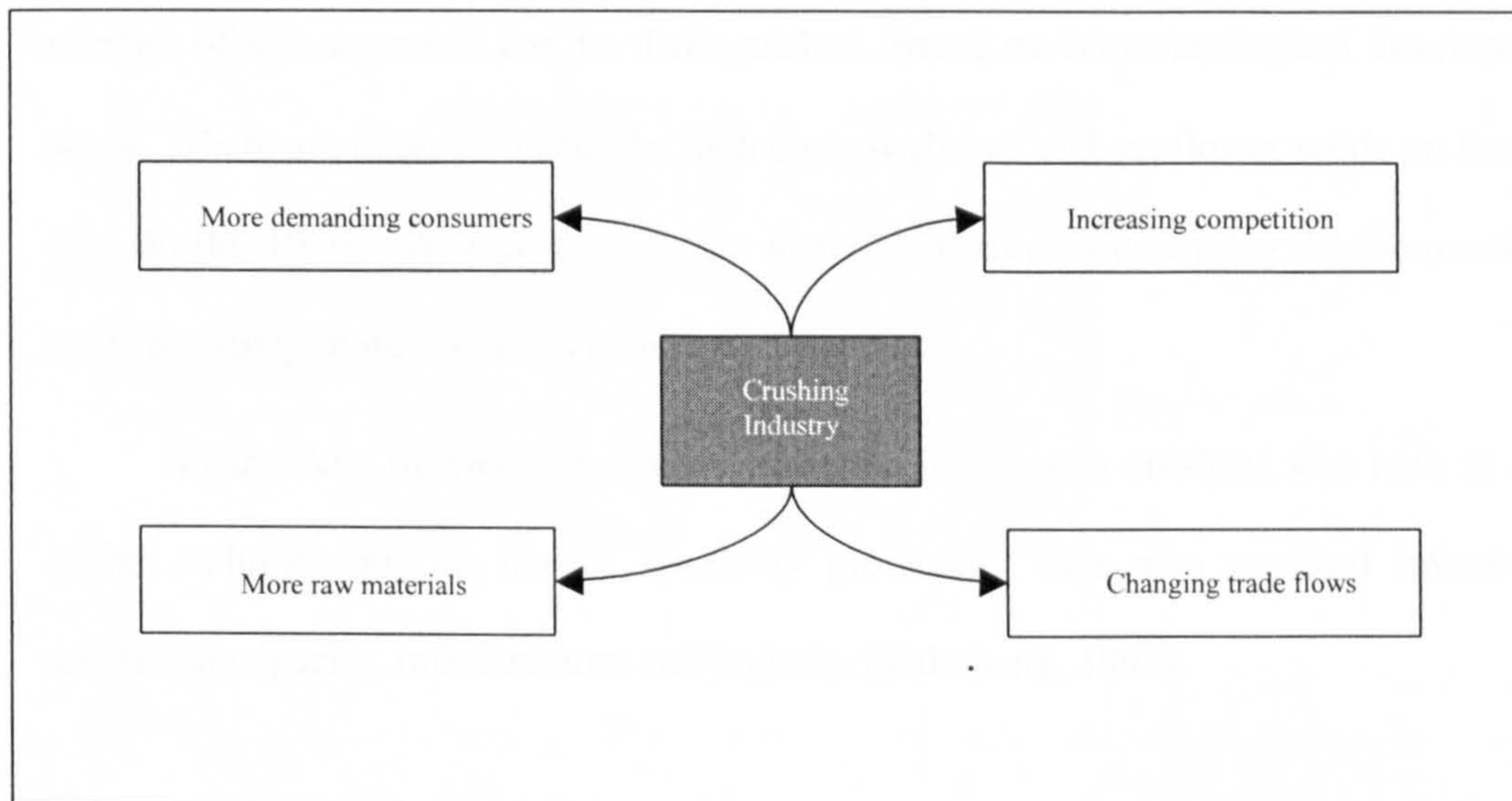
1999). That was the result of a complex process that combined the opening of new companies and plants, the scaling up of existing ones and the shutting down of other firms and some acquisitions by new or existing companies of the industry.

Changes in the edible oil industry in the 1990s

Being an industry that was always exposed to global competition made indigenous crushers particularly susceptible to changes in the international market as well as changes they had to confront in the internal market.

The 1990s implied new challenges for the industry stemming from changes in the national economy and international markets. These can be summarised as deriving from four drivers of change: more demanding consumers; increasing competition; greater availability of raw materials; and changing trade flows.

FIGURE 5.10: DRIVERS OF CHANGE IN THE EDIBLE OIL INDUSTRY (CRUSHING)



More demanding consumers

During the 1990s, not only did the global edible oil industry face a greater number of consumers who were creating a greater demand, but some of this demand became more sophisticated, with consumers – in the developed world particularly – exercising their power with respect to the quality and the safety of the food they consumed. This was an opportunity and a challenge for indigenous crushers. Crushers in particular faced the challenge of producing more oil, as well as improving the consistency, quality and traceability of the products (Ketelhohn *et al*, 1998).

More availability of raw materials

Worldwide the supply of raw materials has been growing on average by 3% yearly since 1990. New-comers such as China and India are taking on an increasingly significant role in the supply of raw material (Rabobank, 1998).

Within the main raw materials (i.e., soya and sunflower oilseeds), an increasing number of sub-segments can be distinguished, based on biotechnological development in seeds. There are now, for example, high oleic soybeans and sunflower seeds on the market (Oil World, 1999). As a result, the raw materials market is becoming de-commoditised in order to satisfy more specialist consumer demand.

In the face of this, the challenge for the indigenous crushers was both to process higher volumes and to handle speciality products. This also required investment in additional capacity, infrastructure and logistics (Rabobank, 1997).

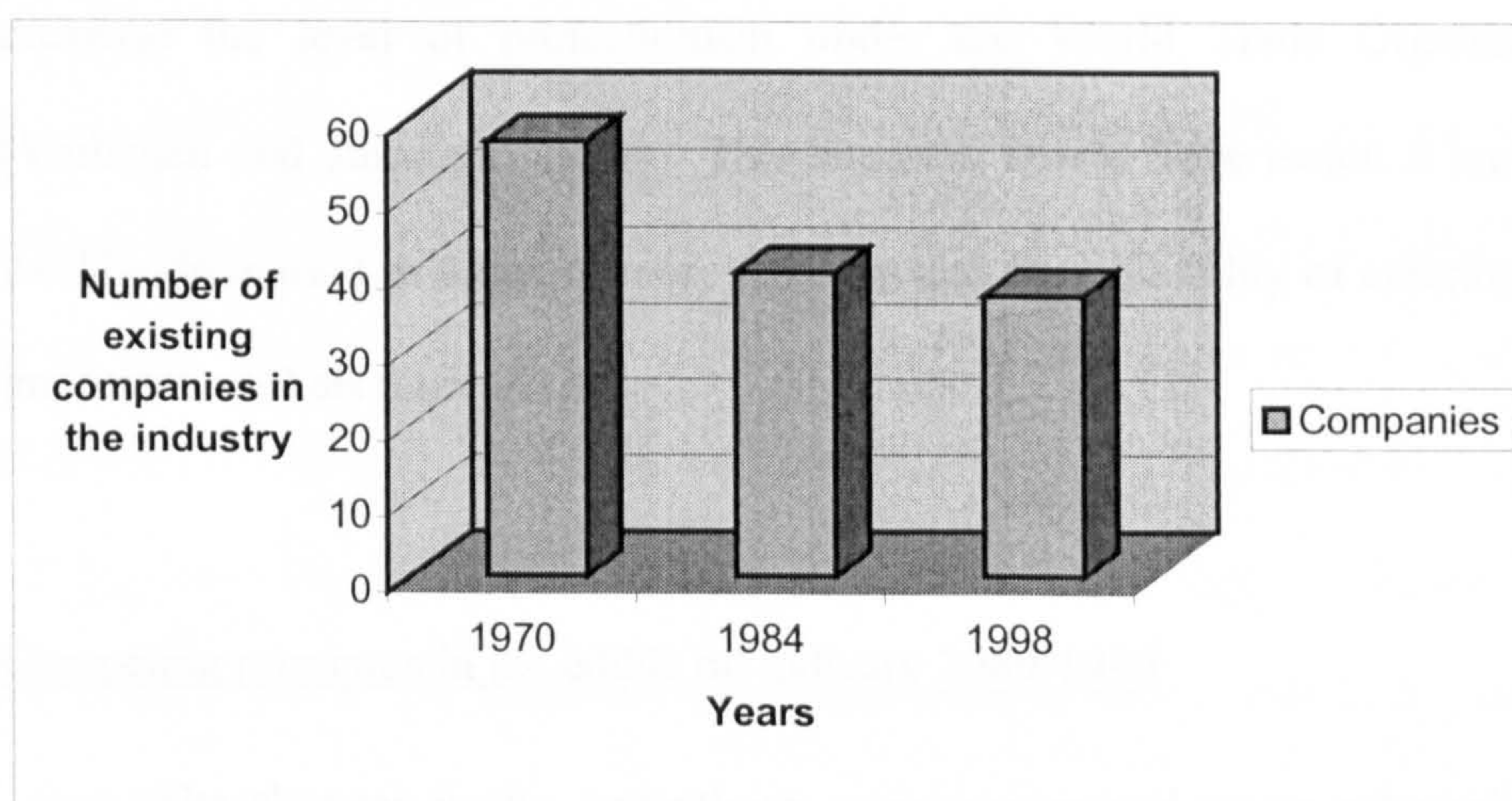
Increasing competition

The worldwide market liberalisation that characterised the 1990s has stimulated globalisation in the industry. As markets started to open up, crushers in different

countries faced direct competition with each other. As a result, crushing margins fell, and this led in turn to cost-driven scaling-up of crushing facilities. Concentration was one of the consequences because only a few players could achieve the necessary scale. Only a few companies worldwide dominated the industry and they expanded to less mature markets such as the Argentinian one and building up quick market shares, often through the acquisition of local companies.

Concentration was usually high in this industry because profit margins were low, which made crushers very dependent on economies of scales. With 57 companies in the 1970s, the industry had only 37 by 1998 (see figure 5.11). The ten largest firms accounted for 85% of the production (CEP, 1999; Rabobank, 1997). The consequences for indigenous businesses were clear: in 1989 the industry was made up for six family-owned businesses among the twenty largest companies by turnover. By 1999 that figure had fallen by half.

FIGURE 5.11: LEVEL OF CONCENTRATION IN THE INDUSTRY³⁵



³⁵ CEP (1999); Rabobank (1997)

Changing trade flows

The high degree of protectionism and subsidies used by developed countries during the 1990s hit Argentina and other oil-producing countries hard. The EU, with its protected agriculture, was one of the main obstacles for the industry. While in Argentina and Brazil the trade of seeds was free and the crushers only received incentives to export, the EU had the higher level of protection in the world at that moment (Rabobank, 1997).

TABLE 5.6: ARGENTINA AND THE EU: LEVELS OF PROTECTION IN THE EDIBLE OIL INDUSTRY³⁶

	Argentina	EU
Grains	-No subsidies at all. Oilseeds are subject to an export tariff. It is a way to discourage exports of grains. -No import tariff for seeds imported for crushing	-Acreage payments for oilseeds (subsidies for cultivated area) -Import tax for all oilseeds
Oils	-Export restitution to encourage exports in oils.	-Tariff imports (varies from 6 to 14%)

The table illustrates the difficulties the Argentinian edible oil industry faced when competing against high levels of protectionism in the EU. The EU, however, was due to decrease the level of protectionism under the World Trade Organisation agreement (Verheijen and Jimmink, 1995). This situation would have meant a breakthrough in the worldwide market in terms of more freedom and the possibility of entering one of the most important markets more easily.

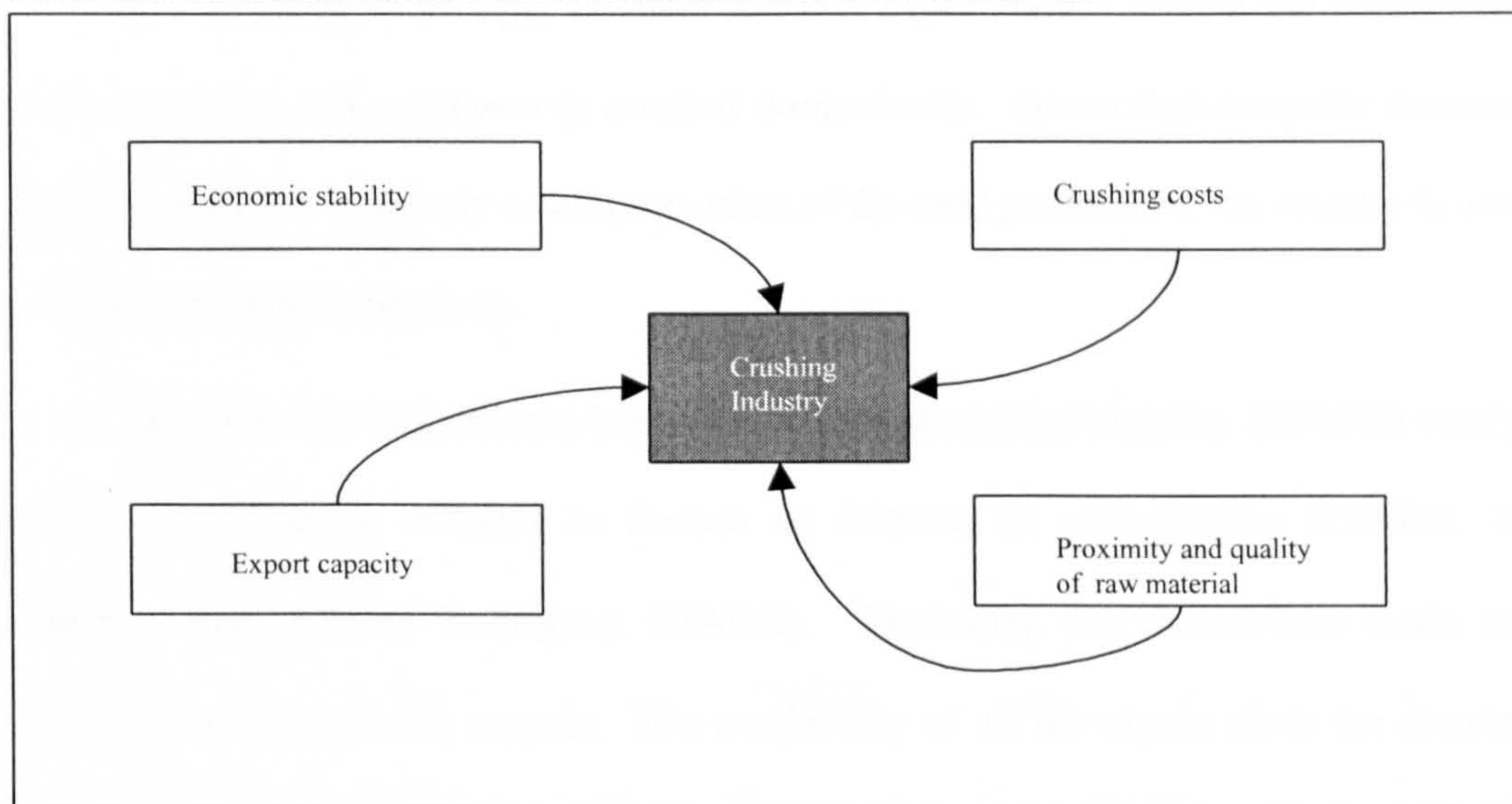
Competing pressures in the edible oil industry 1989-1999

The changes in the Argentinian economy opened up an extraordinary opportunity for MNC companies to set up their operational facilities in one of the most important countries for edible oil production and exports. Between 1990 and 1998, the industry has received approximately US\$ 1 billion of foreign and national investment (Herranz, 1999;

³⁶ Source: Rabobank, 1997

Interview with Alberto Rodriguez, CIARA³⁷). Different factors influenced the increasing competitive pressures within the industry in the 1990s: economic stability; crushing costs; export capacity; and, proximity and quality of raw materials.

FIGURE 5.12: COMPETITIVE PRESSURES IN THE EDIBLE OIL INDUSTRY 1989-1999



Economic stability

Different aspects attracted foreign investors to the industry and gave rise to even more competition. Being one of the top six crushers in the world (Rabobank, 1998) Argentina was a place in which the companies needed to set up operational facilities. While the 1980s were dominated by internal turmoil, the economic stability achieved in the 1990s drew the attention of MNCs and encouraged them to invest in the industry. Although most of the important companies already had a base in the country, new ones appeared as a result of the stability of macro-economic indicators. New investments to improve efficiency were another outcome of the stability in the 1990s. Acquisitions by foreign companies were also important, such as the case of Guipeba by the Brazilian Ceval,

³⁷ Alberto Rodriguez is the President of CIARA, the most important professional association of the edible oil industry

and Oleaginosas Moreno and Oeste by Glencore (from the Swiss Group Andre) (CEP, 1999; Oil World, 1999).

Export capacity

The industry is strongly oriented towards exportation. Almost the entire national crop of soybean and sunflower is crushed domestically. Given that domestic demand for oils and meals is a relatively small proportion of the total production, the country is a major net exporter for both products.

By 1999, the Argentinian internal market had reached maturity (500,000 tons/year) and it was therefore difficult to foresee an increase in consumption (CIARA, 1999; Interview with Alberto Rodriguez, CIARA). Thereafter, any investment made in the industry was destined for exports. The availability of oil for export made the country an appealing place for MNCs that were seeking excess capacity to satisfy net importer countries.

Crushing costs

Crushing costs are primarily determined by the structure of the industry in a specific country, since this determines the size and the technological sophistication of the crushing facilities. We explained above the importance of keeping costs down in an industry in which margins are low and dependent on the efficiency of crushing and procurement costs. Argentina has some of the lowest crushing costs worldwide, illustrating the efficiency that the industry has reached technologically and in terms of scale and transportation facilities (Herrantz, 1999) (see table 5.7).

TABLE 5.7: COST STRUCTURE IN THE CRUSHING INDUSTRY IN 1998 (AS A PERCENTAGE OF WORLD AVERAGE)³⁸

Country	Soybeans % of world average	Softseeds % of world average
<i>Argentina</i>	89%	84%
<i>Brazil</i>	116%	n/a
<i>China</i>	119%	105%
<i>EU</i>	93%	92%
<i>India</i>	188%	105%
<i>Japan</i>	124%	130%
<i>USA</i>	87%	89%

n/a=Not Available

Crushing costs were an increasingly important factor in determining where the raw material would be crushed most efficiently. This is one of the reasons why Argentina attracted both foreign and national investors (Hinrichsen, 1999).

Proximity and quality of raw materials

The fact that Argentina was self-sufficient in oilseeds, oils and meals and that soybeans from the Mercosur³⁹ region were considered to be of a higher average quality than those produced elsewhere, was another reason why foreign direct investment began to flow into the industry (CEP, 1999). Furthermore, the disappearance of intra-Mercosur trade barriers allowed crushers in the Southern Cone region to source their raw material in any member country. As Argentina increased its crushing capacity throughout the 1990s, it was very convenient for companies which settled in the country to acquire, in case of shortage, oilseeds from other countries in the trade agreement such as Paraguay. Secondly, the economic growth of the region increased trade in oils and meals (mostly in Brazil) (Verheijen and Jimmink, 1995).

³⁸ Source: Rabobank, 1998

³⁹ Mercosur is a trade agreement between Argentina, Brazil, Paraguay and Uruguay

Summary and concluding remarks

The foregoing analysis discussed the main factors that increased competitive pressures in the edible oil industry in the 1990s. Four factors were emphasised: economic stability; export capacity; crushing costs; and proximity and quality of raw materials.

The 1990s therefore had a two-fold impact on indigenous firms: firstly, during this period indigenous businesses became more efficient. Efficiency was achieved through acquiring state of the art technology (to improve quality of products for more demanding international customers), and through reducing costs of production (to enable more competitiveness). Secondly, while these results were achieved by some of the companies, a lot of the indigenous businesses left the market due to the impossibility of investing in scaling up their plants and performing more efficiently (Hinrichsen, 1999; Oil World, 1999; Ketelhohn *et al*, 1998).

The most obvious outcome of this process was a higher degree of concentration in the industry. Most of the companies that led the industry in the 1980s are today either small crushers or have been bought by foreign companies (Ketelhohn *et al*, 1998).

5.4 Is hypercompetition a feature of the pharmaceutical and edible oil industries?

Pettigrew and Whipp (1991) point out that the characteristics of a particular environment influence the adaptive responses of the firms. Firms respond differently depending on whether they are in a stable or turbulent contexts (Volberda, 1999). But what attributes of an environment are likely to make it more turbulent than most other environments?

Several researchers have stated the differences between stable and turbulent environments. Emery and Trist (1965) highlight these differences by saying that, compared to stable environments, turbulent ones have an increasing rate of change, complexity is higher, as is the level of connectedness between the firm and the environment.

Khandwalla (1977) states that a turbulent environment is dynamic, unpredictable, expanding and fluctuating. It is an environment marked by changes, compared to stable environments in which little change occurs. Miles *et al* (2000) suggest that unpredictability and dynamism characterise a turbulent environment. Unpredictability is understood as changeability and instability, while dynamism is defined by the rapidity of change.

D'Aveni (1994) has coined the word “hypercompetition” to refer to highly turbulent environments. Hypercompetitive environments are different from stable ones for D'Aveni in that the former escalate towards higher levels of uncertainty, dynamism, heterogeneity of the players, and hostility.

Endorsing the different ideas explained above, Volberda (1996 and 1999) proposed three dimensions for analysing environmental turbulence: dynamism, complexity and unpredictability. Dynamism is defined in terms of frequency and intensity of change. Complexity is defined as the number of factors considered to be drivers of change and their interconnectedness. Finally, unpredictability will depend on the information available to enable managers to predict future developments. The application of Volberda's (1999)

approach to analysing the environment faced by the pharmaceutical and edible oil industries in the 1990s produces interesting results.

In terms of dynamism, both industries went through a relatively stable period of three decades (from the 1960s to the 1980s). The industries were used to long product life, similar competitors and well-established regulation. In the 1990s, the pace of change increased. It saw the opening up of the economy and the lifting of regulations in the economy that affected the pharmaceutical industry directly (i.e., through deregulation measures and a new legal framework) and the edible oil industry indirectly (i.e., through deregulation in transport). Regulations that had previously fended off competition were lifted, making way for new competitors and new products to enter the market, and consequently increasing the level of complexity of the industry (see table 5.8).

Unpredictability is the outcome of a far-reaching process of transformation both at the national and industry level. Before the 1990s it was easier for the different companies in the edible oil and pharmaceutical industries to predict each other's movements. Changes in the economy and the entrance of new players with different technology and business strategies, however, brought unpredictability into the industries during the 1990s.

The competitive environment for both edible oil and pharmaceutical industries changed from a stable context over thirty years (1960s to 1980s) to a turbulent environment in the 1990s, with each of the factors mentioned by Volberda reaching particularly high levels (see also tables 5.9 and 5.10). In such a situation, Volberda (1999) suggests that we are in presence of a hypercompetitive environment (Volberda, 1999; D'Aveni, 1994).

TABLE 5.8: HYPERCOMPETITION IN THE EDIBLE OIL AND PHARMACEUTICAL MARKET OVER THE 1990S

Features of turbulent or hypercompetitive environments	Changes throughout the 1990s
<i>Dynamism</i>	Pace of change grew. This was a shift from previous industry stability. In a short time period, the structure of the industries changed to adapt to new environmental requirements.
<i>Complexity</i>	-New products (both industries). -New competitors via acquisition of companies or via greenfield (both industries). -Lifting of regulations affecting pharmaceutical industry. -Deregulation affecting both industries.
<i>Unpredictability</i>	-New regulations (i.e., patent law) and new actors (i.e., MNCs) made it difficult to forecast what would happen in the industries and it was even difficult to predict the companies' strategic moves.

TABLE 5.9: CHANGES IN THE INSTITUTIONAL/COMPETITION SETTINGS IN THE PHARMACEUTICAL INDUSTRY

Aspects	Before 1990s	During 1990s
<i>Registration of Medicines</i>	Priority to domestic capital firms.	Simplification for foreign firms to register products.
<i>Tariff and Price Control</i>	-High level of tariff protection or prohibition to import certain products. -Price control over products (maximum, regulated or agreed prices).	Elimination of price control and tariff systems.
<i>Patent Law</i>	No patent protection given to pharmaceutical products but for processes.	Patent for products and processes.

TABLE 5.10: CHANGES IN THE INSTITUTIONAL/COMPETITION SETTINGS IN THE EDIBLE OIL INDUSTRY

Aspects	Before 1990s	During 1990s
<i>Deregulation</i>	The activity was not directly regulated but the regulations over transportation affected the costs of the activity.	Lifting of regulations on transportation.
<i>Competition</i>	Freedom to set up plants. The only barriers were the natural ones for this business: need for strong investments and assets to start the activity.	Increasing competition worldwide. The result is that crushing margins have fallen and the need to scale up crushing facilities has arisen. The outcome is concentration in the local market and indigenous businesses being driven out of it.
<i>Raw materials</i>	This aspect has a twofold importance: firstly, before 1990s few countries supplied raw materials; and secondly, most of them were commercialised in bulk.	Today's supply has widened by incorporating new players as world suppliers. On the other hand, sub-products appear as a way of decommoditising the bulk exports.

Summary

In this section we raised the issue of environmental turbulence to understand whether the industries under analysis were stable or turbulent. It was argued that this distinction is important for understanding the adaptive responses of the firms examined in this study. Three dimensions were analysed in order to shed light on the features of the industries: dynamism, complexity and unpredictability. During the 1990s the intensity of competition in both the edible oil and pharmaceutical industries increased greatly. Such intense turbulence was described as hypercompetition.

In a hypercompetitive context, questions arise regarding the adaptive responses of indigenous firms in such an environment. How did the firms in this study react in a highly changeable environment? Were the firms able to adapt and change quickly or were they laggards within their industries? If so, why? What strategies did the firms implement to enable them to face the environmental changes? And what organisational and managerial changes did they try? And finally, what made the companies under study decide in favour of either strategy and organisational change? The following chapters aim to understand those adaptive responses by highlighting the differences in the way flexible and less flexible firms confronted the high levels of competition present in their industries.

Chapter 6: Adaptive responses under competitive pressures

Chapter 5 underlined the competitive pressures the pharmaceutical and edible oil industries underwent during the 1990s. We described these industries as hypercompetitive or highly turbulent (D'Aveni, 1994; Volberda, 1999). Craig (1996) and Volberda (1999) point out that hypercompetitive environments have precipitated far-reaching changes in firms' competitive position and have forced them to transform in order to compete effectively. The adaptive responses of firms under hypercompetition would therefore vary according to the extent to which the transformation process was undertaken (Volberda, 1997). The adaptive responses of the companies under analysis are, therefore, the main concern of chapters 7 and 8.

In his seminal work, D'Aveni (1994) points out that in hypercompetitive environments, competitive advantages are quickly eroded. Companies therefore have to be more concerned about creating new competitive advantages than sustaining old ones. D'Aveni (1994) suggests that companies have to disrupt their own advantages and the advantages of competitors. These strategies need speed and surprise to enable companies to seize opportunities first. Questions arise as to what strategies are needed in such highly competitive environments? And what organisational and managerial challenges are required to allow a company to face hypercompetitive environments?

At the strategic level, the literature has emphasised the importance of product innovation, process and knowledge as competitive and disruptive advantages. In presenting a model for understanding firms' competitive advantages, Nault and Vandebosch (1996:342) assert that in hypercompetitive markets companies should cannibalise their own advantages. For them it is better to "*eat your own lunch before someone else does.*" Such a strategy requires companies to invest and launch the next generation of advantages (i.e., product, process or knowledge) while current advantages are

still profitable. This pre-emptive strategy implicitly considers the importance of first mover or early adopter strategies.

Being a first mover is widely accepted in the literature on hypercompetition as a protective and anticipatory strategy. Craig (1996) shows the importance of the first mover advantage in the Japanese beer industry and how competitors in that industry were surprised by a competitor's introduction of a new product. As Craig (1996) indicates, the first mover advantage can change the rules of competition in an industry. Eisenhardt and Tabrizi (1995) and Brown and Eisenhardt (1997) also point out the importance of the first mover advantage in product innovation in a high velocity environment.

The need for competitive rather than sustainable advantages means organisations have to engage more in the exploration of new strategies rather than incremental exploitation of existing ones (Ilinitch *et al*, 1996). March (1995) indicates that environmental volatility and uncertainty requires change and flexibility if a company wants to explore new horizons. If the environmental context changes rapidly and organisations do not maintain a steady stream of exploration efforts, they may fail to adapt (March, 1995; Lewin *et al*, 1999).

Pettigrew and Fenton's (2000) comprehensive study of new forms of organising in Europe sheds light on both strategic and organisational decisions faced by firms in rapidly changing organisational contexts. The analysis includes economies of scale, concentration on core activities rather than diversification, focus on competencies, and outsourcing and downsizing rather than vertical integration.

In the course of this analysis, Pettigrew and Fenton (2000:39) found that outsourcing and alliance activities increased by 65% over the period 1992-1996. However, only 11% reduced diversification. The de-diversification process was small and diversification among related business high.

Pettigrew and Fenton (2000) also underline the importance of new managerial processes in allowing companies to cope better with the complexities of a rapidly changing environment. These processes include, among others: diversity among the top team; empowerment; employee participation in decision-making; knowledge creation and knowledge transfer; collaboration and communication.

It is important to highlight that the conclusions of Pettigrew and Fenton's research refer to studies carried out in companies in developed countries. Khanna and Palepu (1997) suggest that while western economies stress the importance of core competencies and focus, emerging markets emphasise the critical role of diversification. Khanna and Palepu (1997, 2000) indicate that these differences in organising between more advanced western economies and emerging economies stem from their different institutional settings (see also Chapter 4 in this thesis). The unpredictability of government actions and the lack of access to the advanced technology, capital markets, cheap financing and technical knowledge available in western economies forces companies in emerging markets to rely on diversification as an organisational form to fill the institutional voids existing in their countries (see also Ghemawat and Khanna, 1998).

Broadening the scale and scope of the business was also considered important by those who carried out empirical research in Argentina. Carrera *et al* (2000), in a study of the strategic responses of Argentinian companies throughout the 1990s, show that indigenous businesses strengthened both diversification of related activities and vertical integration. Thus, widening the scope of the business rather than concentration on core competencies was the strategy followed by indigenous businesses. Carrera *et al* (2000) explain that the institutional context in Argentina features a lack of highly developed intermediaries in the market, so the increase in scope was necessary to overcome that shortage (e.g. the impossibility of outsourcing some activities due to the lack of a reliable supplier).

While Pettigrew and Fenton (2000) emphasised the importance of alliancing, Yoguel and Milanesi (2001) – in a survey carried out in Argentinian firms – found that only 25% of the companies signed cooperation agreements during the 1990s. The vast majority relied on informal connections rather than formal cooperation.

Internationalisation of indigenous firms' activities was also considered important in companies facing severe competition in the internal market in the 1990s. Guillén and Toulán (1997) show how the intense pressures brought into the Argentinian market by foreign investment made indigenous firms start to internationalise their activities as a way of balancing out the loss in the internal market (see also Toulán and Guillén, 1997; Guillén, 2000).

Changes at the organisational and managerial level were also indicated by Toulán (1997) and Yoguel and Milanesi (2001). These writers depict the challenges faced by companies in different sectors in Argentina during the 1990s and how most adaptable firms changed their organisational design from a functional hierarchical structure to one based on business units (Toulán, 1997) or cells and teams (Yoguel and Milanesi, 2001).

New managerial capabilities also needed to be developed. Batley (2000) analysed the water industry in Argentina and highlighted the importance of operational autonomy as a way of confronting the speed of environmental changes. In practice, this operational decentralisation meant improving efficiency and effectiveness mainly by freeing managers from bureaucratic rules and controls. Yoguel and Milesi (2001) and Toulán (1997), on the other hand, stress the importance of having managers with broad state-of-the-art techniques and skills. This was a crucial factor for firms that attempted to transform and adapt their businesses during the period of structural adjustment in Argentina in the 1990s.

In the light of the foregoing analysis, questions arise regarding the adaptation responses of the flexible and less flexible companies in this study. We have already shown the differences and similarities in studies that consider the adaptation process of firms operating under high levels of competition in developed countries and in Argentina. So,

did the companies in this study focus on core competences or diversify their activities? Did the firms dismantle the value chain or strengthen it? What were the most important strategies followed by the companies? What organisational and managerial aspects were the focus of their transformation process? And, finally, what were the differences between the adaptation behaviour of flexible and less flexible firms?

Chapters 7 and 8 are transformational accounts that shed light on the adaptive responses of the flexible and less flexible firms selected for the analysis. In chapter 7 A and B the transformation of Sidus and Andrómaco in the pharmaceutical industry is explained, while in chapter 8 A and B the transformation of AGD and Vicentín in the edible oil industry is examined.

To facilitate comparison between the companies analysed in this study, the structures of the chapters are similar. In each, we briefly analyse the history of the firm from its foundation to 1999. However, the cases centre on tracing key issues chronologically over the period 1989-1999, viz: strategic initiatives (in the case of flexible firms) or market and products (in the case of less flexible firms); changes in the structure of the company; changes in the management; changes in the governance; and finally, unresolved issues and challenges for the future.

Chapter 7A: Case study: Sidus Group⁴⁰

7.1 Overview of the history of Sidus 1938-1999

Founded in 1938 by Miguel and Antonio Argüelles, today Sidus is a diversified group that participates in the pharmaceutical industry at various points in the chain of value. By 1999 Instituto Sidus, the mother company, was the 4th largest laboratory in the ranking of pharmaceutical companies in Argentina (IMS,1999). Another company in the Group, BioSidus, was considered the most important biotechnological company in Latin America (González García *et al*, 1999). BioSidus was also considered one of the few companies that successfully weathered the economic recession that affected the country over the period 1998-2001 (Ramos, 2001).

Miguel and Antonio married and had children. Miguel had three children: Estela, Irma and Fernando. Sadly, Fernando died at the age of eighteen. Antonio, on the other hand, had two children – Marcelo and Silvia. None of the female children entered the business and the only male heir was Marcelo, who started to work in Sidus in 1963. By 1984 the company was in effect run by Marcelo Argüelles, although the founders were still alive.⁴¹ Antonio finally died in 1985 and Miguel in 1987.

From the very beginning, the founders emphasised the importance of product innovation as a key factor for success. Product innovation promoted the growth of the company throughout the 1960s and 1980s (see figure 7.1 for the evolution of Sidus over time).

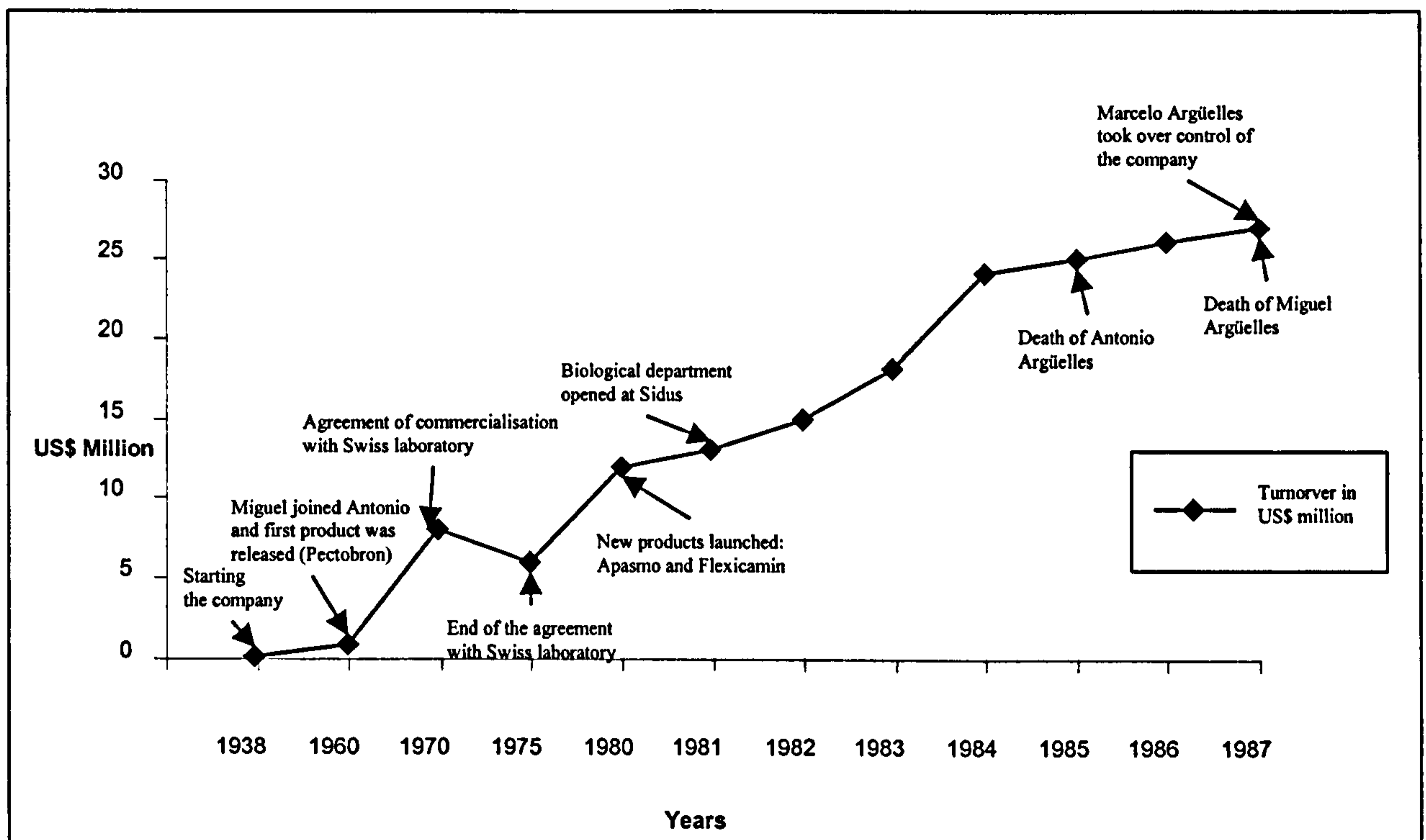
The 1980s saw significant changes in the company. In 1980, Instituto Sidus set up a small biotechnological department. This investment would become the star project of the company a decade later: BioSidus. *“In those days we could see that there were two clear alternatives: one was the pharmo-chemical projects that were popular at the time in Italy*

⁴⁰ In 1989 Instituto Sidus became a Group of companies, so, we will use the words Sidus, the Group or Sidus Group to differentiate them from Instituto Sidus the mother company.

⁴¹ Interview with Santiago García Belmonte and informal talks with Luis García Belmonte and Estela Argüelles

and Europe, on the basis that Italy was the supplier [of raw material] for the countries without patents; and the other was integration from the biological point of view. We took the risk of heading towards biological integration.⁴²

FIGURE 7.1: EVOLUTION OF SIDUS 1938-1987



It was during the tenure of Marcelo Argüelles that the company took off rapidly. In 1988 the opportunity arose with the first and only strategic alliance in the industry at that time.⁴³ A deal with Merck, the world's largest medicinal laboratory in 1988, made it possible for Instituto Sidus to jump from 22nd position in the ranking of pharmaceutical companies to 3rd position in Argentina. The twelve-year agreement (until the year 2000) with Merck can be considered the most important milestone in the growth of the company during the 1980s (see stages of the firm in figure 7.2)

⁴² Interview with Marcelo Argüelles, CEO

⁴³ To date there has not been another strategic alliance in the pharmaceutical industry in Argentina

“The agreement with Merck was a milestone in the company’s history and marked a break with the usual paradigms because within the industry the deal was considered crazy, but the President of the company foresaw the legal change which would take place in the future in our sector with the patent law, and when the patent law was passed he had already made a strategic alliance with a top level company, building a strength which no other Argentinian company has today.”⁴⁴

After the Merck deal, however, the differences between Sidus and the rest of the companies in the industry widened. In 1989 Sidus pulled out of CILFA, the professional association that Sidus’ founders helped to set up.

Although the agreement boosted Instituto Sidus’ position in the pharmaceutical industry, it was clear that once the deal was over, Instituto Sidus was in a potentially very fragile position. A strategy of diversification and spreading the activities of the company throughout the value chain began immediately after the deal with Merck. Figure 7.3 shows both the evolution of the Group after the deal with Merck and the main macro-environmental changes affecting the industry.

Sidus embarked on various projects over the period 1989-1999. In 1989 the company set up what would become the first biotechnological company in Argentina and Latin America (Katz, 1992). The former biological department at Instituto Sidus emerged as the driving force of the group some years later.

In 1990 Sidus also set up a distribution company. This step was necessary to enable them to commercialise all their own products and the products that Merck was pouring into the company. In 1992, Tecnoplant, a division of BioSidus, was established. It was a step towards developing markets for new bio-products of plant origin, as well as the production and multiplication of transgenic plants, among others.⁴⁵

⁴⁴ Interview with Marcelo Burstein-HR Manager.

⁴⁵ Interview with Marcelo Criscuolo-Executive Manager of BioSidus-Company’s brochure.

1995 saw the company moving forward in the chain of value with its attempt to set up a company called Lasifarma, established to commercialise OTC (over-the-counter) products. However, the project failed and by 1999 Lasifarma was a small and shrinking company.⁴⁶

The end of the decade would show Sidus returning to the mass consumption market but in a different way: investing in retail through buying a chain of pharmacies and intermediary companies. In 1998 then, Sidus, in a move unlike other companies in the industry, bought a franchise of *Vantage* pharmacies, set up its own outlets and also bought stakes in another chain. The move prompted Sidus to participate in intermediary companies that operated between the pharmacies and the unions and the social security system. This strategic move positioned the Group all along the value chain, from production, research and development to commercialisation, distribution and retailing (see structure of the group in figure 7.4).

⁴⁶ Interview with Jorge Coronel-ex Marketing Manager, current head of New Businesses Unit.

FIGURE 7.2: STAGES IN SIDUS' HISTORY

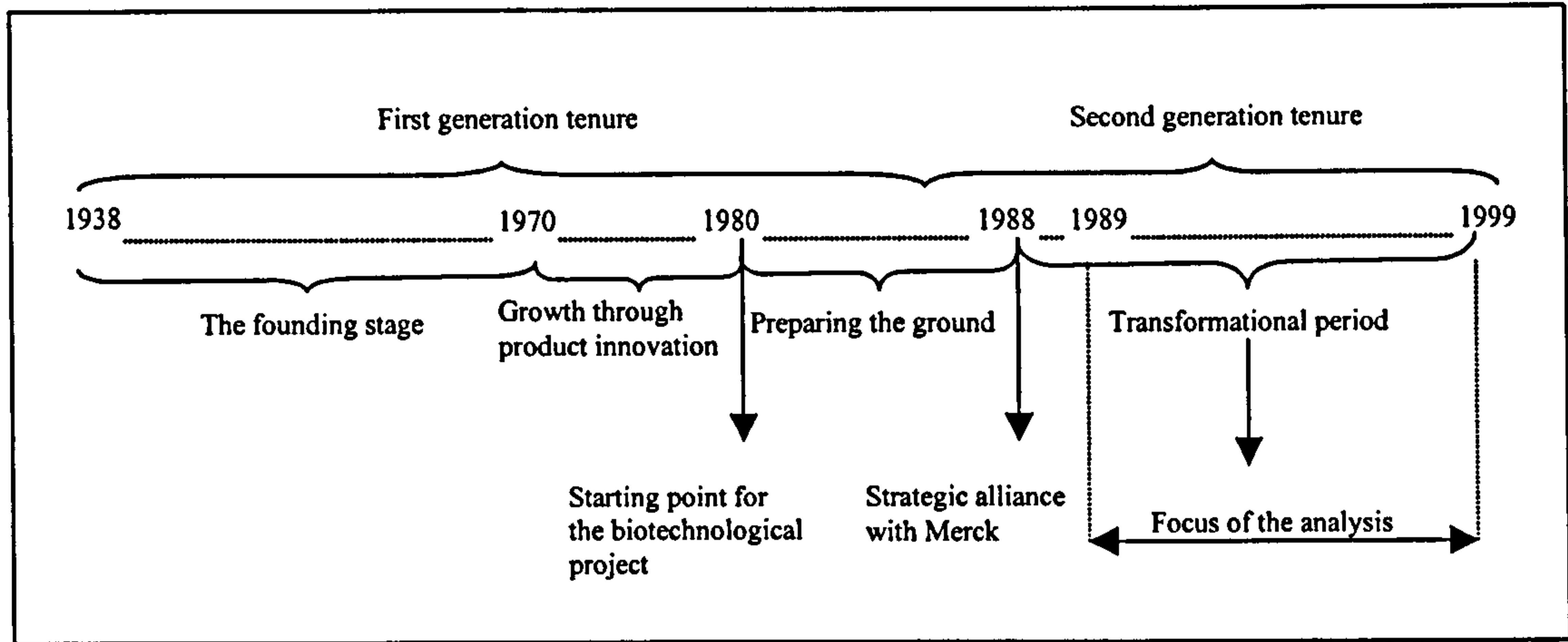
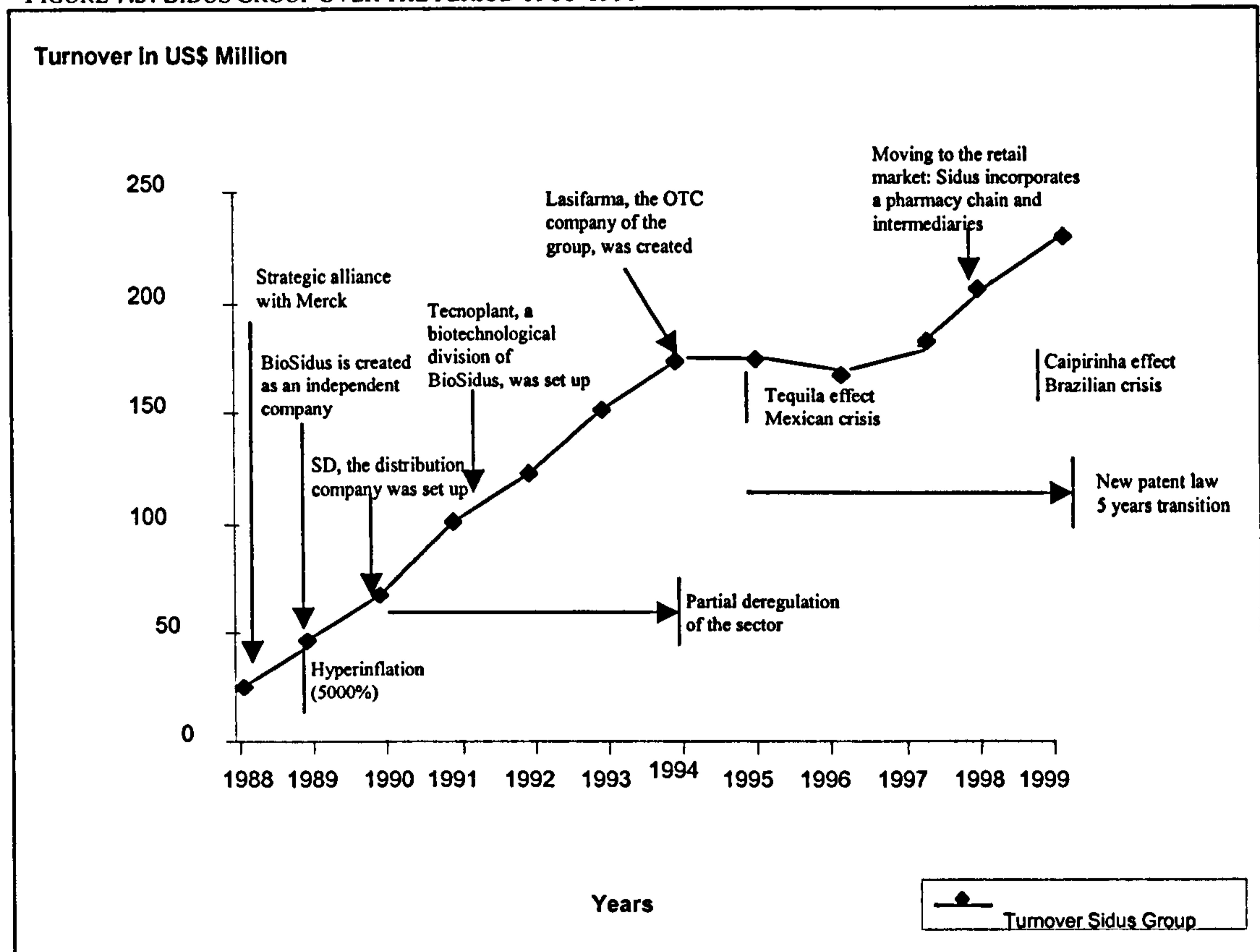
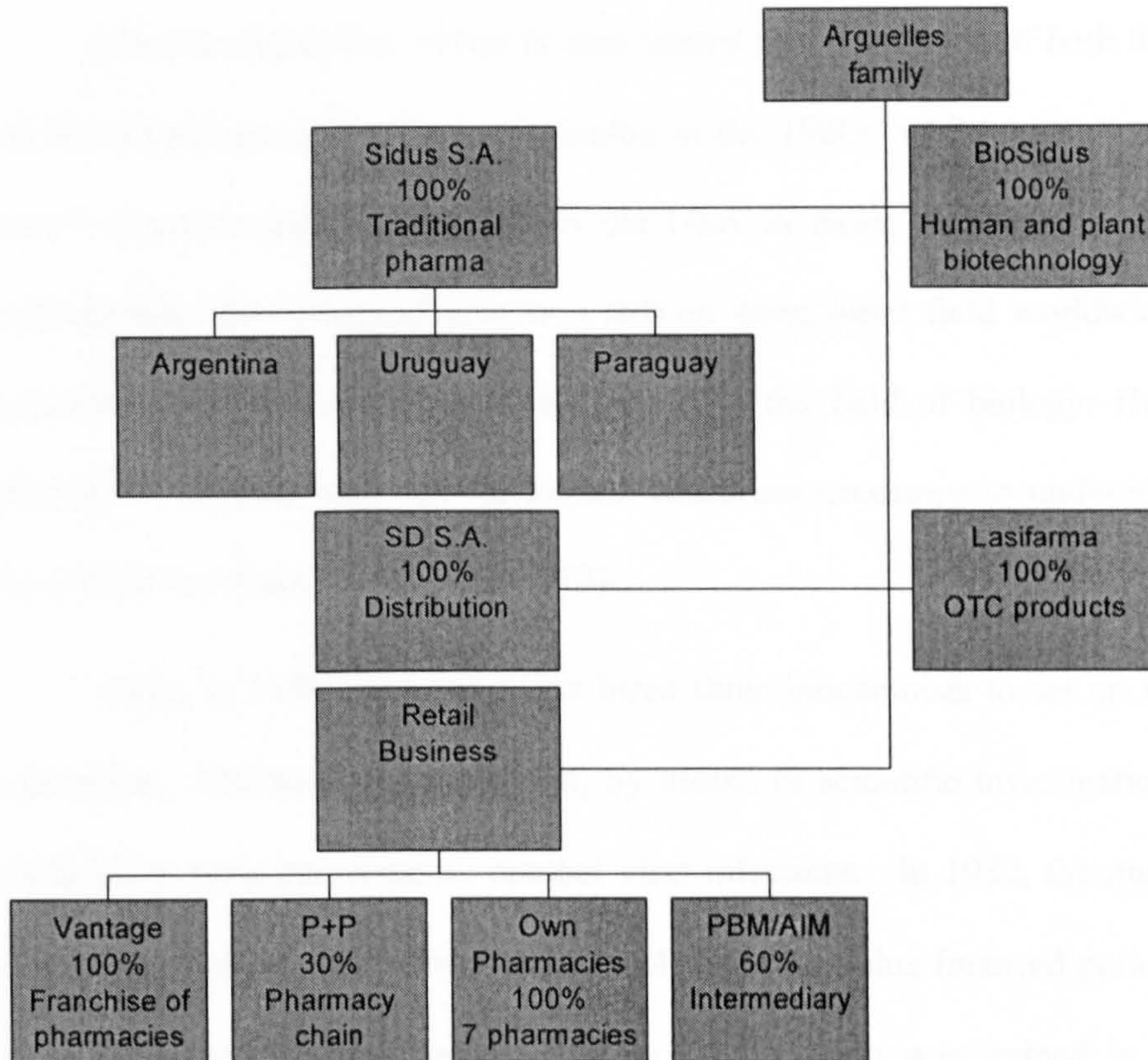


FIGURE 7.3: SIDUS GROUP OVER THE PERIOD 1988-1999⁴⁷



⁴⁷ This figure was prepared using different sources of information: company's archive material; interview with Jorge Quintana and interview with Alejandro García Belmonte.

FIGURE 7.4: STRUCTURE OF THE SIDUS GROUP YEAR 1999⁴⁸



7.2 Chronological and analytical tracing of key issues

The strategic initiatives: Biotechnology

In 1980, Marcelo Argüelles, the son of the then CEO of Instituto Sidus, decided to embark on a risky but, as it proved, successful project: the setting up of a biotechnological department within Instituto Sidus. Both founders, Antonio and Miguel, backed Marcelo in this venture: *“When you spin things out, you realise that there was something at the back of Marcelo’s mind: biotechnology is the development of products under their own brand names. Having a licence means that you have a certain length of time to commercialise*

⁴⁸ This organisational chart was prepared using the information provided by the Board of Directors of Sidus.

*your products. When the time is up, they go, you have lost them. Today, we are using biotechnology to replace what we are going to lose once the Merck contract is over.”*⁴⁹

Marcelo Argüelles' vision is also related to the situation of both the pharmaceutical and biotechnology industries in Argentina in the 1980s: while Argentina was thirty years behind countries such as the UK or the USA in terms of pharmaceutical research and development, the biological area was still an unexplored field worldwide. Furthermore, Argentina had produced three Nobel prizes in the field of biology: Hussay, Leloir and Milstein.⁵⁰ The country had the human resources necessary to undertake such a project (Bercovich and Katz, 1990; Diaz, 1993).

Thus, in 1980, Instituto Sidus hired three biochemists to set up its new biological department. The basic plan was that, by means of scientific investigation, Instituto Sidus would work with interferon to combat viral infections. In 1982, the number of scientists rose to 20. Between the period 1982-1984, Instituto Sidus financed periods of study leave for its group of scientists and researchers. The team was trained in three disciplines: genetic engineering, cell cultivation and protein purification. In 1986, Instituto Sidus bought laboratory facilities in the city of Buenos Aires. Cultural differences between the scientists and Instituto Sidus personnel speeded up the decision to move to a different location.⁵¹

1989-1999: The investment bears fruit

It was not until 1989, however, that BioSidus was established as an independent company and part of the Sidus group: *“Imagine that year, 1989, everybody in the industry thought we were mad. That year inflation rose steeply and we had a company that still did*

⁴⁹ Interview with Santiago García Belmonte- family member and Executive Director of Retail Businesses

⁵⁰ Milstein studied in Argentina but won the Nobel Prize at Cambridge University.

⁵¹ Interview with Marcelo Criscuolo- Executive Director of BioSidus.

not have a product. We were in the last stages of our clinical trials. The situation in which the country was submerged made us fear for the project's survival."⁵²

In 1990, BioSidus was in the final stages of releasing its first product, the Recombinant Human Erythropoietin, which is used to combat anaemia. Although the plan had been to release the Interferon first, the company shifted strategy due to changes in the market. There were two main considerations that caused them to change strategy: firstly, the Erythropoietin was much more profitable than Interferon; secondly, and as an additional advantage to producing Erythropoietin, Interferon already existed in the country but not Erythropoietin. Hence, in 1987, the company halted the Interferon project and brought out the Erythropoietin.⁵³

The product was launched in the United States in 1989, and in Argentina in August 1990. The strategic move to release the Erythropoietin was rewarded by the market. The product has held 70% of the market share in Argentina while four products are competing for the market.⁵⁴ Moreover, BioSidus is considered one of the three largest producers of Erythropoietin worldwide along with Amgen and Genetech of the United States (Diaz, 1993).

In 1991, the Interferon was launched. The release of the product, however, encountered opposition from two different fronts: firstly, the foreign companies that already commercialised the product in the country (i.e., Roche, Schering Plough); and secondly, from the indigenous oncologists that were suspicious of using a national product.

One of the problems the company had to face was when Roche – the Swiss laboratory – accused Sidus of selling a bogus product: *“Marcelo held meetings with the*

⁵² Interview with Juan Carlos Bidegaray, Business Development Manager of BioSidus.

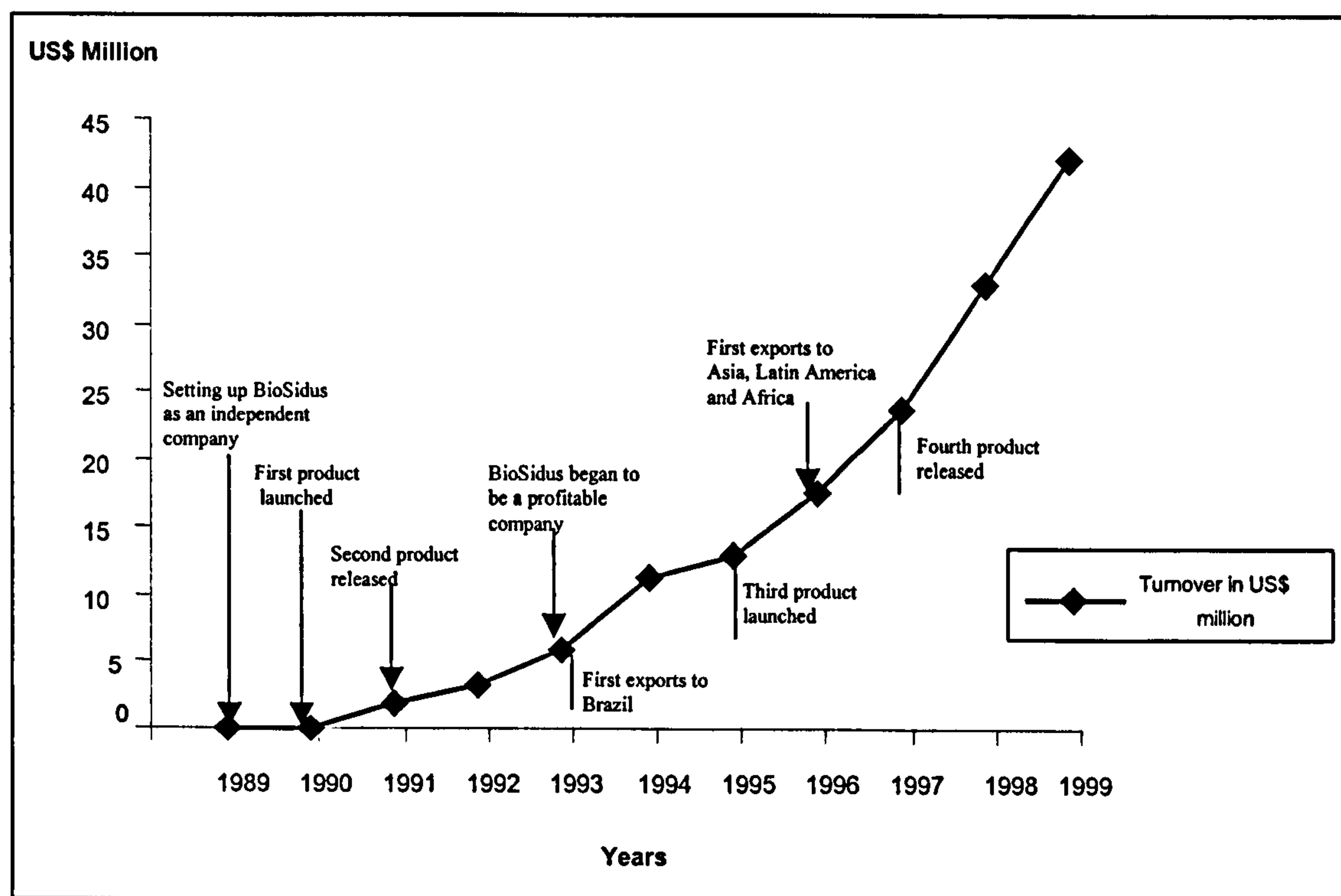
⁵³ Interview with Juan Carlos Bidegaray and Marcelo Criscuolo.

⁵⁴ If we consider that BioSidus provides the raw material for one of the competing products, the market share increases to 85%

*President of Roche to avoid this kind of smear campaign. When we proved that Roche had accused us falsely, simply because we were the competition, our sales rose significantly.*⁵⁵

BioSidus released two more products. In 1995, it launched the G-CSF, a product for patients who have undergone bone marrow transplants and for those undergoing chemotherapy. In 1997, the last product was launched, which was the growth hormone to treat growth problems in children (figure 7.5 shows the evolution of products released and turnover obtained in the period 1989-1999).

FIGURE 7.5: EVOLUTION OF BIOSIDUS OVER THE PERIOD 1989-1999⁵⁶



Internationalising the group through BioSidus

The investments the group made in the first two products meant that the company could not afford to write off the debts incurred by the investments without looking beyond

⁵⁵ Interview with Marcelo Criscuolo-Executive Director of BioSidus

⁵⁶ This figure was created using data from the interviews at Sidus and BioSidus and from the information provided by the Foreign Commerce Sales Department of BioSidus.

the Argentinian market. Thus, BioSidus created the foreign sales department.⁵⁷ The first target was Brazil. In 1993 BioSidus was in a position to register their products in the biggest market in the region. The company sold both products in Brazil (Erythropoietin and Interferon), attaining 70% of the Brazilian market.⁵⁸ This was when BioSidus leapt ahead. In 1993 the company had achieved economic independence from Sidus.⁵⁹

While the company entered the Brazilian market with a partner, Biosintética, it granted licenses to MNC pharmaceutical companies to commercialise its products in the next stages of the internationalisation process in Asia, Africa, Latin America and the Caribbean (see table 7.1). This new stage of internationalisation began in 1995. While Biosidus had an important worldwide presence, there were certain markets – for example, the European, American and Japanese markets – which, due to tight regulatory policies, were difficult to access.

BioSidus had created the ‘tit for tat’ phenomenon. For example, Schwartz, a German company, had granted Instituto Sidus the licence to produce a series of products and BioSidus had granted them some other licences. This would allow BioSidus to enter the Chinese market within a few years by forming an alliance with Schwartz which already had a company in China.⁶⁰

⁵⁷ Informal talk with Juan Pablo Barta- Foreign Commerce Sales Department of BioSidus.

⁵⁸ Data obtained from the Foreign Commerce Sales Department of BioSidus.

⁵⁹ Interview with Marcelo Criscuolo-Executive Director of BioSidus.

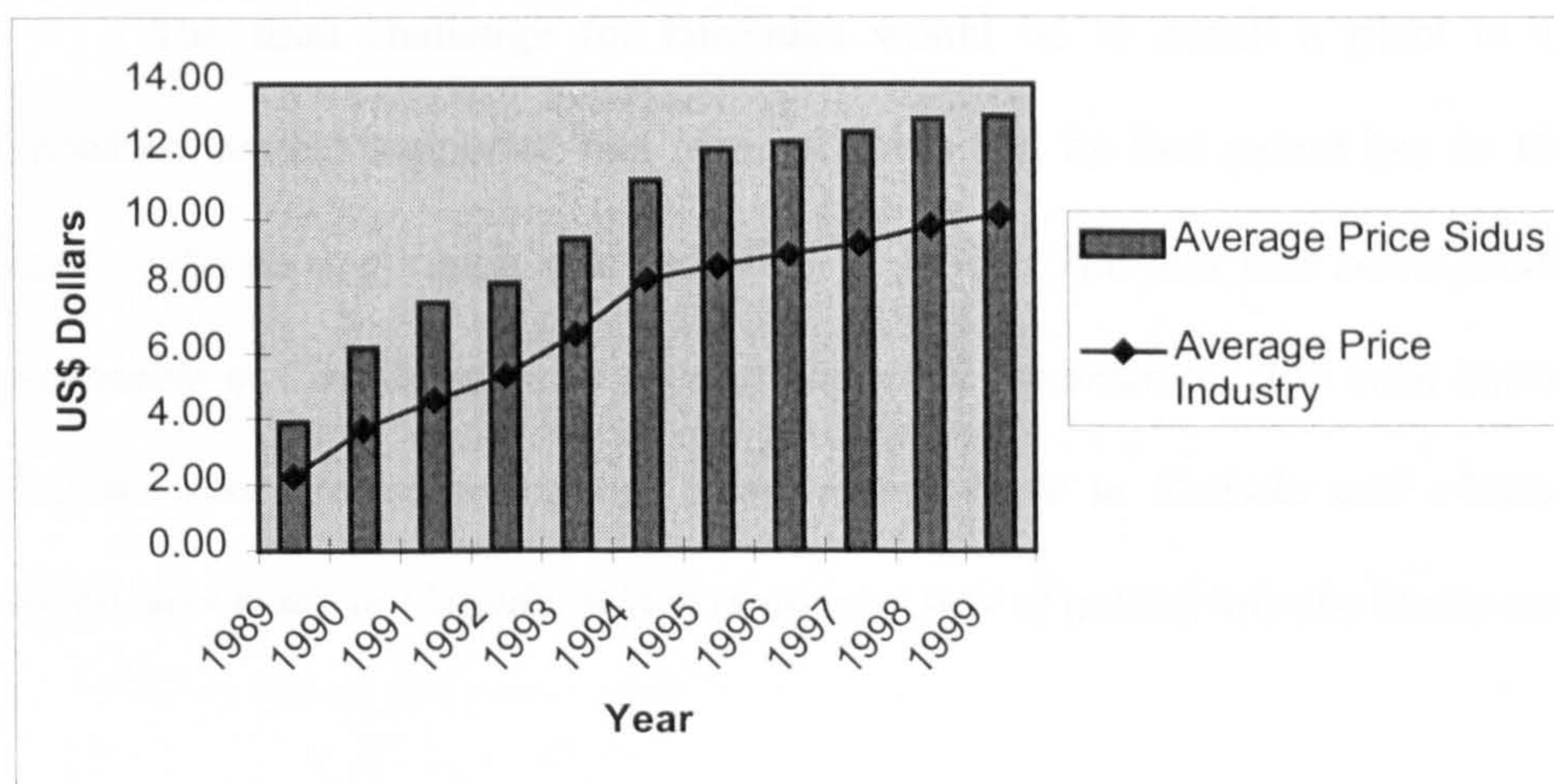
⁶⁰ Interview with Marcelo Criscuolo-Executive Director of BioSidus.

TABLE 7.1: BIOSIDUS IN THE WORLD⁶¹

Country	Licensee
Argentina	Sidus; Inmuno and Rontang
Brazil	Biosintetica
Bolivia	Schering AG
Colombia	Procapis
Chile	Andrómaco
Ecuador	Interpharm
Paraguay/ Uruguay	Sidus
Peru	Farmaindustria
Central America and Caribbean Sea	Asta Medica
India	Cadila Healthcare
Thailand	Berli Jucker
China	Schwartz Pharma
Lebanon/ Syria	U.P.O
Turkey	Fako and Nobel
Algeria /Morocco/ Libya/ Tunisia	Medis

The investment in biotechnology was also helping the Group to keep the average price of its products above the average price of the industry as a whole, as figure 7.6 illustrates.

FIGURE 7.6: AVERAGE PRICE OF SIDUS' PRODUCTS AND PRICES IN THE INDUSTRY OVER THE PERIOD 1989-1999⁶²



⁶¹ This table was created using data provided by the Foreign Commerce Sales Department of BioSidus.

⁶² Source of information: Reports of IMS 1989-1999.

Challenges for the future

BioSidus faces three main challenges in the future. The first one is to release a broader range of products. The second and third challenges are related to building plants in Brazil and Canada.

There are some lines of products that the company wants to bring out in the next few years. The new products, however, are products for a niche market such as those related to Alzheimer's disease, bone marrow transplant, thrombosis, osteoporosis and a regulator of intestinal flora, as well as those products considered appropriate for illnesses more prevalent in developing countries such as chagas and cholera.⁶³

A second challenge would be to build a plant in Brazil. The group signed a joint venture with a Brazilian partner and founded a company called Biolatina: *"At the moment this project is well under way, but it is hard to set up a bi-national company with Brazil, it is difficult to get finance which fits the economic climate of both countries."*⁶⁴

The final challenge for BioSidus would be to install a plant in Canada. The Canadian context supported this idea. Canada had its first patent law in 1989. It was a very moderate one which was modified in 1992: *"The fact that some products are non-patentable in Canada gives us a great historical opportunity. The most interesting thing is that we can develop technology here, manufacture in Canada and obtain a certificate which says made in Canada, which is an easy way of getting into the States and Europe."*⁶⁵

The strategic initiatives: Retail market

From the laboratory to the pharmacy

The most recent move Sidus made in the market was in 1998, when it decided to jump from one point in the chain to another, from production and research and

⁶³ Interview with Juan Carlos Bidegaray, Business Development Manager of BioSidus.

⁶⁴ Interview with Marcelo Criscuolo-Executive Director of BioSidus.

⁶⁵ Interview with Marcelo Argüelles-CEO.

development straight to the retail market, by setting up a chain of pharmacies. The original project was to invest US\$ 15 million and establish 50 outlets. However, the plan was modified when Sidus realised that two foreign companies wanted to set up a franchise of pharmacies in the country. The Group thereafter bought only 7 pharmacies and a franchise *Vantage* – the first and only franchise in Argentina up to 1999.⁶⁶

Having a franchise allowed the Group to increase swiftly its level of participation in the retail market. With the franchises (200 pharmacies) and its own pharmacies, the Group sought to find mutually beneficial arrangements. In 1998, Sidus also bought 30% of the shares of P+P – a very important chain of pharmacies owned by the Pardo brothers. The last acquisition was explained as an attempt *“to learn the business from the most important company in the sector and to achieve synergies with our own pharmacies. Thirty percent of the shares was enough to accomplish this.”*⁶⁷

In one year then, Sidus shocked the pharmaceutical industry by entering a field that had not been explored by other pharmaceutical companies, buying the first and only franchise in the country, acquiring 7 pharmacies and buying a share in another chain (Manzone, 2000). *“Our entrance into the market was a shock for the rest of the industry. They did not expect us to make this move. Again we were in the forefront, the first to move ahead, destroying the competitors and setting ourselves apart from them.”*⁶⁸

In 1999, Sidus also decided to get involved in another activity which complemented its investments in the retail market. In 1999, it bought 60% of AIM and Compañía de Servicios Farmacéuticos. The companies ranked first and second respectively in their specialities. AIM and Compañía were mandatory or intermediary companies. They traded between the pharmacy and the social security system, agreeing contracts and discounts. In 1999, Sidus also bought 30% of a company called PBM. PBM was a technology company that provided services to the mandatory companies. PBM had no competition because it

⁶⁶ Interview with Santiago García Belmonte- family member and Executive Director of Retail Businesses.

⁶⁷ Interview with Santiago García Belmonte- family member and Executive Director of Retail Businesses.

⁶⁸ Interview with Santiago García Belmonte- family member and Executive Director of Retail Businesses

was the only company providing this type of service: *"By buying these companies what Sidus did was it distanced the company from the rest of the industry."*⁶⁹

The incomplete tasks

From the moment the pharmacies were opened, the volume of products sold by Sidus increased.⁷⁰ The new businesses, however, were still far from being profitable. Sidus' own pharmacies had a monthly turnover of US\$ 1 million and the 30 % participation in P+P amounted to US\$ 1.5 million monthly. Neither Sidus' own companies nor P+P reached the break-even point. Furthermore, the *Vantage* franchise was also seeing losses.

*"Our main aim in 2000 and 2001 is to break even in the three projects. All three of them are strategically important but we are not earning money with them; on the contrary, we are losing money. We need to own at least 20 pharmacies to gain scale. This, with a good management of the outlets, will give us profits. We need to have a level of turnover of 6 million a month to be able to absorb the costs of such a structure."*⁷¹

To be able to do this, Sidus is thinking of either taking over four or five of P+P's fourteen pharmacies or buying 51% of P+P shares. By doing this, the group of pharmacies plus the franchise will be able to achieve profits.⁷²

On the other hand, companies such as PBM, AIM and Compañía are also running at a loss: *"The whole idea is great. It is an important step forward to be the first to get a grip on this part of the industry. The companies, nevertheless, are operating below the breakeven point. When we bought them they were losing money. As you can see, money was not the main reason for buying them. But now, we have to sort things out and start to make profits."*⁷³

⁶⁹ Interview with Santiago García Belmonte- family member and Executive Director of Retail Businesses.

⁷⁰ Data obtained from company's sources (Marketing department).

⁷¹ Interview with Ricardo Pedreira-Manager Vantage franchise and own pharmacies.

⁷² In the year 2002 Sidus bought 51% of the P+P company.

⁷³ Interview with Santiago García Belmonte- family member and Executive Director of Retail Businesses.

Sidus took steps towards achieving this goal and these included making some changes: PBM and AIM have a new General Manager. Changes in Compañía are forthcoming.⁷⁴

Changes in the structure

The effects of Sidus' decision to diversify are clearly reflected in the structure of the company. While in 1989 the structure of the company was a functional one (see figure 7.7), in 1999 the group split up into 5 companies that are divisions of Sidus Group (see figure 7.8).

The changes in the structure were decided in 1989 once BioSidus was established as a separate company. The Board believed that BioSidus had a different nature and this was demonstrated by the cultural clashes the group of scientists experienced while sharing the same space with Instituto Sidus' personnel. The Board therefore decided that BioSidus should have its own space *"to express and develop itself."*⁷⁵

With the other emerging areas such as the distribution company (SD), the OTC company (Lasifarma) and the retail businesses, the company used a similar strategy. The aim, as the CEO stated, was *"To avoid bureaucracy in decision-making. Having different companies with the freedom to make decisions and a structure focused on their particular businesses helped us to be fast and first."*⁷⁶

After the creation of the second company –SD – in 1990, the Group started to reorganise the areas within Instituto Sidus (the mother company) to gain, as some managers stated, *"economies of scale"* and *"efficiency"*.⁷⁷ The different support areas that previously gave their services to the main company were transformed into support areas for the whole Group. In so doing, the company avoided overlapping functions and activities.

⁷⁴ In the year 2000, PBM and Vantage achieved break-even point. In the year 2002 Sidus bought 100% of PBM and was negotiating with other companies to go into partnership with Sidus in AIM and Compañía.

⁷⁵ Interview with Marcelo Argüelles-CEO.

⁷⁶ Interview with Marcelo Argüelles-CEO.

⁷⁷ Interview with Marcelo Burstein, Santiago García Belmonte and Jorge Quintana.

The Group's support areas can be seen in figure 7.8 (within the structure of Instituto Sidus in the unshaded boxes).

New support units emerged in this process, such as the Human Resource department in 1994, which replaced the old Personnel Department, and the area of Communication and Image to unify the corporate message of the whole group. Finally, the Logistics department was set up to achieve economies of scale throughout the companies of the group as shown in figure 7.8.

Not only were new areas created but a new concept also emerged as central to running the businesses at Instituto Sidus: the business units. The reorganisation sought to give more power to the people in charge of the business units: *"By doing this we wanted to infuse the areas with more dynamism, and we thought that the form of business units suited our objectives."*⁷⁸

While the different companies of the group benefited from the support of some units at the headquarters, the Board also decided they needed to update the units that depended directly on the Board. This is how three new areas emerged: Regulation and Legal Analysis in 1990; Sectoral Analysis in 1990; and finally, Macroeconomic Analysis in 1997. In all three cases, these were areas that aimed to look into different aspects of the context surrounding and affecting the company.

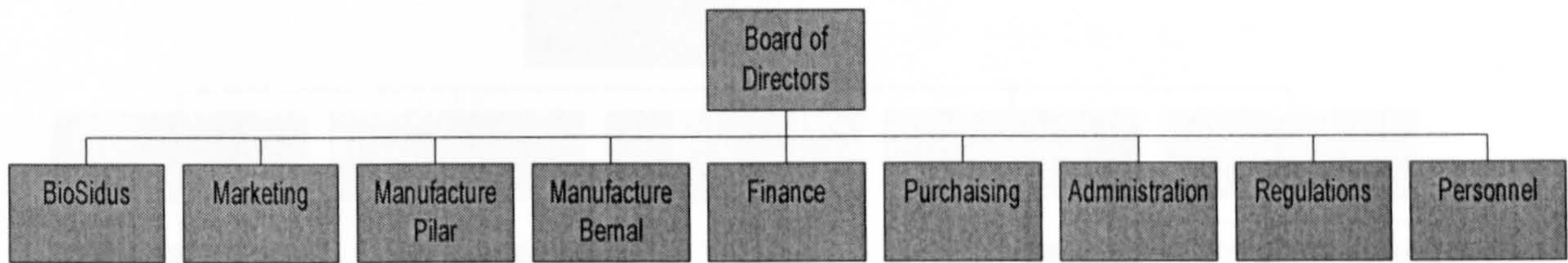
Changes to the structure were effected smoothly and without resistance. The fact that the company was expanding did not alter its normal development. As some managers stated: *"The changes in the structure passed without notice. The company was expanding its activities, and the fact that it was decided that each new venture would become a new company meant that we did not notice the impact of the change. This was probably the success of the structural change."*⁷⁹ *"We have not noticed any structural changes over the last ten years. However, if you compared the structure now and ten years ago, there have*

⁷⁸ Interview with Marcelo Argüelles-CEO.

⁷⁹ Interview with Alejandro García Belmonte-Controller.

been huge changes. I think this is something the Board was working on hard to try to avoid the normal problems these changes usually bring about.”⁸⁰

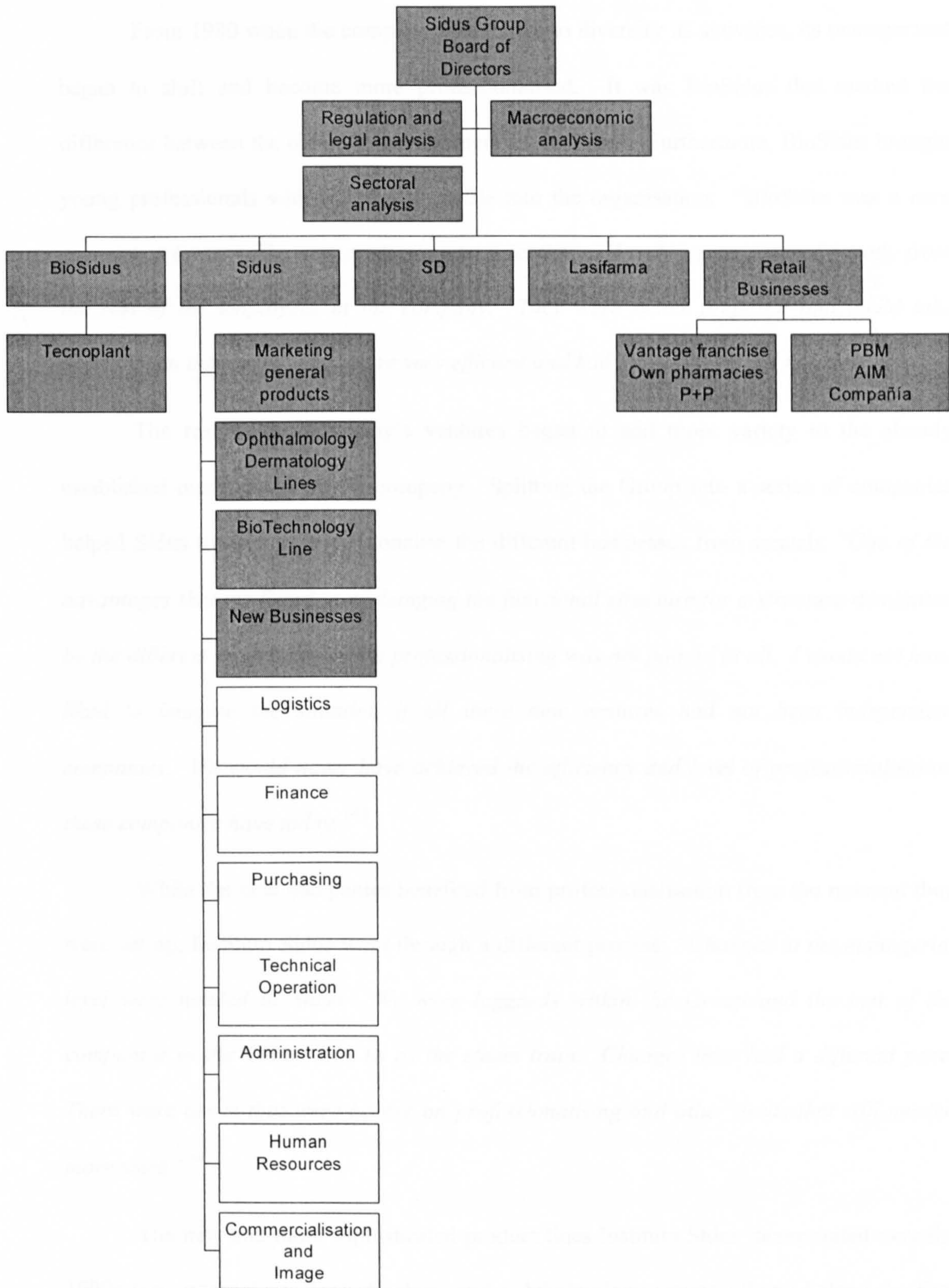
FIGURE 7.7: SIDUS’ STRUCTURE IN 1989⁸¹



⁸⁰ Interview with Jorge Coronel-ex Marketing Manager, current head of New Businesses Unit.

⁸¹ Figures 7.7 and 7.8 were created with archive material from the Human Resource department.

FIGURE 7.8: SIDUS' STRUCTURE IN 1999



Changes in the management of the company

A wave of new professionals

From 1980 when the company first started to diversify its activities, its management began to shift and become more professionalised. It was BioSidus that marked the difference between the old-style management and the new. Furthermore, BioSidus brought young professionals with a different profile into the organisation: *“BioSidus was a rare experience for us. The new professionals, scientists and technicians differed greatly from the rest of the employees in the company. They were better prepared and could take decisions on their own. They were very efficient and had tools that we did not have.”*⁸²

The rest of the company’s ventures began to add more variety to the already established management in the company. Splitting the Group into a series of companies helped Sidus to start to professionalise the different businesses from scratch: *“One of the advantages that we found in exchanging the functional structure for a structure dominated by the different businesses is that professionalising was not painful at all. I would not have liked to imagine the situation if all these new ventures had not been independent companies. We would never have achieved the efficiency and level of professionalisation these companies have today.”*⁸³

While the new companies benefited from professionalisation from the moment they were set up, Instituto Sidus went through a different process: *“Changes at the managerial level were needed at Sidus. We were laggards within the Group and the rest of the companies in the Group saw us as the steam train. Changes here had a different pace. There were areas that were keener on professionalising and other areas that still needed more work.”*⁸⁴

The new and more sophisticated product lines Instituto Sidus incorporated over the 1990s (i.e., odontology, biotechnology and ophthalmology among others) helped the firm

⁸² Interview with Marcelo Argüelles-CEO.

⁸³ Interview with Marcelo Argüelles-CEO.

⁸⁴ Interview with Marcelo Burstein-HR Manager.

to renew the largest section of its work force: the sales team.⁸⁵ As table 7.2 shows, entry requirements for those seeking employment with Sidus were tougher, thus boosting the level of professionals incorporated in the firm over the 1990s. By 1999 the sales force of Sidus had increased in number from 20 in 1989 to 200 in 1999, reducing the average age from 49 years to 39. Similarly, the average amount of working experience was reduced from 15 years to 5 years.⁸⁶ Table 7.3 illustrates the changes in average age in different areas of the company.

TABLE 7.2: DEGREES AND REQUIREMENTS FOR ENTERING SIDUS OVER THE PERIOD 1989-1999 (SELECTED AREAS)⁸⁷

Areas	1989	1999
<i>Marketing</i>	-Experienced medical visitor -At least 10 years work experience in the industry.	-University degree -Age between 25-30 -3 years average experience (not exclusively in pharmaceuticals)
<i>Finance</i>	-University degree in accounting or economics -Several years of experience in banking or pharmaceutical industry	-University degree-preferably accounting, economics and business administration -Experience in different industries is welcomed
<i>Human Resources (Personnel in 1989)</i>	-Not specified. The personnel area focused on administrative matters therefore, no specific requirements for entering the area.	-University degree -Having done training or internship in a company before -Experience outside the sector welcomed.

TABLE 7.3: AVERAGE AGE OF PERSONNEL IN SELECTED AREAS OF SIDUS GROUP⁸⁸

Area/Company	1989-Average age	1999-Average Age
Marketing	49	39
Production	54	42
Administration	48	37
BioSidus	33	32
Vantage Pharmacies	Did not exist	30

Although Sidus considered it advantageous to shift towards a more professionalised company, they were also aware of the disadvantages of this move: *“Previously, executives*

⁸⁵ The sales force of Instituto Sidus accounted for 44% of the total work force of the company.

⁸⁶ Interview with Jorge Coronel-ex Marketing Manager, current head of New Businesses Unit.

⁸⁷ This table was created with data provided by the different areas under analysis (Marketing, Finance and HR).

⁸⁸ This table was created using archive material provided by the HR department of Sidus.

were very intuitive, they based their relationship with the company exclusively on trust, within surroundings which needed very little control. They had a nose for the market, very few managerial skills, but put in lots of effort. The new professional is someone with many skills, who is well trained, and who has less intuition but more intention."⁸⁹

At Sidus they asserted the importance of old and new managers as having a complementary role in the running of the company: *"The Board is convinced that old managers can help to preserve old values that are our foundation, and new managers would bring those values and tools that the company needs. I would not say that the coexistence is easy, but it works and we learn from each other."*⁹⁰

Control and planning process

In 1988 Instituto Sidus hired a consultant from Arthur Andersen to become its Administration Manager. Marcelo Burstein⁹¹ was given an important task by the Board: to set up the control systems of which the company had very few.

Burstein spent his tenure setting up the whole area of administration, including the clarification of costs, preparation of budgets and the area of taxation. The emphasis in Burstein's work was on information systems and control processes: *"The philosophy I encouraged, in agreement with the General Director, was to prioritise the sharing of information, the sharing of transactions, for which we installed a single database for the whole of the company. We created the control boards that allowed managers from different levels and the Directors to have access to different indicators of the company and its performance. Besides that we improved horizontal communication"*⁹² (see table 7.4).

It was not an easy task to convince the Board of the benefits of having more control:

"We were afraid of control mechanisms. I was against them. We did not want to lose one

⁸⁹ Interview with Marcelo Burstein-HR Manager.

⁹⁰ Interview with Marcelo Burstein-HR Manager.

⁹¹ Marcelo Burstein was firstly appointed as Administrative Manager and, subsequently, in 1995, as HR Manager.

⁹² Interview with Marcelo Burstein-HR Manager (ex-Administration Manager).

of our virtues which was being able to make decisions quickly. In other words, we wanted to avoid becoming a bureaucratic company.”⁹³ Burstein pointed out the difficulty of formalisation in a company that was not used to controls and processes: “It took me years to convince them to introduce technology, to introduce a budget. It seems incredible to me, today, to hear the CEO asking the managers to justify how they have spent their budgets, when a few years ago he would say to me that if we set budgets the company would turn into a public and bureaucratic company.”⁹⁴

TABLE 7.4: INDICATORS USED BY SELECTED AREAS OVER THE PERIOD 1989-1999⁹⁵

Area	Indicators in 1989	Indicators in 1999
<p><i>Marketing*</i></p> <p><i>*In 1999 the indicators correspond to the different business units of product lines.</i></p>	-Sales budget	-Sales budget -Spending budget -Investment budget
<p><i>Production*</i></p> <p><i>*Corresponds to the Manufacture areas in 1989 and the Technical Operation in 1999.</i></p>	-Estimates of cost per unit released.	-%Productivity -Quality of products released -Cost efficiency (cost over total units)
<p><i>Human Resources*</i></p> <p><i>*Personnel department in 1989</i></p>	-%Absenteeism	-%Absenteeism -Specific indicators for training, welfare policies and working conditions -Selection and performance

Board of Directors: Governance, strategy and family

Governance and family alignment

When the founders were still alive, Antonio was the President of the company and Miguel its Vice-President. In 1985 Antonio died and Miguel took over the post of President, though only for a short period of time before his death in 1987. As mentioned before, Marcelo Argüelles, Antonio’s son, was in effect running the company from 1984. Marcelo was the natural candidate when Miguel Argüelles died.

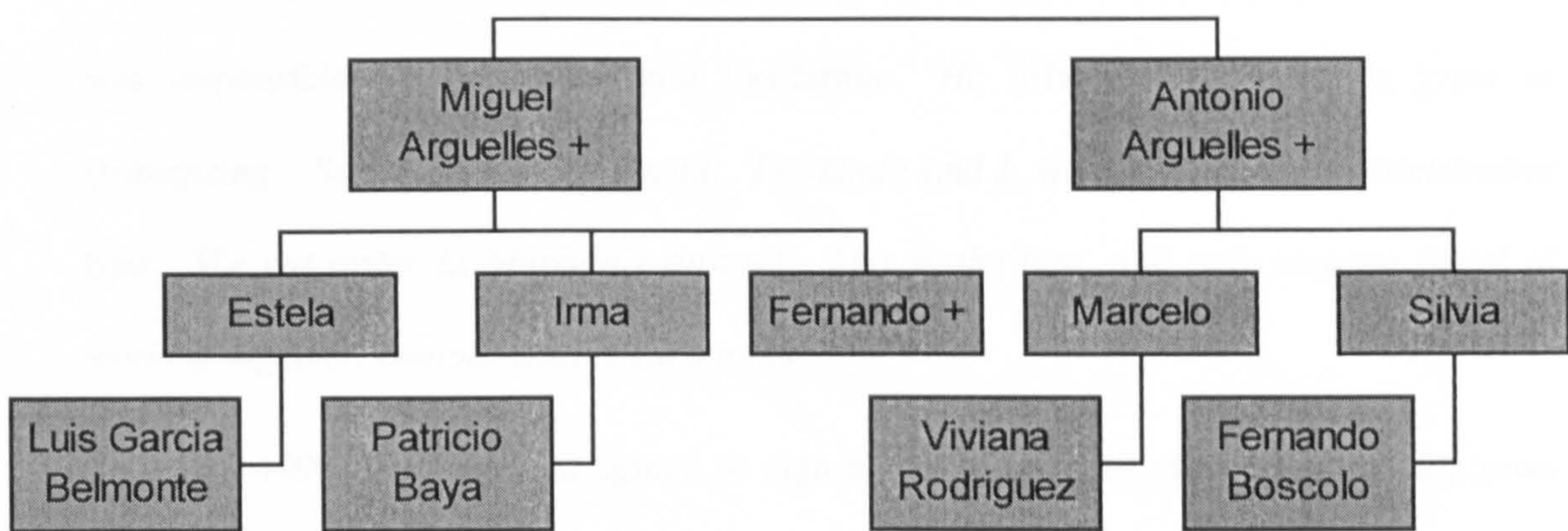
⁹³ Interview with Marcelo Argüelles-CEO.

⁹⁴ Interview with Marcelo Burstein-HR Manager.

⁹⁵ This table was created using data provided by the following areas at Sidus company: Human Resources, Marketing General Products and Technical Operations.

The Board that was created after the founders' death to represent the whole family, however, changed over time. To be able to understand the changes, it is important to understand the family tree. The figure shows the founders and their children. The founders' children married and their spouses are shown in the third row.

FIGURE 7.9: FAMILY TREE AND GOVERNANCE AT SIDUS⁹⁶



When Marcelo Argüelles took over the presidency of the company, Fernando Boscolo and Patricio Baya were already working in the firm and became Directors representing their wives on the Board. Luis García Belmonte – Estela Argüelles' husband – was the last to join the company and this happened when Miguel Argüelles passed away.

When Irma Argüelles and Patricio Baya divorced in 1994, Patricio bowed out and the Board was restructured. Marcelo Argüelles (CEO and Director), Luis García Belmonte and Fernando Boscolo were the only three Directors of the company.⁹⁷ Luis García Belmonte would represent Irma Argüelles' stake in the company.

⁹⁶ This figure was created using data from the following interviews: Santiago García Belmonte; Jorge Quintana and Marcelo Argüelles. The + signal indicates that this person is dead.

⁹⁷ By 1999, Marcelo Argüelles was 54 years old, Patricio Baya was 58 years old and Luis García Belmonte was 64 years old.

Over the years the Board settled down and the Directors started to work together: *“We can say that it was not a promising start for this Board. We did not get on very well. But you know, this is a family company, and we retain many family values in terms of the way that none of the things we have lived through has weakened our relationship and for us this is incalculably important. I have to say that I never found any obstacles to anything; I always found collaboration, willingness, help and support both for the things which turned out well and those which turned out badly.”*⁹⁸

While Fernando Boscolo was responsible for finance and SD, Luis García Belmonte was responsible for Production and Lasifarma: *“He (Marcelo Argüelles) is great at strategising. So we let him go ahead. Fernando and I, we are more the administrative type. We put order in Marcelo’s turmoil. This is the best, and only way we found of working together, complementing each other.”*⁹⁹

In 1990, the Directors agreed to sign a family protocol, thus avoiding any rows between the third generation of family members. Some of them were already working in the company in 1990. The protocol made the entry conditions for family members tougher. The following table shows the main features of the protocol.

⁹⁸ Interview with Marcelo Argüelles-CEO.

⁹⁹ Informal talk with Luis García Belmonte-Director.

TABLE 7.5: PRE-CONDITIONS FOR FAMILY MEMBERS WISHING TO JOIN SIDUS IN THE FUTURE¹⁰⁰

Aspects	Requisites
<i>General conditions for a family member to join the company</i>	<ul style="list-style-type: none"> -The family member will enter in the lowest position in the area he or she will work. The aim of this policy is for the family member to learn all the work from the bottom of the hierarchy to be able to understand the nature of the job. This experience will also give him/her the knowledge he or she will need as a future leader. -The salary will be appropriate to the position he or she holds. -Over the first year the newcomer will not receive a salary. The aim of this policy is to represent the time the newcomer would employ had not his/her parents helped him/her find a job. -Extra working hours will not be paid.
<i>Career Plan</i>	-Promotions in the hierarchy will depend exclusively on dedication, effort and professionalism. The most able and efficient professionals must hold the top management positions in the company. The fact that it is a family business is another matter.
<i>Attitude</i>	<ul style="list-style-type: none"> -The family member has a double condition as a family member and employee, thus he/she has more duties than the normal employee and must set an example for others. -The family member has to respect and follow all the norms concerning absenteeism.

Strategy, delegation and control

It was the Board's idea to reorganise the company in the early 1990s and create a group of companies. This decision had a specific aim concerning the strategic decision-making of the company: *"I am overwhelmed by the bureaucracy a large organisation generates. In this aspect, our relationship with Merck had too much of an effect on our structure. I did not want this company to become a leviathan. I wanted to keep the speed in our decision-making process. I think that this was our principal advantage."*¹⁰¹

The reorganisation of the company in the early 1990s was helpful in tackling the task of avoiding bureaucracy in decision-making and allowing the Board – and its President – to focus on strategy. *"In this business, as in others I imagine, you have to have time for thinking about strategy, to have a vision. The vision of the business is something instinctive and natural, and there is not much difference between the 1980s and the 1990s. The main difference between the 1980s and the 1990s is the time you spent grounding and developing the strategy. The 1990s were different, you had to be careful, so you needed more time for working on strategic issues. What we [the Board] wanted to achieve with the changes in*

¹⁰⁰ "Incorporation of family members in Sidus Group" Document provided by the Board of Directors.

¹⁰¹ Interview with Marcelo Argüelles-CEO.

the company, was to have more time for thinking strategically and being open to changes in the context."¹⁰²

A process of delegation started once the second company of the group was created (i.e., BioSidus). It was a necessary and natural process that otherwise *"would have trapped us in a terrible deadlock."*¹⁰³

Strategic decision-making, however, was centralised in the Board. Mr. Argüelles made it clear that there are some decisions that are not being delegated because *"they represent critical aspects of the company's life and future."*¹⁰⁴ The following table shows those decisions considered to be strategic and that only the CEO and Board would take.

TABLE 7.6: STRATEGIC DECISIONS NEEDING THE CEO'S INTERVENTION¹⁰⁵

Areas/Companies	Strategic decisions
<i>In all the companies</i>	-Strategic alliances -Associations or joint ventures -Investments -Launching a bid to buy a company
<i>BioSidus</i>	-Development of new products -Licences to be given
<i>Marketing business units</i>	-Licences to be taken

The most important way the Board of Directors exercises control is through these strategic decisions: *"This is how the Board has a grip on the different businesses. There are meetings in which the different critical areas analyse the different businesses. The Board is more interested in the strategic part of the presentation. They assume that you should be responsible for the operation. Another outcome of the Board's change of attitude toward the businesses is that it has forced managers to provide the Board with more accurate indicators and information, something that was impossible a decade*

¹⁰² Interview with Marcelo Argüelles-CEO.

¹⁰³ Interview with Marcelo Argüelles-CEO.

¹⁰⁴ Interview with Marcelo Argüelles-CEO.

¹⁰⁵ This table was prepared using information provided by the interviews with Marcelo Argüelles, Marcelo Criscuolo and Jorge Coronel.

ago.”¹⁰⁶ The following table shows the way two selected areas of the firm were controlled by the Board of Sidus.

TABLE 7.7: FOLLOW UP ON MEETINGS/REPORTS BETWEEN THE BOARD AND THE BUSINESS UNITS¹⁰⁷

Business Units/Support area	Frequency of meeting/report	Indicators/aspects required by the board
<i>Finance</i>	Annually (Report) Monthly (Meeting)	-Gross margin -Gross operating margin -Cost of goods sold -General costs -Net Profits (Consolidated information)
<i>Retail Businesses</i>	Annually (Report) Monthly (Meeting)	-Same information as finance but for the business unit. -Additional needs for funds -Investments -Business strategy: aims, actions, and projections.

The incomplete tasks

Many tasks have yet to be fully accomplished. However, two issues have preoccupied, and sometimes vexed, the managers.

The first issue relates to the communication of strategy. For some managers, there is a lack of communication of strategic issues that sometimes undermines the feeling of belonging to the company and distorts the alignment of operational issues to strategic issues.¹⁰⁸ As the HR Manager stated: *“I think that Marcelo (Argüelles) should try to explain better, to the managers, the whys and wherefores of the strategy he is working on. [...] Sometimes this lack of communication causes misunderstandings, lack of motivation and duplication. Improving strategic communication is a challenge for the Board and its President.”*¹⁰⁹

Another issue that has worried some managers is the delegation of some aspects of decision-making. While the delegation process worked in the different companies that are

¹⁰⁶ Interview with Santiago García Belmonte-family member and Executive Director of Retail Businesses.

¹⁰⁷ This table was created using the reports sent to the Board by the Finance area and Retail Businesses unit (Reports analysed in Finance: 1994-1999; reports analysed in Retail Businesses: 1998-1999).

¹⁰⁸ Interviews with Marcelo Criscuolo and Marcelo Burstein.

¹⁰⁹ Interview with Marcelo Burstein-HR Manager.

part of the Group, the situation at Instituto Sidus is different: *“In the different companies of the group the wheels of the delegation process were well oiled. With Instituto Sidus it is different: the President is sometimes caught up in the day-to-day running of the company. He loves marketing and so he is always involved with that.”*¹¹⁰

The unresolved issues

Two issues regarding the future of the company concern the Board and managers. The first issue is related to the participation of the third generation of family members in the Board and the second is related to the opening up of the company to the public.

The problem of succession and family participation in the Board is one issue that could potentially harm the governance of the firm. Marcelo Argüelles’ children are very young compared to the others in the third generation, thus making it difficult to decide who will be Argüelles’ successor. In spite of this, Argüelles has been delaying the issue to give his own children the chance to decide whether or not they want to participate in the running of the company.¹¹¹

*“With regard to the family, I see a conflict on the horizon because in the next generation there are lots of children. I can see a clear conflict and huge differences arising between Santiago [García Belmonte] and the rest of his generation. If you were to ask me who I see as taking the leadership role in the family in a few years time, I would suggest that it would have to be Santiago.”*¹¹²

*“In my opinion the Board should be more participative and some of us [the third generation] should start to participate in it, then we could share the power that is today concentrated in Marcelo’s hands.”*¹¹³

¹¹⁰ Interview with Marcelo Burstein-HR Manager.

¹¹¹ Interviews with Jorge Quintana, Marcelo Argüelles and Alejandro G. Belmonte.

¹¹² Interview with Marcelo Burstein.

¹¹³ Interview with Santiago García Belmonte-family member and Executive Director of Retail Businesses.

An idea shared by the human resource Manager (hereafter, HR Manager) and Santiago García Belmonte was the creation of an executive committee between the Board and the managers: *“This would be a way of starting to participate in the decisions, a committee in which top managers from the different companies of the Group – both family and non-family members – participated.”*¹¹⁴ *“I am trying to sell this idea to the Board. It is the best way of avoiding tension between generations of family members and a way of having a participative organisation.”*¹¹⁵

A second issue, which is equally important but not so pressing, was the possibility of floating BioSidus on the stock market. The company had a concrete plan which was to open BioSidus up to the public. The idea was to sell between 15 and 20% of the shares. This was planned for the year 2001: *“It will change a lot of things for us. We are working with people from Citibank. The plan is to consolidate the company first and this undoubtedly will take us a couple of years.”*¹¹⁶

The Group has already received some offers to buy shares or to buy the whole of BioSidus or the whole Group. However, the Board was reluctant to sell: *“Firstly we would not sell the company to any of our fellow companies, although some of them have made a proposal. It is a matter of pride. Selling to a multinational? Well, in this case we would be selling the whole Group not part of it. It is very difficult to share this company with companies the size of Schering for example. We would like to find a medium size partner, then we would be able to talk one to one. It would be a more equal relationship.”*¹¹⁷

¹¹⁴ Interview with Santiago García Belmonte-family member and Executive Director of Retail Businesses.

¹¹⁵ Interview with Marcelo Burstein-HR Manager.

¹¹⁶ Interview with Marcelo Argüelles-CEO.

¹¹⁷ Interview with Marcelo Argüelles-CEO.

Chapter 7B: Case Study: Laboratorio Andrómico

7.3 Overview of the history of Andrómico 1924-1999

Founded in 1924 by the Spaniards Raúl Roviralta and Fernando Rulet, Andrómico was in 1999 a leading company in the dermatological sub-market of the industry (IMS, 1999). Andrómico also ranked 20th in terms of turnover among pharmaceutical companies in Argentina (IMS, 1999).

Roviralta and Rulet met in 1924 and it was Rulet who suggested setting up a laboratory for clinical analyses. Roviralta, however, said *“no, instead we are going to set up a pharmaceutical laboratory.”*¹¹⁸ And so Andrómico was born.

The Spanish Civil War (1936-1939) brought about a split between the business partners because they had conflicting political beliefs. Until the definitive split between them that occurred in 1939, the company had commercial or industrial outlets in 19 countries.¹¹⁹ When the partners split, they shared the brands and branches out between them. They also granted each other the right to found businesses in countries where Andrómico had not already established itself.

Raúl Roviralta carried on with the internationalisation process in different countries such as Chile, Brazil, Argentina, Paraguay, Uruguay, Colombia and Mexico. The headquarters of the new Andrómico was in Argentina.

In 1979, Raúl Roviralta died, leaving eight children. That year, the family situation took its toll on the organisation because the shares were held by so many private individuals that there was no impetus to continue as a group.

A gradual exit from the world of business, the loss of group identity and family continuity in the Southern Cone area were the three phenomena which marked 1979. The only part of the family which persevered with the business was the family that remained in

¹¹⁸ Personal travel diary Raúl Roviralta, 24/05/1934.

¹¹⁹ Argentina was the first branch set up outside Spain.

Argentina and took over operations in Uruguay and Paraguay under the son of Raúl Roviralta, Alejandro. The remaining companies of the group were sold off.¹²⁰ As can be seen in figures 7.10 and 7.11, the Argentinian market is the most important for Andrómaco both in terms of volume and value of products sold in US\$.

While Raúl Roviralta was still alive and running the Group, Alejandro Roviralta was not involved in the business because his father did not want his children to get caught up in the company. Thus, when Raúl Roviralta passed away and Alejandro Roviralta inherited the Argentinian branch (Paraguay and Uruguay were included here), he decided to retain Carlos Salvo as CEO – formerly the CEO of the Andrómaco’s Group.

In 1983 Carlos Salvo died and Julio Tuchi took his place. Alejandro Roviralta stayed on the sidelines. Over 50 years old and with little experience as an executive, he preferred to employ an experienced manager to run the company. Julio Tuchi ran the company until 1997.

“My father had no alternative. Tuchi’s period represented a solution for my father. He could not manage the company so he had to rely on somebody else. Tuchi seemed to be the right person at the time. The problem is that he [Tuchi] lasted for a long time and the market changed a lot but the company did not.”¹²¹

In 1988, Pablo Roviralta (the son of Alejandro Roviralta) entered the company when he was co-opted to the Board. However, it was not until 1993 that Pablo Roviralta started to have an important role in the company. That year, he set up the OTC (over-the-counter) department, and in August 1996 he became the Commercial Manager, a role which involved the management of ‘ethical’ products, promotion, and sales and marketing of OTC products. In 1997 he became the CEO of the company, replacing Tuchi.

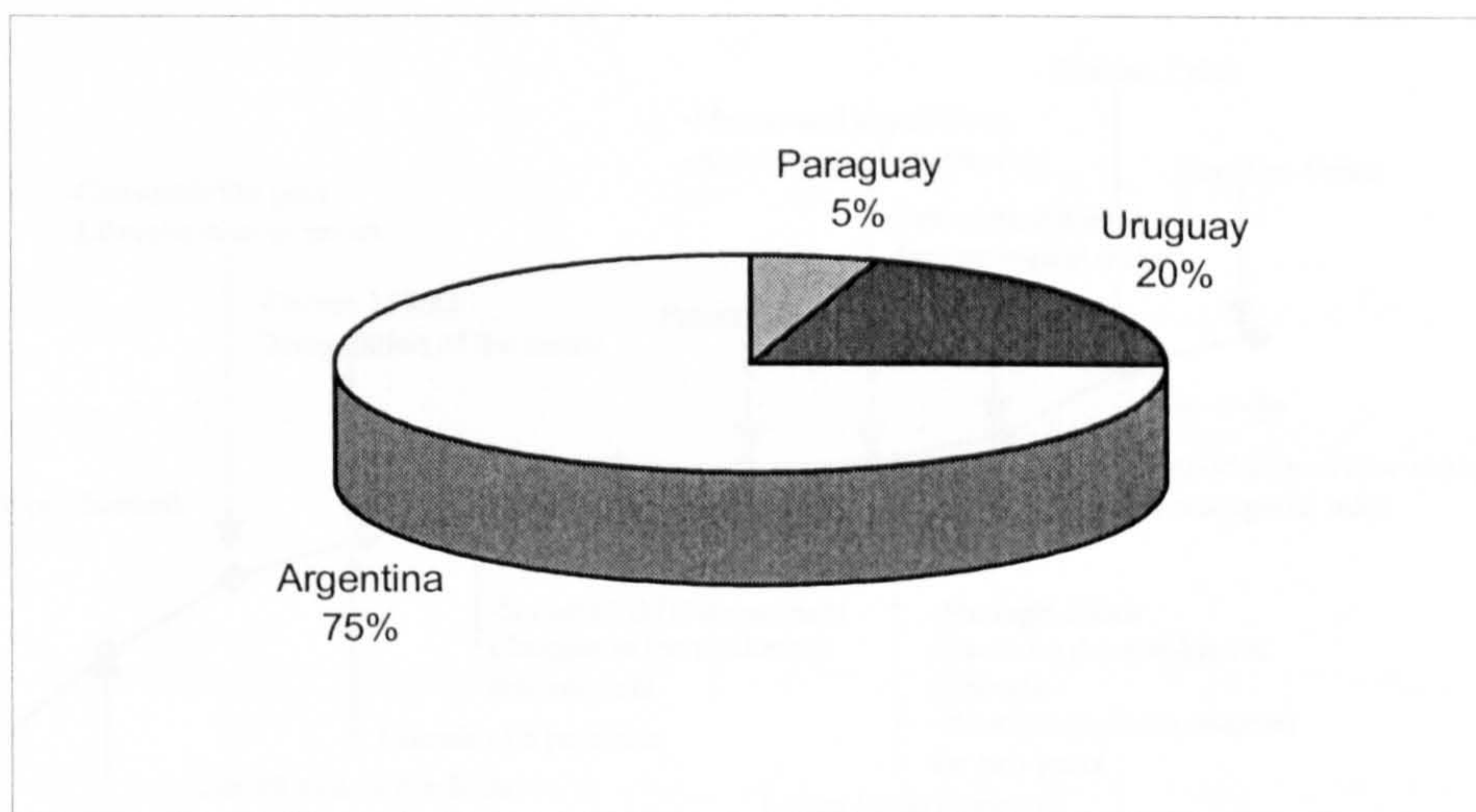
¹²⁰ Interview with Pablo Roviralta-CEO Andrómaco (first and second interview, 1999 and 2000) and informal talks with Alejandro Roviralta and Alejandro Roviralta Jr.

¹²¹ Interview with Pablo Roviralta-CEO Andrómaco (second interview, 2000).

On 25th August 1997, the day Pablo Roviralta took over responsibility for the company, twenty-two managers were dismissed, the first step in a “*shock strategy*”¹²², as the company likes to define it.

The new CEO undertook several changes to bring the company out of the stagnation of the previous two decades. Strategic focus on dermatology products, financial order and organisational restructuring were critical issues for the new management. However, by 1999 many difficulties were still jeopardising the company’s growth. The changes in strategies, although clarifying the long-term objectives of the company, put the firm in a niche of the market that limited its possibilities for growth (see Andrómaco’s evolution 1989-1999 in figure 7.12 and also figure 7.13).

FIGURE 7.10: ANDRÓMACO GROUP: SALES IN UNITS (IN %) IN 1999¹²³



¹²² Interview with Pablo Roviralta-CEO Andrómaco (second interview, 2000)

¹²³ Source of information: Company’s marketing department

FIGURE 7.11: ANDRÓMACO GROUP: SALES IN US DOLLARS IN 1999¹²⁴

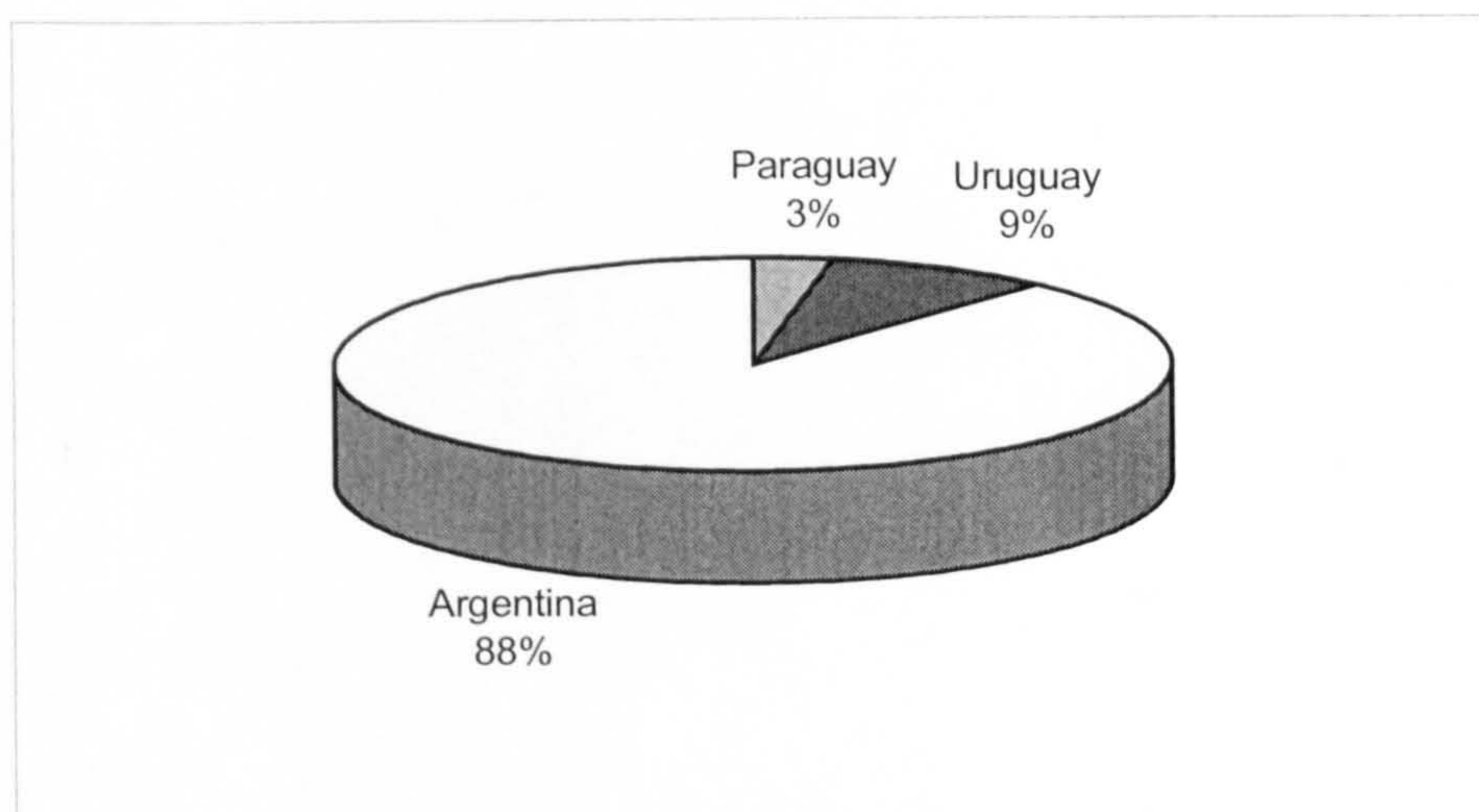
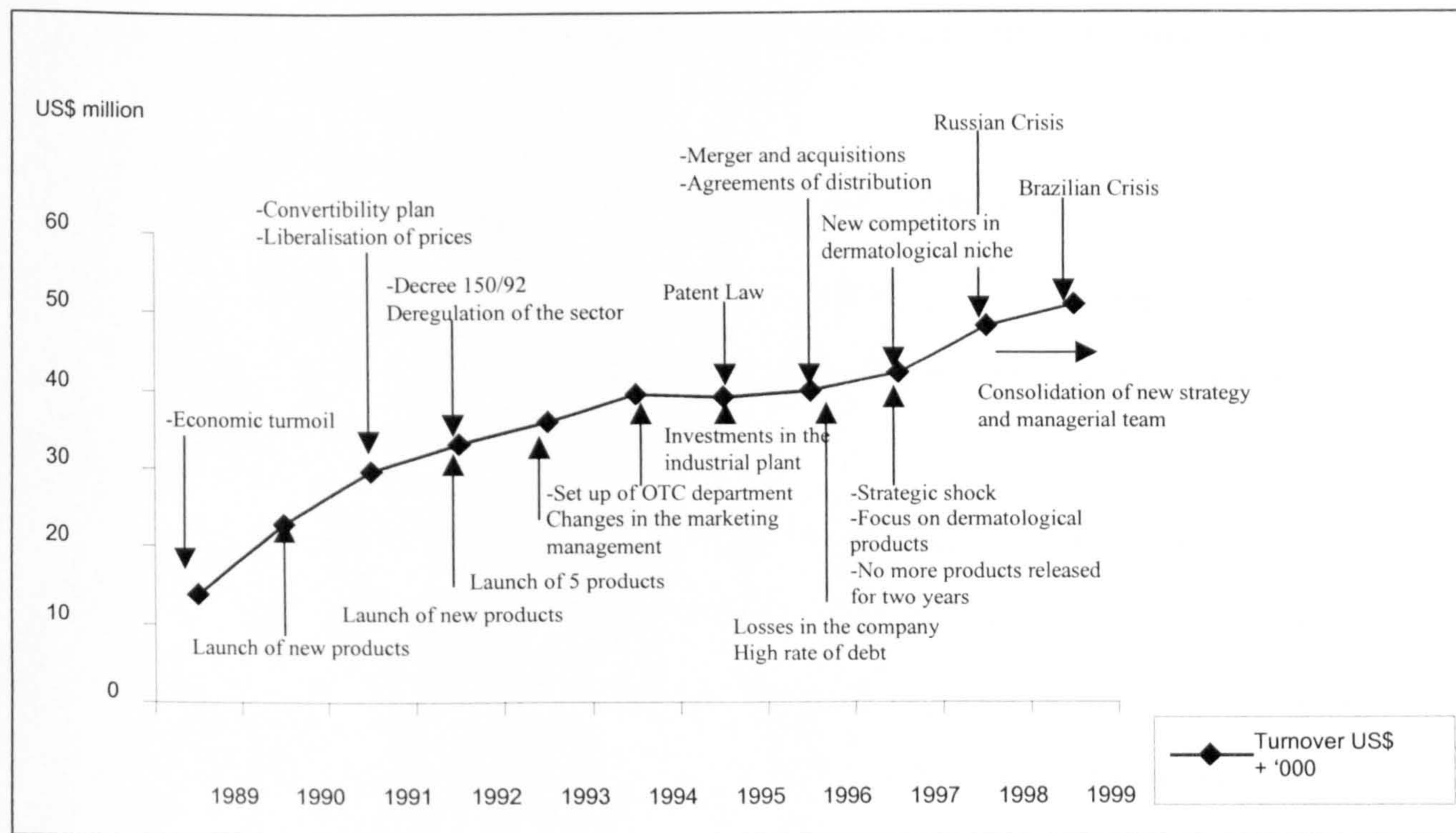


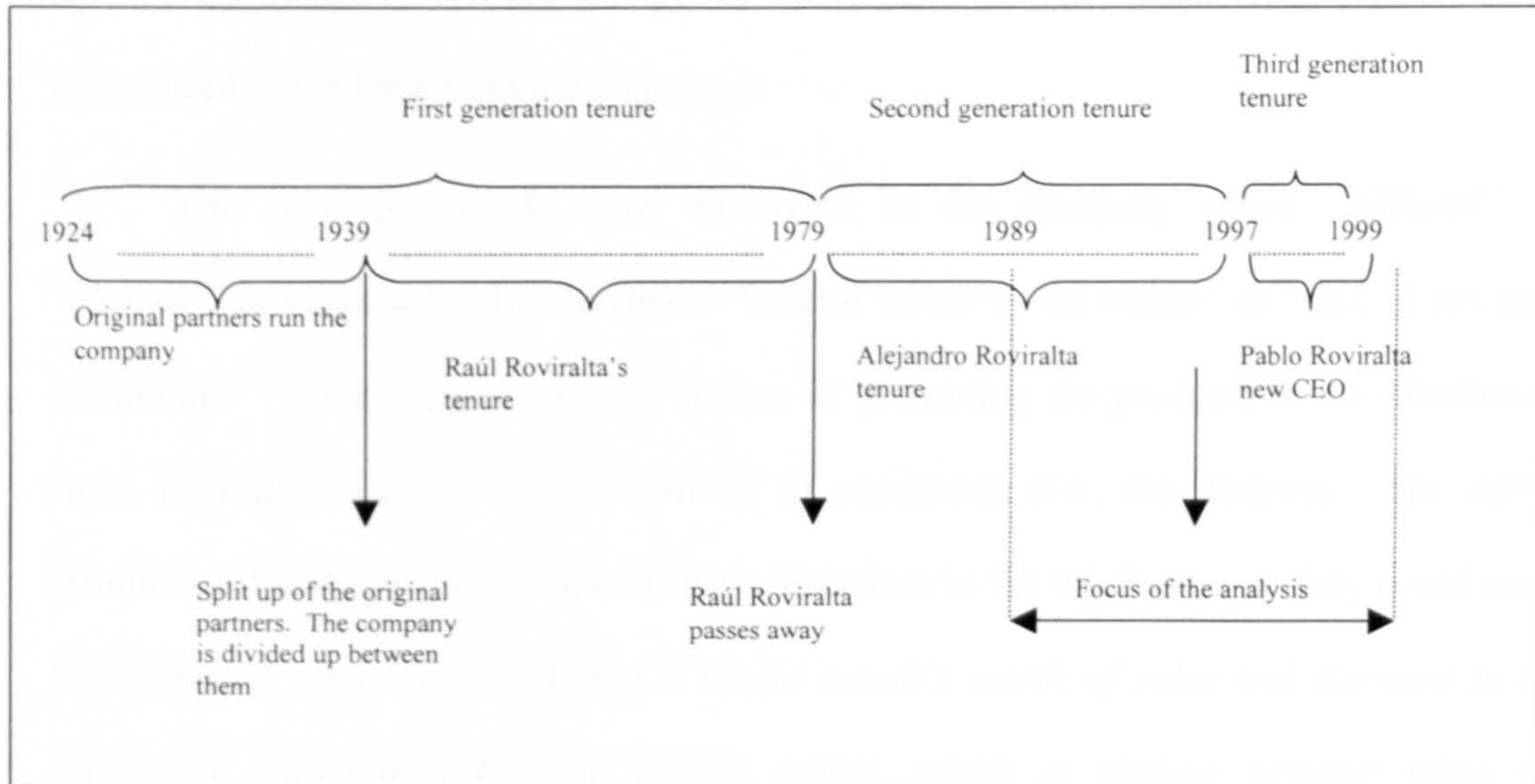
FIGURE 7.12: ANDRÓMACO'S EVOLUTION 1989-1999¹²⁵



¹²⁴ Source of information: Company's marketing department.

¹²⁵ This figure was constructed using archival material in the company (such as "Strategic Plan 1997-1998") and interviews with different managers.

FIGURE 7.13: STAGES OF ANALYSIS IN ANDRÓMACO'S HISTORY



7.4 Chronological and analytical tracing of key elements over the period 1989-1999

Market and Products: Finding out the strategic focus of the company

From 1978 to 1997, the company followed a simple strategy: investing in those niches that were fast-growing and which could offer the company opportunities, no matter what the niche was.

Andrómico participated in all the therapeutic niches in the pharmaceutical market. The fact that they had been an international company made them believe that they could profit from the different products they already had and add new products to the already existing ones: *“Many products were launched in the different therapeutic niches in the conviction that anything would add value and everything would have the potential for commercialisation. After a while these products were withdrawn because the return on the investment was negative.”*¹²⁶

However, the regulation of the market and the tight price control in the 1980s

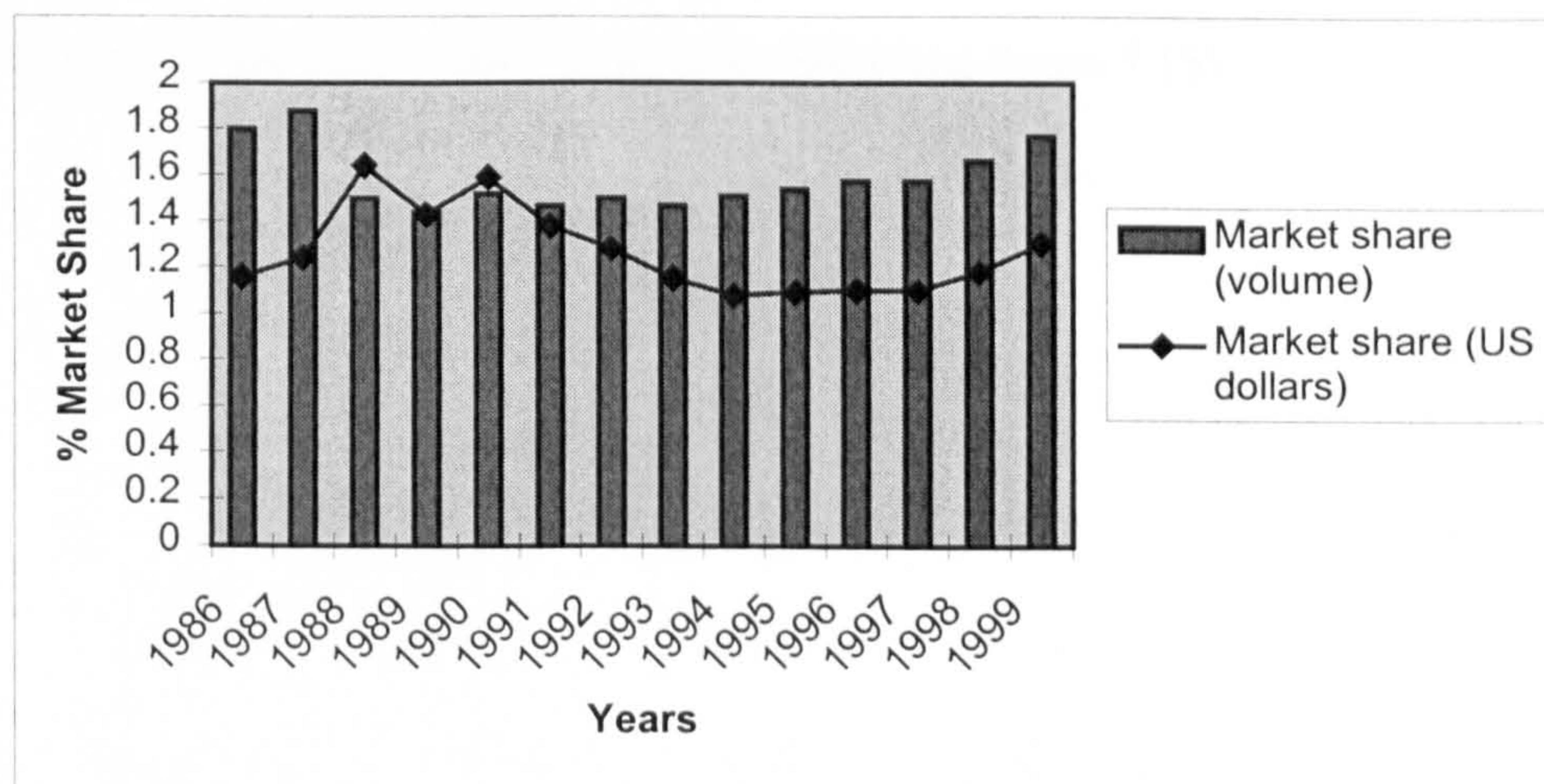
¹²⁶ Interview with Pedro Carvallo-Technical Director Andrómico.

allowed the company to keep this policy of trying a new product in the market without taking heed of the long-term consequences.

This strategy, which many managers in the company called “diffused”, or “blurred”, or characterised as having a “lack of vision”, “no vision” or “lack of strategic orientation”¹²⁷, was supported by a system of promoting the products to the distribution chain instead of via the normal channel of promotion (i.e., the doctors). The APMs (promotional and sales team) offered huge discounts to the wholesaler so they could reach the estimated sales levels: “Almost a whole month’s worth of sales laid dormant in the wholesaler warehouses because of this policy, which is obvious because when the wholesaler gets a discount he buys more.”¹²⁸

The 1990s, however, proved the inconsistencies of this strategy: “In 1990 we faced the impossibility of launching new products. We were losing market share. We thought about selling abroad, but the export strategy also failed.”¹²⁹ Figure 7.14 demonstrates that the firm’s strategy was not rewarded by an increase in market share. On the contrary, Andrómaco was losing ground in the pharmaceutical market for most of the decade.

FIGURE 7.14: ANDRÓMACO’S MARKET SHARE OVER THE PERIOD 1986-1999¹³⁰



¹²⁷ Interview with diverse managers in Andrómaco

¹²⁸ Interview with Javier Ruiz-Manager of Promotion and Sales

¹²⁹ Interview with Pablo Roviralta-CEO Andrómaco (second interview, 2000)

¹³⁰ Sources of information: For the period 1986-1988, company’s archival material. For the period 1989-1999, IMS Reports.

While the market conditions allowed the company to increase its turnover until 1994, after this date sales stagnated and started to decrease, and financial indicators began to give the owners cause for concern. In 1995, Pablo Roviralta and a group of managers studied the performance of all the products released by the competitors and Andrómaco over the period January 1990 to December 1995. A successful performance was defined as a product with a turnover of one million US dollars per year two years after being launched, or a product that could have cornered 10% of the market share in its niche with a turnover of at least US\$ 250,000 also two years after the launch of the product.¹³¹ The results were disappointing for the company.

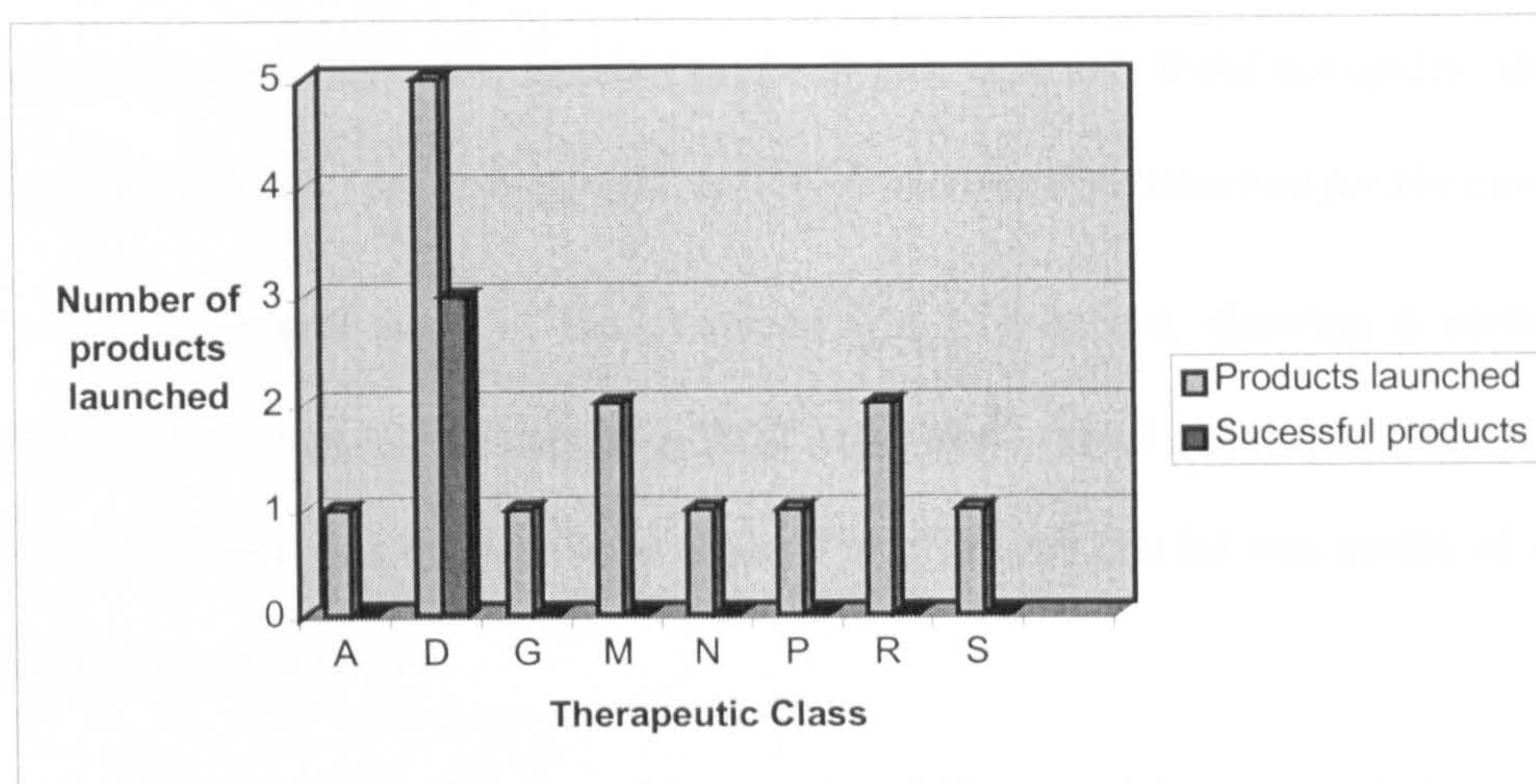
“The proportion of successful launches in the industry was around about 30%. Andrómaco had a proportion of 22 percent. We were more effective in the skincare product market where the proportion was 60%. But we kept on trying new niches in which we were not effective. In fact, the money fed into the other niches came from our cash-cow products, the dermatological ones.”¹³²

The analysis carried out by the company in 1995 underlined the ineffectiveness of the product launches in the different niches. Of fourteen products launched over a period of five years, only three were considered effective releases with good performance. These three products were dermatological products (see figure 7.15).

¹³¹ Archival material (document “Policy of launching products in Andrómaco”, 1996) Interview with Pablo Roviralta and Javier Ruiz.

¹³² Interview with Pablo Roviralta-CEO Andrómaco (first interview, 1999).

FIGURE 7.15: NUMBER OF PRODUCTS LAUNCHED OVER SUCCESSFUL PRODUCTS 1990-1995¹³³



The study in itself did not change the strategy of the company, but it made it clear that Andrómaco had a definite propensity for working in the skin-care sub-market: *“The most important outcome of this study was to make my father realise that we were on the wrong track. However, Tuchi was against this idea of focus and nothing happened. Never mind, I said to myself, this is the first step towards a big change in the company. This change took two long and painful years to happen.”*¹³⁴

The critical years: 1995-1996-1997

The Mexican crisis in 1995 hit the whole industry hard. Until 1994 deregulation benefited all the companies in the industry. Turnover increased due to an increase in prices rather than units sold.

However, after 1995, sales stagnated and Andrómaco’s debt grew. The company found it difficult to recover from that situation: *“The company was in a critical situation. In spite of important decisions taken as part of our business plan, like the increase in the*

¹³³ This figure was constructed using archival material provided by promotion and sales department and the document “Policy of launching products in Andrómaco, 1996”.

In the figure the therapeutic classes are shown by different letters: A=Metabolism; D=Dermatology; G=Genito-Urinary; M= Muscular System; N=Central Nervous System; P=Parasitology; R=Respiratory System; S=Locomotive System.

¹³⁴ Interview Pablo Roviralta-CEO Andrómaco (second interview, 2000)

price of Hipoglos and Dermaglos¹³⁵, the financial problem could not be solved.”¹³⁶ “The company was rather slow to react to the threats it faced. It did not update its products nor did it launch any successful products – the worst possible situation for the company.”¹³⁷

A general audit of the company was carried out, showing a certain number of aspects that were out of date, a lack of order and – most strikingly – rampant corruption. Tuchi’s power was hit very hard when it was proved that he was aware of and benefiting from corrupt practices.

Besides all these problems, the Mexican laboratory Columbia (previously Andrómaco) bought the national laboratory Disprovent. Their plans were to launch dermatological products similar to those marketed by Andrómaco.¹³⁸ Thus the star products Andrómaco had were now in danger.

By the end of the year, Tuchi’s power was in tatters and the Board of Directors had been restructured. Pablo Roviralta and Alejandro Roviralta Jr. were now Directors. The Board asked Pablo to prepare a plan to get the company out of the crisis. Along with Javier Ruiz, who joined the company in January 1997, they prepared a new strategic formulation for the company. That plan was approved in April 1997.

The shock strategy: 1997

“I presented the plan to my father in April 1997 and he backed it. It was decided that Julio Tuchi would step down and I would take over his job on the 25th August 1997.”¹³⁹

On that day, the new CEO dismissed 22 managers. The new strategic plan was

¹³⁵ Dermaglos and Hipoglos are the most important brands of the company. Both of them are dermatological products.

¹³⁶ Interview with Jorge Idiart-Manager of Zone 1, Capital-Andrómaco.

¹³⁷ Interview with Pedro Carvallo- Technical Director Andrómaco.

¹³⁸ It is important to remember that when the group split up in 1979, the companies were left with similar products in the different countries. Thus the formulae of the new product Columbia laboratory tried to produce in Argentina were similar to those Andrómaco was already producing.

¹³⁹ Interview with Pablo Roviralta-CEO Andrómaco (second interview, 2000).

communicated and the main aspects of the strategy were highlighted:¹⁴⁰ (Details of the way the strategy was operationalised can be found in table 7.8 and 7.9).

- The company would focus on dermatological products. A strategy of niche products replaced the more generalist view of the former administration;
- Reduction of the company's debt (i.e., US\$ 5.3 million, which represented one and a half month's sales);
- Investments in infrastructure to update the old facilities;
- Decision to suspend the launch of any new product for two years;
- To achieve 25% of market share of the dermatological niche by 2003.

TABLE 7.8: STRATEGIC CHANGE: DIFFERENCE IN STRATEGY BEFORE AND AFTER 1997¹⁴¹

Aspect	Until 1997	After 1997 "shock strategy"
<i>Strategic focus</i>	Diversification in different sub-market niches	Specialisation in dermatological sub-market
<i>Commercial focus</i>	New Products	Existent products
<i>Product launch</i>	In attractive and growing niches	In dermatology
<i>Financing product releases</i>	Through transferring resources from mature brands (disinvest in mature brands)	Re-invest in mature brands and re-position them in the market

¹⁴⁰ Presentation to the management of the company of the new strategic plan 1997-1998.

¹⁴¹ Data obtained from archival material in Andr omaco, interviews and report "Looking for a new breakeven point", 1996.

TABLE 7.9: DETAILED PLANS IN DIFFERENT AREAS TO TAKE THE COMPANY OUT OF THE CRISIS¹⁴²

Aims	Mechanisms
<i>Improve gross operating margin</i>	-Not releasing new products for two years -Investing same amount of money as established by budget in 1996 -Promoting brands taking into account profitability as key criteria
<i>Selection of products to promote</i>	-Products with an important level of turnover in US dollars and units -Leading brands and well known in the market -Priority to own brands -Products produced nationally
<i>Reduce commercial costs stage I</i>	-Close delegations in the interior of the country -Discontinuity of Marketing Service Area -Reduce Administration of sales force area
<i>Reduce commercial costs stage II</i>	-Reorganise Special Promotion department -Reduce Special Products department -Outsource distribution ¹⁴³
<i>Reduce commercial costs stage III</i>	-Redesign administrative and commercial processes -Monthly budget control -Reduction of stocks -Better logistic coordination -Reduce budget for "creative production" -Sell brands without promotional investment -Renegotiate contract with LeoPharma (licensing agreement)

"We worked hard on the idea of differentiation. We asked ourselves what made us stand out from our competitors – did we do anything better than them? Should we highlight that aspect? Andrómaco runs 1.1% of the total market. But in the dermatology sector it has 17 percent, followed by Plough with 5.8%. At Andrómaco this unusual asymmetry made us think."¹⁴⁴

"Having strategic focus has huge advantages which consist of ensuring the organisation has a meaning, direction and a logical raison d'être when it comes to running things. It makes decision-making easier."¹⁴⁵

Once the strategic focus was defined, once it was decided that the company was going to commercialise skin care products, the remainder of the company's products were considered "peripheral."¹⁴⁶ Thus, some peripheral products were used to acquire new brands in dermatology.

¹⁴² Archival material in Andrómaco (document Strategic Plan 1997-1998).

¹⁴³ In 1980 Andrómaco set up its own distribution company Distran. This company was dissolved after the strategic changes that took place in the company in 1997. Distribution was outsourced through an existent company in the industry called Disprofarma.

¹⁴⁴ Interview with Pablo Roviralta-CEO Andrómaco (first interview, 1999).

¹⁴⁵ Interview with Pablo Roviralta, CEO Andrómaco- (second interview, 2000).

¹⁴⁶ Interview with Pablo Roviralta, CEO Andrómaco (second interview, 2000).

Supporting the strategy

The new strategy was launched in an environment which showed little promise. In April 1997 the strategy was approved, and in August the new CEO took over and started to work on communicating the strategy and trying to bring some order into the company.

In August 1998, Pablo Roviralta started to implement changes in the area of Promotion and Sales. It was necessary to build up a support system to boost the strategy Pablo Roviralta wanted to achieve. Javier Ruiz was the new head of the Department. The old policy of focusing on the wholesaler was changed by stressing the importance of the demand (the doctor).

“We changed the paradigm for the way we commercialised products in the firm. We did not expect the wholesaler to sell one unit more of my product, because it is not up to them to generate the perception of a brand. We needed to generate this perception in the person who makes the purchasing decision, which is the doctor.”¹⁴⁷

At the end of August 1998, the company ran for almost 45 working days with short term liabilities and they had no way of paying wages. The situation worsened because the dismissal of 22 managers meant that a great deal of money was paid out in redundancy payments throughout 1997. By December 1998 the crisis was much more pronounced because of the lack of raw materials needed for use on the production line for the suntan lotion campaign. These crises made the company consider even more far-reaching changes in the logistics department. By 1999, none of the suppliers that used to provide raw material to the company were still working with Andrómaco.¹⁴⁸

“I took over the company when it was nearly collapsing. These crises were inevitable. What happened with these crises throughout 1998 was that we reached rock bottom. However, we did not change our path, we stuck firmly to our vision. Those crises, however painful, were helpful because they introduced more changes that would otherwise

¹⁴⁷ Interview with Javier Ruiz-Promotion and Sale Manager-Andrómaco.

¹⁴⁸ Interview with Hugo García-Logistic Manager Andrómaco.

have been difficult.”¹⁴⁹

By March 1999, the company had paid off its debt and started to generate its own resources. By May 1999, the company launched one product (after two years without releases) and bought up four new brands.

Changes in the structure of the company

From 1989 to 1996, the structure remained largely unchanged. The main change was in 1993 when Pablo Roviralta created the OTC department and later in 1996 when he became the new Commercial Director of the company. Creating the OTC department in 1993 allowed the company to be more dynamic in the commercialisation of the OTC products that were one of its strengths.

The main changes Andrómaco experienced related mainly to the merging of areas to create a structure more suitable for the new competitive arena. However, Andrómaco was still structured in a functional way in 1999 (see figure 7.16).

As one manager explained: *“I remember that the structure of the company was like an octopus. The CEO made all the decisions and the head of each department was taking all of the decisions related to his section. Today, although there is a lot of work to be done, the company has decompressed the situation a lot by creating different areas within the different departments.”*¹⁵⁰

*“I do not think you will have many problems analysing the structure in 1989. It was a very easy structure: everything was centralised in the General Manager’ Tuchi.”*¹⁵¹

From nine departments in 1989, the company downsized the structure to six departments in 1999. New areas were created within the different departments as shown in

¹⁴⁹ Interview with Pablo Roviralta-CEO Andrómaco (second interview, 2000).

¹⁵⁰ Interview with Pedro Carvallo-Technical Director in Andrómaco.

¹⁵¹ Interview with Hector Alquati-OTC Marketing Manager in Andrómaco.

figure 7.16.¹⁵²

“The old structure had two main problems. Firstly, hierarchy was more important than anything else, so decisions were delayed for ages. But secondly and probably most importantly, the old structure lasted a long time, until I took over the post of CEO.”¹⁵³

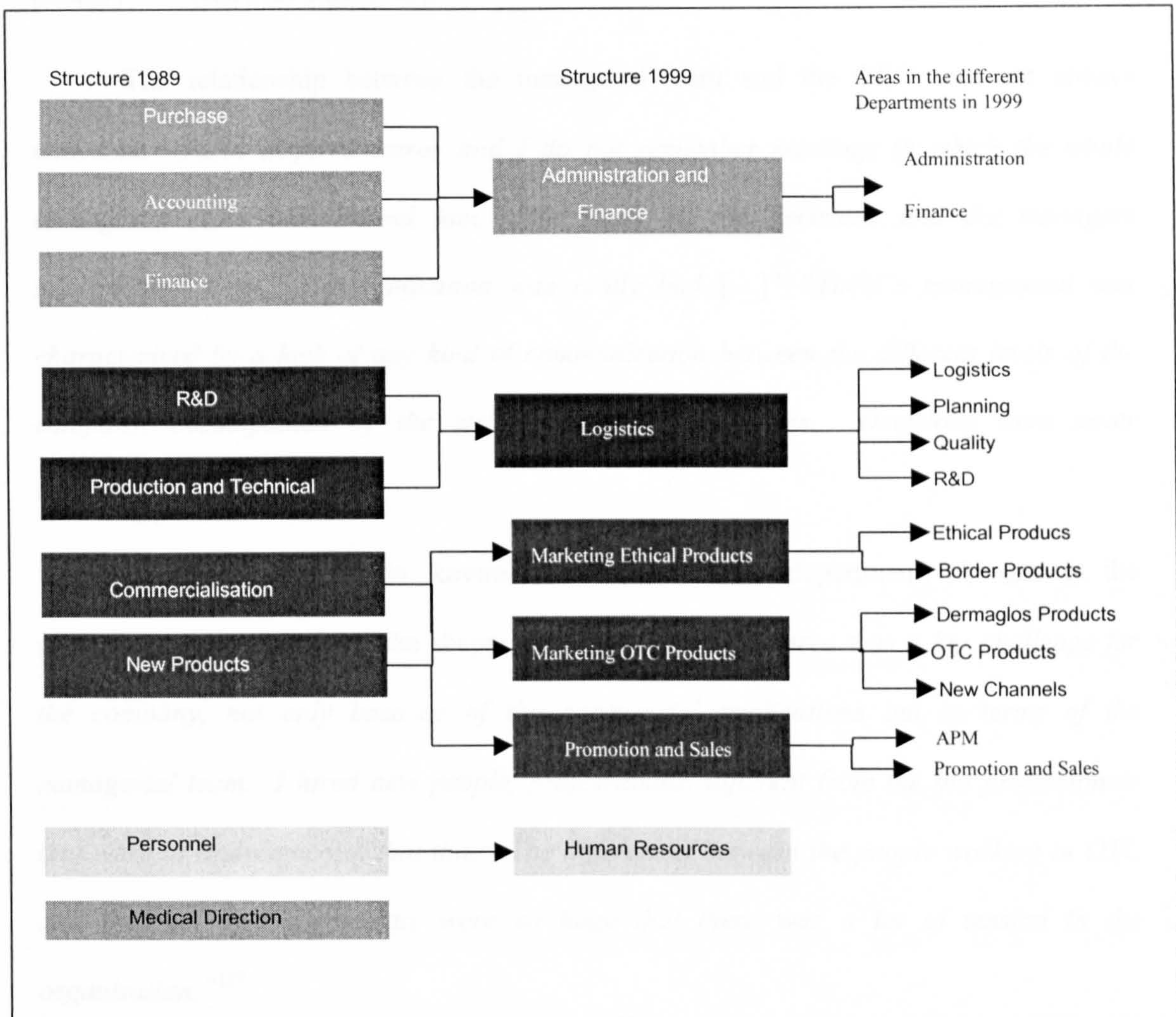
Since 1999 Andrómaco has had a structure in which positions have been consolidated and the structure in itself has evened out. But there are still some unresolved issues to be considered: firstly, there are still many layers in the different structures of the departments. This fact made decision-making more difficult and bureaucratic processes became very complicated: *“We still have on average six layers. That is a lot. There is not a great difference in the number of layers now and in 1989. This is one of the most important aspects we have to tackle. We have started to work on that issue though but it is not easy.”¹⁵⁴*

¹⁵² The first column shows the old departments and the way they merged to give rise to the new structure. The second column represents the new Departments and the third column is the opening up of the structure in 1999.

¹⁵³ Interview with Pablo Roviralta-CEO Andrómaco (second interview, 2000).

¹⁵⁴ Interview with Juan Pablo Rizzo, HR Manager Andrómaco.

FIGURE 7.16: EVOLUTION OF THE COMPANY'S STRUCTURE 1989-1999¹⁵⁵



Changes in the Management of the company

Between 1989 and 1996, the managerial structure of the company remained largely unchanged. The style of the CEO marked the period: *“Tuchi was rather authoritarian. This did not allow him to surround himself with the right people to make the changes the company needed.”*¹⁵⁶

The main criteria for hiring managers were, as some managers stated, age and experience in the industry: *“Age was very important. Previously, [in the 1980s] there were*

¹⁵⁵ This figure was created using archive material from the Human Resource department and data provided by the Board of Directors.

¹⁵⁶ Interview with Juan Pablo Rizzo, HR Manager Andrómaco.

a lot of old people in the company who relied on their years of experience in the industry."¹⁵⁷ (see also table 7.10).

The relationship between the managerial team and the CEO was not always amicable: *"Tuchi inspired terror and I do not remember meetings in which the whole managerial team was behind him. He made all the decisions and the managers implemented them. Communication was really bad [...]"* *"Tuchi's management was characterised by a lack of any kind of communication between the different levels of the company, accompanied by the strict control of operations. Decisions were never discussed."*¹⁵⁸

In 1993, when Pablo Roviralta set up the OTC department, changes in the managerial team started to take shape: *"Setting up the OTC area was a big challenge for the company, not only because of the commercial implications but in terms of the managerial team. I hired new people, professionals, different from the old professionals that were in Andrómaco at that time. The differences between the people working in OTC and the rest of the company were so huge that there was a lot of tension in the organisation."*¹⁵⁹

After the crisis the company went through during the period 1995-1997, Pablo Roviralta took over as the new CEO of the company and started to change things. Roviralta's first decision was to reshuffle the management team by dismissing twenty-two managers: *"In 1996 we were working on the new strategic plan and, while doing so, I was assessing the different managers of the company. I started to see behaviour that was less than loyal to the company – people with very difficult personalities. To avoid any type of resistance I got rid of those who I saw as an obstacle to change."*¹⁶⁰

However, the managerial team was not ready in 1999: *"I think by the end of the*

¹⁵⁷ Interview with Hugo García-Logistic Manager in Andrómaco.

¹⁵⁸ Interview with Jorge Idiart-Manager of Zone 1 in Andrómaco.

¹⁵⁹ Interview with Pablo Roviralta-CEO Andrómaco (first interview, 1999).

¹⁶⁰ Interview with Pablo Roviralta-CEO Andrómaco (first interview, 1999).

year 2000 we are going to have our structure settled with all the boxes of the structure filled. I take special care when selecting those who are going to be part of the managerial team."¹⁶¹

With the new managerial team, vertical and horizontal communication has improved: *"Communication is clear now, in contrast to the closed system operated by the previous CEO. Before 1997 there was no communication between managers and employees. The worker found his way by drawing his own conclusions."*¹⁶²

Supporting the managerial change process: The HR area

Until 1997 there was no HR Department in Andrómaco but a Personnel Department dealing with administrative matters. In July 1999 the first HR manager started work in the company. *"When I started work, there was no HR policy within the company. There was a lack of HR policy, widespread demotivation and a lack of integration in the organisation. Furthermore they did not consider HR to be a strategic resource for the company."*¹⁶³ However, the new CEO wanted a change: he wanted Andrómaco to become a company that focused on people rather than on the hierarchy.

The HR area was set up to support the new changes in the company. Pablo Roviralta and the new HR Manager established the objectives of the area in the medium term: firstly, to avoid the bureaucracy that had been a problem in the company; secondly, to bring people closer to the Board; and, finally, to improve the selection process and create a training programme for young professionals (table 7.10 shows the evolution of the entry requirements for selected areas in Andrómaco).

"One of the problems I encountered was a terrible bureaucratisation in the company. The information it produced was not trustworthy, it was erratic and there were

¹⁶¹ Interview with Pablo Roviralta-CEO Andrómaco (first interview, 1999)

¹⁶² Interview with Walter Monzon-Finance Manager in Andrómaco

¹⁶³ Interview with Juan Pablo Rizzo-HR Manager in Andrómaco

no statistics. We are now working with the areas in creating trustworthy indicators."¹⁶⁴

*"Another aspect we are working on is encouraging contact between the Board and the different levels of employees. Employees did not know the Board, they did not know what they were like. Using the tactic of holding conversation sessions with 20 people each time, Pablo Roviralta was able to comment on the company's strategy and let them know what changes the company was going through."*¹⁶⁵

The last aspect human resources was working on in 1999 was the selection process in the company. One of the most ambitious projects in the area today is what they call the *"Andrómaco seedbed."*¹⁶⁶ The company's aim is that by February 2001 there will be a group of ten trainees who can either replace or join the current managerial team in the medium term.¹⁶⁷

For the CEO, selection has another important effect: *"Selection is very important. Through selection I am trying to get all the heads of departments to share similar values. On the other hand we would like young people without experience to join the company. Why? Because the company would be their school and we will shape them with our mould."*¹⁶⁸

¹⁶⁴ Interview with Juan Pablo Rizzo-HR Manager in Andrómico

¹⁶⁵ Interview with Juan Pablo Rizzo-HR Manager in Andrómico

¹⁶⁶ Archival material of the company provided by Pablo Roviralta

¹⁶⁷ By May 2002 the company had not set up the group of ten trainees.

¹⁶⁸ Interview with Pablo Roviralta-CEO Andrómico

TABLE 7.10: ENTRY REQUIREMENTS FOR THE DIFFERENT AREAS IN ANDRÓMACO. SELECTED AREAS¹⁶⁹

Areas	1989	1996	1999
Logistics (we take the case of Production and Technical Department in 1989).	-Age (“the older the better”). -Experience in logistics in other pharmaceutical company.	-Idem 1989.	-Young professionals (engineers). -Experience in other industries.
Administration and Finance (we take the case of Accounting and also Finance in 1989).	-Accountant and tax specialist.	-Accountancy -Business Administration	-Accountancy -Business Administration
Marketing OTC and Marketing Ethical Products (Commercialisation in 1989).	-Promotional and sales team (APM): very experienced in the industry. -Mktg: Experience in the industry.	-APM: Idem 1989 Mktg: New OTC area introduced new and younger professionals with experience different from the pharmaceutical industry. The rest of the commercial area had similar features to those in 1989.	-Big changes in these areas. Reshuffle of -APMs: younger, with university degree or technical degree. Experience in the industry was not a requirement. -Other professionals: Younger with university degrees were welcomed. -Experience in the industry was preferable.

Board of Directors: Governance, strategy and family

Corporate governance in Andrómico

While the founder, Raúl Roviralta, was still alive, the whole group of companies followed the orders of his right hand man, the Argentinian Carlos Salvo. There was neither a Board of Directors nor a committee that tried to establish general strategies for the group. Both Raúl Roviralta and Salvo took decisions.¹⁷⁰

When Raúl Roviralta died in 1979, and the group split up into different companies, the responsibility for the Argentinian branch (including Paraguay and Uruguay) fell to Alejandro Roviralta – the son of Raúl Roviralta. His inexperience in the business and his shy personality¹⁷¹ made him back out and delegate the management of the company first to Carlos Salvo and then to Julio Tuchi until the third generation took over the administration

¹⁶⁹ This table was created using data provided by the different areas under analysis (Marketing OTC, Marketing Ethical Products, Logistics and Administration and Finance).

¹⁷⁰ Interviews with Pablo Roviralta (two interviews in 1999 and 2000); and informal talk with Mr. Alejandro Roviralta Jr.

¹⁷¹ Interview with Pablo Roviralta-CEO Andrómico (first interview, 1999).

of the company.

In 1986, when Alejandro Roviralta Jr. joined the company they decided to set up a Board of Directors as a way of improving the communication of strategies to the future heirs. The Board was formed by Alejandro Roviralta (father and President), Alejandro Roviralta Jr. (eldest son and Vice-President) and Julio Tuchi (CEO). In 1988, Pablo Roviralta was co-opted to the Board.

However, the Board of Directors was not meeting its objectives: *“It did not make any difference when my brother and I joined the Board. We were inexperienced, and my father relied on Tuchi. So, we went there to listen to what Tuchi had already decided.”*¹⁷²

There was a transitional stage in the Board’s life between 1993 and 1996 when the brothers started to have more power. Alejandro Roviralta Jr. assumed responsibility for institutional communication and Pablo Roviralta for the new and profitable OTC area. By 1996, the success of both brothers, but mainly the achievements of Pablo Roviralta in his new post (Commercial Director), started to pay off and reshaped the role of the Board: *“Our father started to be more open towards what was going on in the company and he started to listen to us. We were working hard and our accomplishments were helping us to be heard.”*¹⁷³

In 1993, Pablo Roviralta took over the project of the OTC area in Andrómaco with great success (in three years he increased the volume of OTC products sold fivefold).¹⁷⁴ By 1996, achievements in the OTC area led Pablo Rovitalta to become Commercial Manager of the company, a critical role in a company that was struggling to survive.

“Pablo [Roviralta] set about taking on more of the company’s problems until he actually replaced Tuchi. It was a natural process and that gives added value to the leadership Pablo achieved within the company. He took over power which nobody held, appropriating bit by bit all the real power while Tuchi was only left with the formal power.”

¹⁷² Interview with Pablo Roviralta-CEO Andrómaco (second interview, 2000).

¹⁷³ Interview with Pablo Roviralta-CEO Andrómaco (second interview, 2000).

¹⁷⁴ Archival material. Data provided by the Marketing OTC Product Departments.

The whole process was accomplished thanks to Pablo's amazing strategic vision."¹⁷⁵

In 1997, when Pablo Roviralta took over control of the company, the Board was composed of three members, all of them family members: Alejandro Roviralta, Alejandro Roviralta Jr. and Pablo Roviralta.¹⁷⁶ Alejandro Roviralta was the President of the company, Alejandro Jr. the Vice President. Alejandro Roviralta Jr. dealt mainly with Public Relations issues. Everything that concerned dealing with the industry was delegated to Alejandro Jr.: *"Alejandro [Jr.] has a subsidiary role within the company. However he attends the weekly meetings of the Board."*¹⁷⁷ Pablo Roviralta, on the other hand, was both CEO and a Board member.

*"Alejandro Roviralta has delegated a lot to his son Pablo, who has responded by achieving great success. This constituted the mainstay of the restructuring process. Pablo is quite an autonomous figure. Sandi [Alejandro Roviralta Jr's nickname] has a very good relationship with Pablo because their different personalities complement each other: Pablo is more thoughtful and Sandi more intuitive, less respectful of forms, less willing to take risks, with less theoretical base to his actions but a wide knowledge of the day-to-day reality. By contrast, Pablo has done more formal training, which helps him to be more sure of his concepts, taking risks in things which make up the business."*¹⁷⁸

Strategy, delegation and control

*"The old company was very dull and bureaucratic, decisions were far too reliant on the centre of power: Julio Tuchi, the Managing Director. This person presided over a golden period in the company's history and another period of bad luck. He nearly compromised its survival."*¹⁷⁹

"The Board did not agree with decisions being made at the lower levels, but

¹⁷⁵ Interview with Juan Pablo Rizzo-HR Manager in Andrómaco.

¹⁷⁶ By 1999, Alejandro Roviralta was 73, Alejandro Roviralta Jr. was 47 and Pablo Roviralta 45.

¹⁷⁷ Interview with Pablo Roviralta-CEO Andrómaco (second interview, 2000).

¹⁷⁸ Interview with Juan Pablo Rizzo-HR Manager in Andrómaco.

¹⁷⁹ Interview with Juan Pablo Rizzo-HR Manager in Andrómaco.

insisted that everything be studied by them, an attitude which remains today but to a lesser degree now."¹⁸⁰

*"Under Tuchi's administration, decision-making took ages because two or three people in the company decided everything, every single detail."*¹⁸¹

Centralisation of decision-making not only seems to have been an old problem but continues to be one: *"I am trying to delegate decisions to the managers, but this will take time. The management team is new and we first need to make them work as a team."*¹⁸²

The Board and the CEO are very much involved in the different operative activities of the company: *"We are still very dependent on the owner. Although the company is family-run and the owners are professional in their actions, they continue to make the same kind of gut decisions typical of this sort of company. Decisions are made more according to the owners' whim than by obeying business logic."*¹⁸³

Control mechanisms were always stringent in Andrómaco. However there was a difference in nature. *"Under Tuchi's management the Board was very keen on obtaining information and controlling. They were always on people's backs [...] This type of control generated harmful behaviour in the managers and workers."*¹⁸⁴ *"Today's control is different. I would say that control is tighter now than before but is more consistent."*¹⁸⁵

*"Control was based on fear [under Tuchi's administration]. At that time a good employee was one who arrived at work early and never took time off. The company directives inspired terror and were an abuse of power. The worker was not allowed to poke his nose into the company's business."*¹⁸⁶

However, there was a general feeling among managers that the control mechanisms were still excessive: *"The nature of this business, and all businesses, is that decisions and*

¹⁸⁰ Interview with Juan Pablo Rizzo-HR Manager in Andrómaco.

¹⁸¹ Interview with Hector Alquati-OTC Marketing Manager in Andrómaco.

¹⁸² Interview with Pablo Roviralta-CEO Andrómaco (first interview, 1999).

¹⁸³ Interview with Hector Alquati-OTC Marketing Manager in Andrómaco.

¹⁸⁴ Interview with Javier Ruiz-Promotion and Sales Manager in Andrómaco.

¹⁸⁵ Interview with Juan Pablo Rizzo-HR Manager in Andrómaco.

¹⁸⁶ Interview with Hugo García-Logistic Manager in Andrómaco.

*counter-decisions must be taken throughout the progress of the different activities. These decisions have to be made on a daily basis. The problem we have is that the CEO and Board want to participate in each decision.*¹⁸⁷

Table 7.11 illustrates the way Andrómaco's Board of Directors controlled the different areas of the company through a variety of meetings, reports and specific indicators. Many managers thought that the frequent meetings got in the way of the day-to-day running of the operation.

¹⁸⁷ Interview with Hector Alquati-OTC Marketing Manager in Andrómaco.

TABLE 7.11: FOLLOW UP ON MEETINGS/REPORTS BETWEEN THE BOARD AND THE DIFFERENT DEPARTMENTS¹⁸⁸

Department	Frequency meeting/report	Indicators/aspects required by the Board
Administration and Finance	-Weekly (report) -Weekly (meeting) -Monthly (report)	-Debt -Payment of suppliers -Breakeven point -Gross operating margin in general and by product -Taxes -Net Sale by product -Market share -Different aspects relating to the systems of the company
Human Resources	-Weekly (report) -Weekly (meeting) -Monthly (report)	-People: Appraisal assessment with comments, absences, overtime work, wage development. -Administration: Selection, dismissal of people -Organisation: News in the different areas and training. -Security and hygiene: Projects, accidents, news, hygiene and maintenance of the building, and production. -Life quality: Medical services, "smoke-free zone" programme, "bathroom hygiene" programme".
Logistics*	-Weekly (report) -Weekly (meeting) -Monthly (report)	-Quality: processes and training to the internal customer, policy of stocks, measurement and control -Deposits: News and stocks -Quality and costs: assessment of process between the real capacity and the required capacity; standardisation, measures and control. -Assessment of each line and machine of production -Assessment of the assembly line in terms of maintenance of the building -Planning assembly line production
Marketing Product OTC	-Weekly (report) -Weekly (meeting) -Monthly (report)	-Profile new people that were hired by the area -Units sold in each line of products -News of each line (packaging, advertisement campaign). -Units sold, discounts, estimates for the following week. -APMs activities. Details -Projects in analysis.

As many managers recognised, the higher degree of centralisation and control impeded the company's ability to respond quickly. However, Pablo Roviralta stated that:

"The company came from a very low level. We were at rock bottom. So the first commitment I had was to reach a level of performance that allowed us to survive. Tight control of operations has allowed Andrómaco to perform well over the last two years and is still necessary. As soon as we achieve stability and a continuous and better performance

¹⁸⁸ This table was prepared using the results of the interviews held with different managers and a copy of the latest follow up reports in the selected areas.

*Only some indicators/aspects are mentioned here.

we are going to whip up support for delegation.”¹⁸⁹

The unresolved issues

Two issues regarding the future of the company concerned the Board and, in particular, the CEO. These two issues are related to the possibilities of growth in the medium and long term, and the succession process.

There is one big challenge for the company in the medium term. As many managers mentioned, the niche strategy was good for taking Andrómaco out of the crisis it went through. However, they also saw the strategy as a limitation for growth: *“I agree that concentrating on one area was the best for the company in the mid-1990s. However, now that the strategy is consolidated, Andrómaco is suffering a growth crisis. Andrómaco wants to grow in a market that is in decline.”¹⁹⁰* Figure 7.17 shows Andrómaco’s increasing importance in the dermatology sub-market. However, as can be seen in the figure, the importance of the dermatological sub-market within the pharmaceutical market in Argentina is shrinking. This reduction of the share of the dermatological sub-market in Argentina is a product of the maturity of such a sub-market and the lack of investments in R&D and innovation in it. These two factors (i.e., R&D and innovation) have impacted on the average price of dermatological products which is below the industry average. The heavy dependence of Andrómaco on such products, as shown in figure 7.18, has impacted negatively on the average prices of the products sold by the company.

“Growth is not going to be feasible for our current skincare products because they are nearly hitting the roof. To achieve our objectives by 2003, that is to increase the company’s share of the market in skincare products to 25%, there are various alternatives. One is to buy up new brands, but it is difficult to do so because the brands which stay on the market are the biggest and it would mean an extraordinary investment for Andrómaco,

¹⁸⁹ Interview with Pablo Roviralta-CEO Andrómaco (second interview, 2000).

¹⁹⁰ Interview with Hector Alquati-OTC Manager Andrómaco.

an amount of money that we do not have. The second alternative consists of developing products in those niches where we have not yet participated.”¹⁹¹

FIGURE 7.17: ANDRÓMACO’S STRATEGIC FOCUS ON DERMATOLOGICAL NICHE¹⁹²

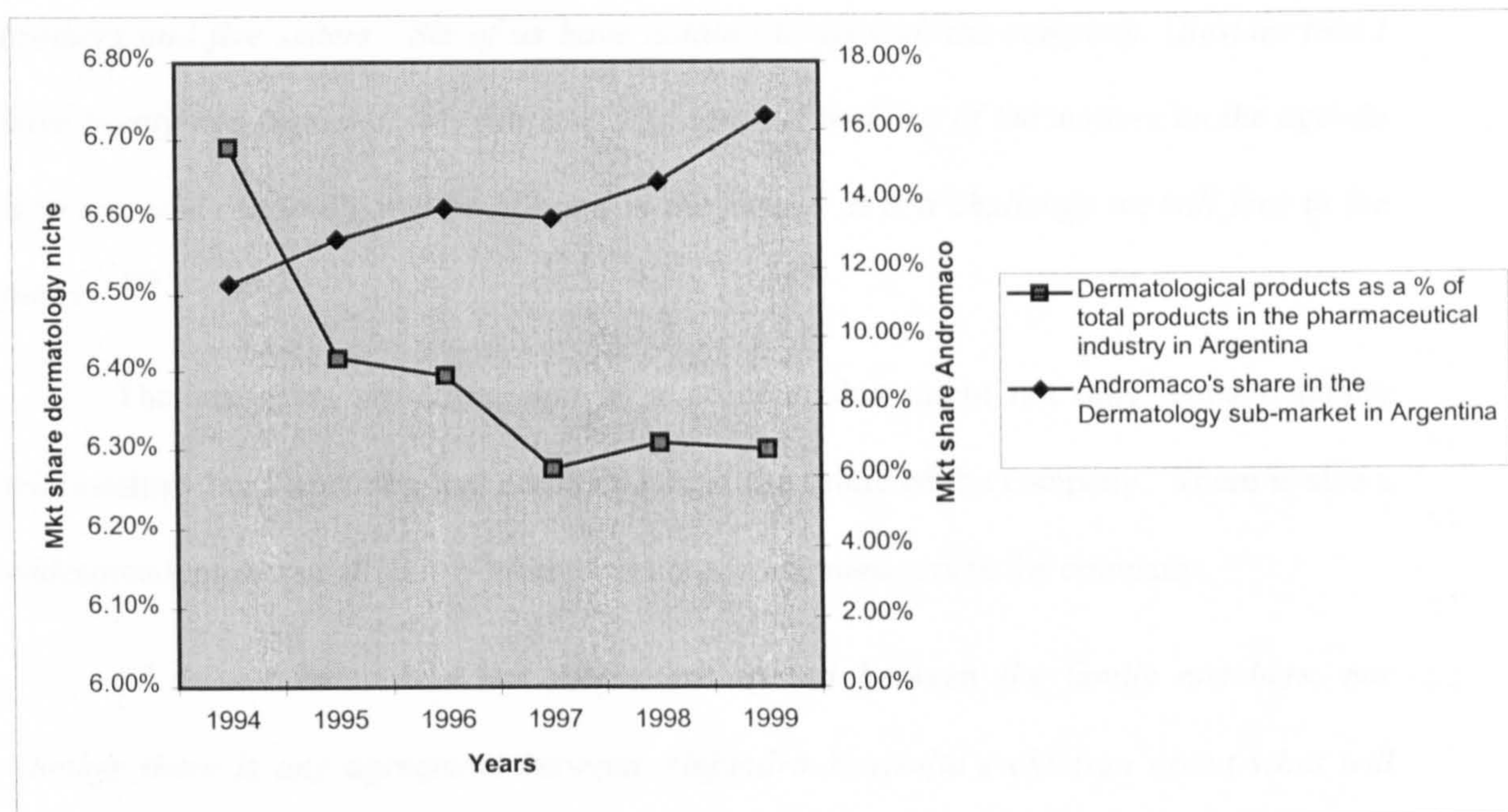
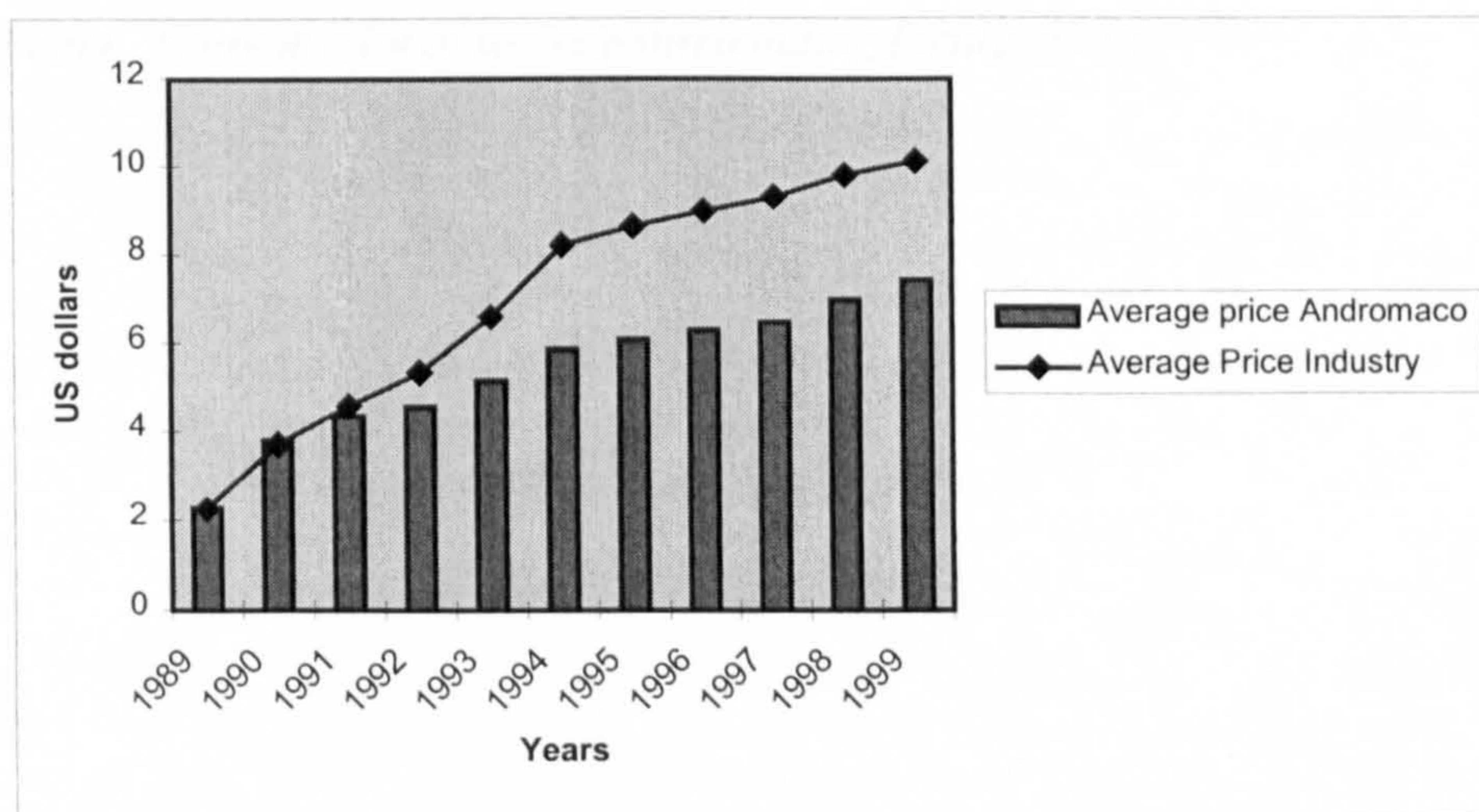


FIGURE 7.18: AVERAGE PRICE AT ANDRÓMACO AND THE INDUSTRY OVER THE PERIOD 1989-1999¹⁹³



¹⁹¹ Interview with Walter Monzon-Finance Manager Andrómaco.

¹⁹² Sources of information: IMS Reports 1994-1999 and archival material provided by the Marketing OTC and Promotion and Sales Department in Andrómaco.

¹⁹³ Source of information: IMS Reports, 1989-1999.

The succession process and the entrance of the fourth generation of family members are the other issues that concern the Board. Measures have not yet been taken to ensure a planned and smooth succession.

“My older brother works with me but the younger one does not. I have two brothers and five sisters. Six of us have nothing to do with the company. Besides that I have twenty-two nephews. My father is 73 years old and one of the matters on the agenda is to see how continuity will be affected in the future. It is a challenge we will face in the future.”¹⁹⁴

The managers see succession as a problem that might not only damage family relationships but something that could endanger the future of the company. There is also a widespread ignorance of family arrangements among managers in the company.

“I do not know how the shares are spread between the family members, nor whether there is any agreement between Alejandro Roviralta’s children about what will happen when he leaves the Board. The situation is very complicated seeing as in this kind of company it is very difficult to distinguish between company and family. [...] We [the managers] do not know anything about the family. We only have contact with Sandi and Pablo. There is a lot of secrecy surrounding family affairs.”¹⁹⁵

¹⁹⁴ Interview with Pablo Roviralta-CEO Andrómaco (first interview, 1999).

¹⁹⁵ Interview with Juan Pablo Rizzo-HR Manager in Andrómaco.

Chapter 8A: Case Study: AGD Aceitera General Deheza

8.1 Brief overview of the history of AGD 1948-1999

Founded in 1948 by Adrian Urquía, AGD (Aceitera General Deheza) transformed itself from a small oil-processing factory into the biggest indigenous firm in the industry. Nowadays AGD is a leading edible oil export company and also one of the frontrunners on the retail market for bottled oil with several successful brands. It ranked 40th among the 1000 top companies in terms of turnover in Argentina in 1999 (Revista Mercado, 1999), and it is considered the fifth most important exporter in the country (Revista Mercado, 1999).

After the changes the country went through in the 1990s, the company was able to adapt and thrive in an industry in which most indigenous businesses did not manage to survive. Nevertheless, the roots of AGD's success do not date from the 1990s but long before, in their thinking ahead about ways of improving technology, scale and cost-effective measures – a trio of decisions that would prove to be the right combination for survival and success.

The first generation tenure of the firm lasted 37 years: from 1948 to 1985, when the founder bowed out from the executive direction of the company and became its President. This foundational period can be split into three sub-periods: the founding period from 1948 to 1968, the crisis in 1968, and finally, the consolidation of the company between 1968 and 1985 (see stages of the history of the firm in figure 8.1).

The first generation tenure is shaped by the figure of its founder, Adrian Urquía, who was absolutely determined to set up an oil factory in the countryside in the Province of Córdoba. His enthusiasm and commitment, plus the importance Urquía attributed to technology and process flexibility, were key factors in the success of the firm: *“He [the founder] worked permanently to increase production volume in order to improve economies of scale. Optimising logistics, achieving efficiency and lowering costs were*

particular preoccupations of his. Another distinctive attitude was the systematic incorporation of technological developments."¹⁹⁶

However, there were a number of obstacles in the way. 1968 was a milestone year for the company. AGD was forced to shut down. An unfortunate combination of events – such as a worldwide increase in oilseed prices and the lack of a commercial strategy – forced the company to rethink its strategy.

From 1968 to 1985 the consolidation process took place until AGD had reached a leading position in the industry. In 1985 the company was a hundred percent export-oriented, selling bulk products made with state-of-the-art technology.

Urquía's children not only inherited the company, but also some of their father's fundamental values that were and still are deeply rooted in AGD's culture: paternalism, and Directors who know the operations and who are constantly attentive to what is going on both within the industry and outside it.

In 1985 the founder withdrew from the daily operation. 1985 is also an important date because that was when Urquía's youngest child, Adriana, started to work in the company. His sons Roberto and Adrian Jr. had already joined the firm several years earlier.

The period from 1985 to 1999 was characterised both by times of turmoil and spells of stability in Argentina. Changes in macroeconomic policies prompted companies to rethink their businesses and strategies. AGD did just this and ahead of the other companies in its industry, it launched two strategic initiatives: firstly, it started to manufacture brand products to compete with the retail market; and secondly, it set about strengthening the logistics chain to achieve cost effectiveness. A second stage began in 1995 when the company took a good look at its internal organisation – a process which triggered changes affecting the structure, management and governance of the company.

¹⁹⁶ Interview with Roberto Urquía- Director of AGD

In November 1996, the founder died. By that time, the firm was a leading indigenous edible oil producer. In figure 8.2 we present a detailed account of the evolution of AGD and the industry during the company's first tenure (1948-1985). As can be seen in the figure, the changes at the sectoral level had a deep impact on the evolution of the company (i.e., international crisis speeded up the internal crisis in the company in 1968; the soya boom in the country boosted AGD's processing capacity).

FIGURE 8.1: CHRONOLOGY AND STAGES IN AGD'S HISTORY

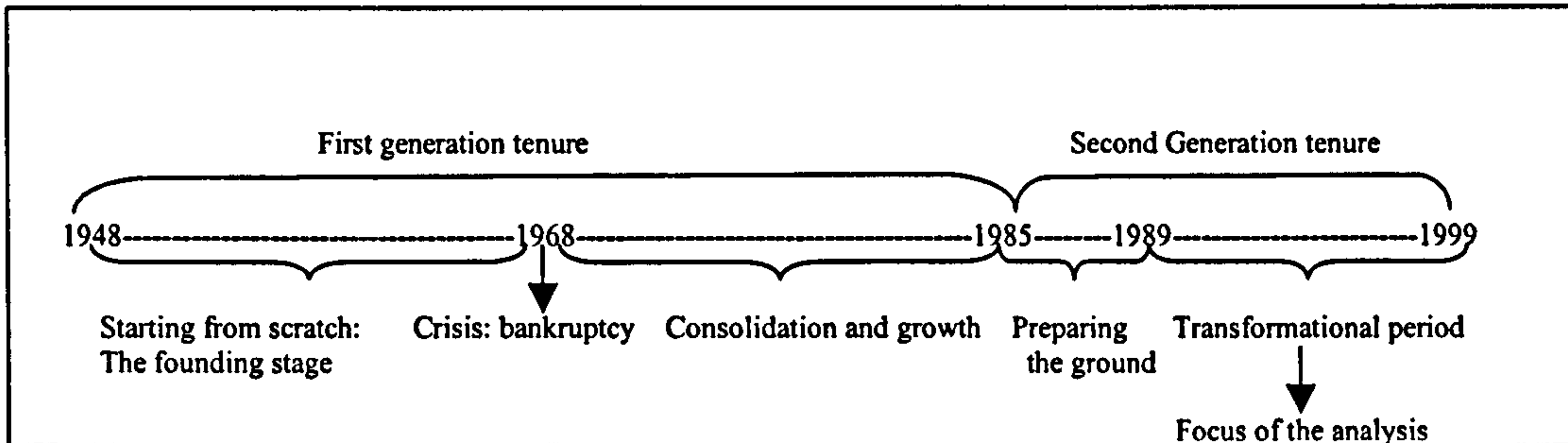
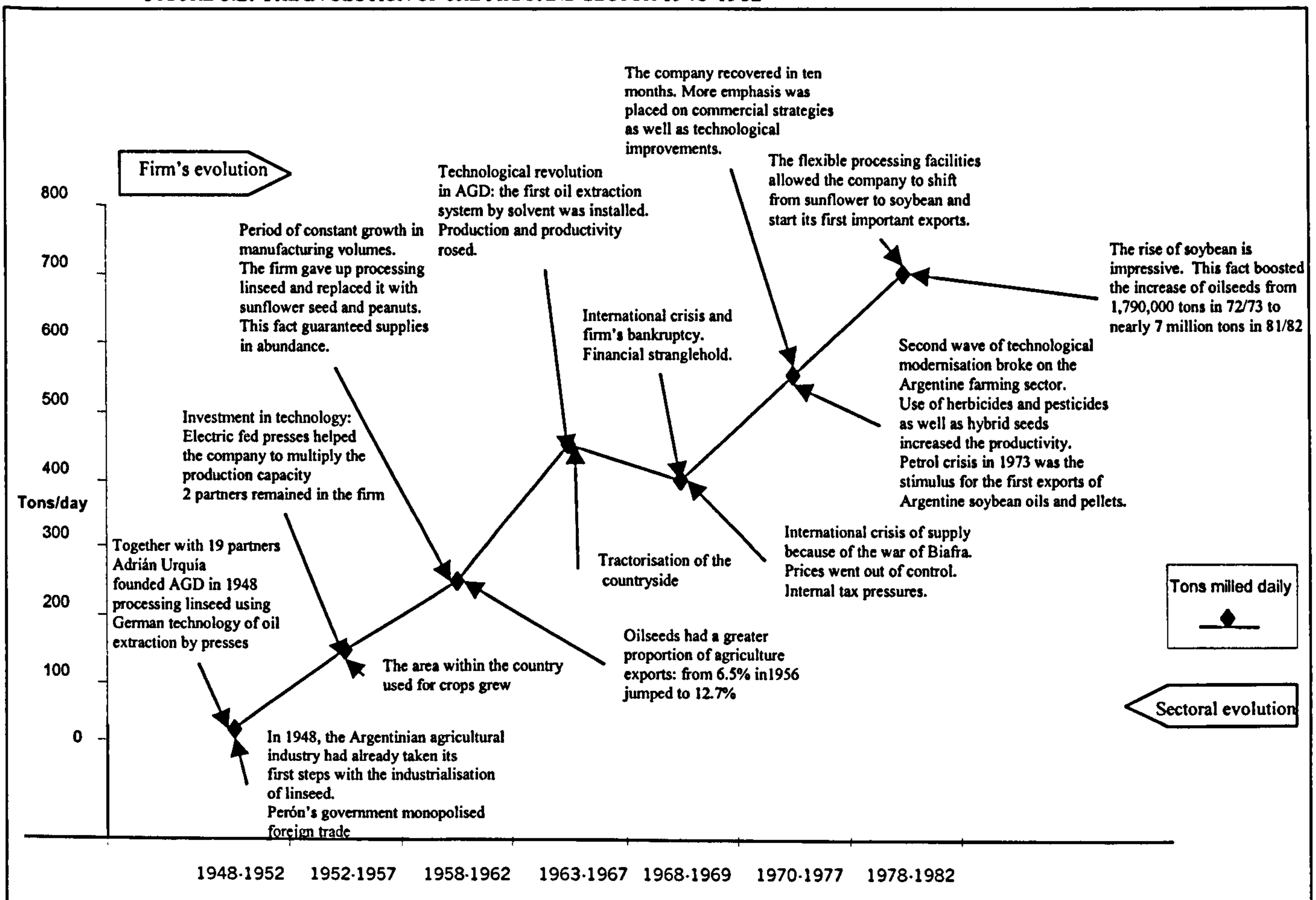


FIGURE 8.2: THE EVOLUTION OF THE FIRM AND SECTOR 1948-1982¹⁹⁷



¹⁹⁷ Archive material from the company (provided by Adriana Urquía); Gatto and Gutman, (1993) and Gutman and Feldman, (1990) were used to analyse the sectoral evolution).

8.2 Understanding the transformation of AGD: Chronological and analytical tracing of key elements over the period 1989-1999

Strategic initiatives: Branding

By 1988, AGD saw the need to diversify its production of bulk edible oil. It was to be expected that a company that crushed and refined oilseeds would make a move into the retail market: *“The family wanted to keep one foot in the internal market as a safeguard in case the external market did badly. The retail market offered that opportunity. It was the opposite of what other companies were doing. Everybody wanted to export to avoid the turmoil of the internal market.”*¹⁹⁸

Adrian Urquía Jr., the Director and CEO of the company, assumed the responsibility of preparing the launch of the new strategy. *“After one trip to the USA he [Adrian Urquía Jr.] came to a Board meeting and opened a suitcase full of oil bottles. They were plastic bottles – a different concept to that used in Argentina back then, because the market leader used glass bottles. He also came up with the idea of non-cholesterol oil, which was a piece of luck because until then this was a dormant market.”*¹⁹⁹

Another important development took place in the retail market for edible oil: Molinos, the leader, bought Santa Clara, the second company in the retail market: *“We perceived that the important customers wanted to have more than one supplier. Besides that, Molinos was so far ahead of the rest of the market that it did not need to keep up to date. Undoubtedly this led them to relax and not think about innovation, which was a big mistake and we took advantage of that mistake. They fell asleep.”*²⁰⁰

“Commercialising products with an extra value, achieving greater profitability and becoming more diversified were the outcomes of this strategy,” stated Roberto Urquía.

¹⁹⁸ Interview with Miguel Acevedo-Finance Manager.

¹⁹⁹ Interview with Adriana Urquía-Director.

²⁰⁰ Interview with Roberto Urquía-Director.

“Not putting all their eggs in one basket,”²⁰¹ as one Director said, was the strategy followed to stabilise the margins of the business.

In 1989 AGD launched the first pure sunflower oil to appear on the Argentinian market as shown in table 8.1. Ketelhohn *et al* (1998) pointed out that customers not only saw this product as healthier but also a good combination of relatively low cost price and perceived high quality, proving AGD’s strategy of product innovation to be a successful one and achieving a high share of the market for brand name oils (see market share evolution in figure 8.3).

AGD also took a step towards its entry into the massive consumer market by launching products related to the oil industry such as mayonnaise and juices based on soya and fruits. The following table and figures aim to illustrate the sequence in which new products were launched and the market share obtained.

TABLE 8.1: RELEASES OF DIFFERENT PRODUCTS BY AGD PER YEAR²⁰²

Product Year of Launching	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000*
Natura Edible Oil	X											
Manley’s Mayonnaise				X								
Familiar Edible Oil						X						
Natura Mayonnaise						X						
Cada Dia Edible Oil								X				
Mayoliva Mayonnaise									X			
Soya drink										X		
Trovatore Edible Oil											X	
Soya drink light												X
Manley’s Ketchup												X

*Expected / Company’s source, 1999

²⁰¹ Interview with Roberto Urquía-Director.

²⁰² This table was created using documentary data provided by Marketing Department.

FIGURE 8.3 MARKET SHARE FOR AGD'S EDIBLE OIL PRODUCTS 1997-1999²⁰³

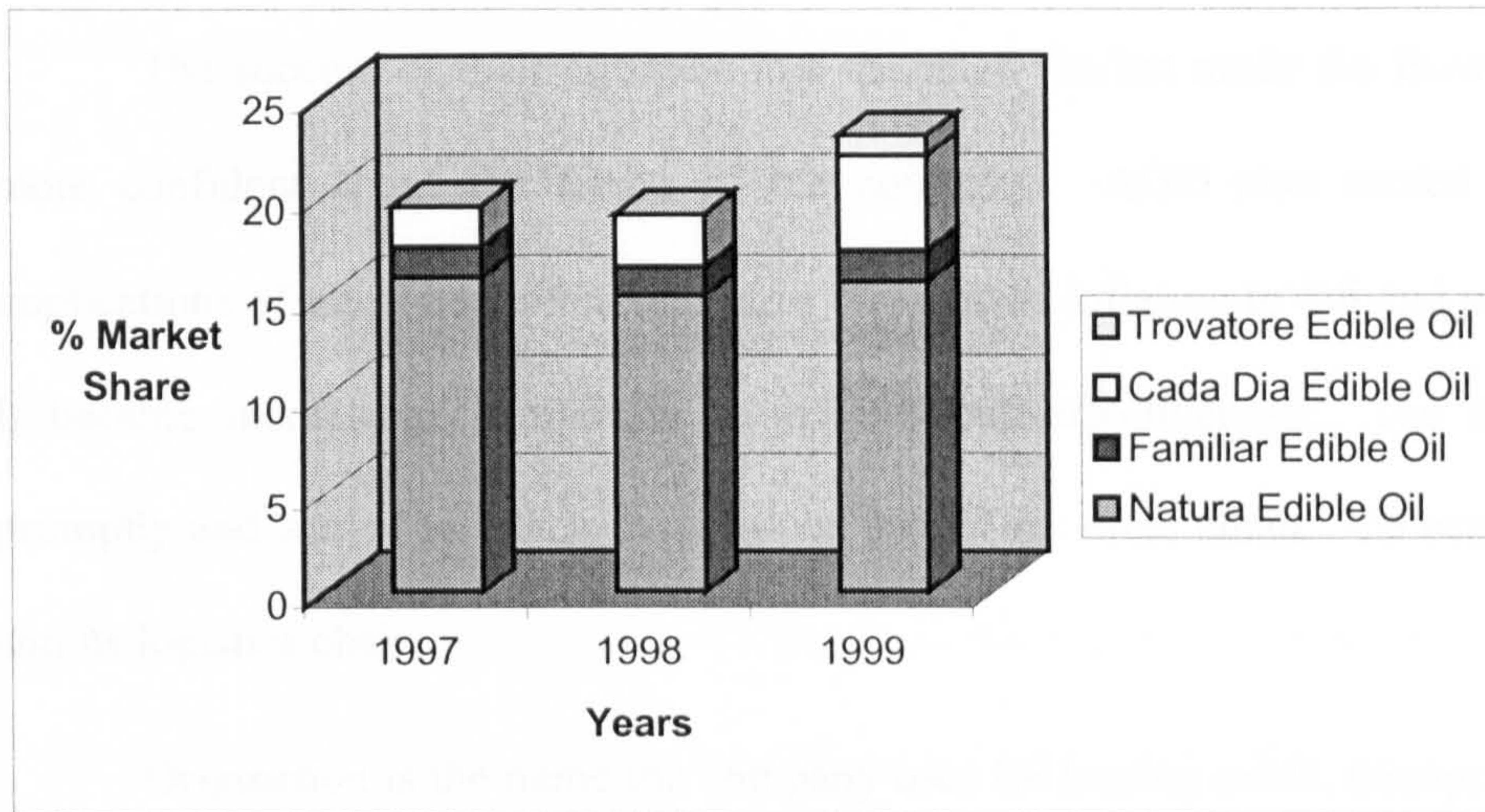
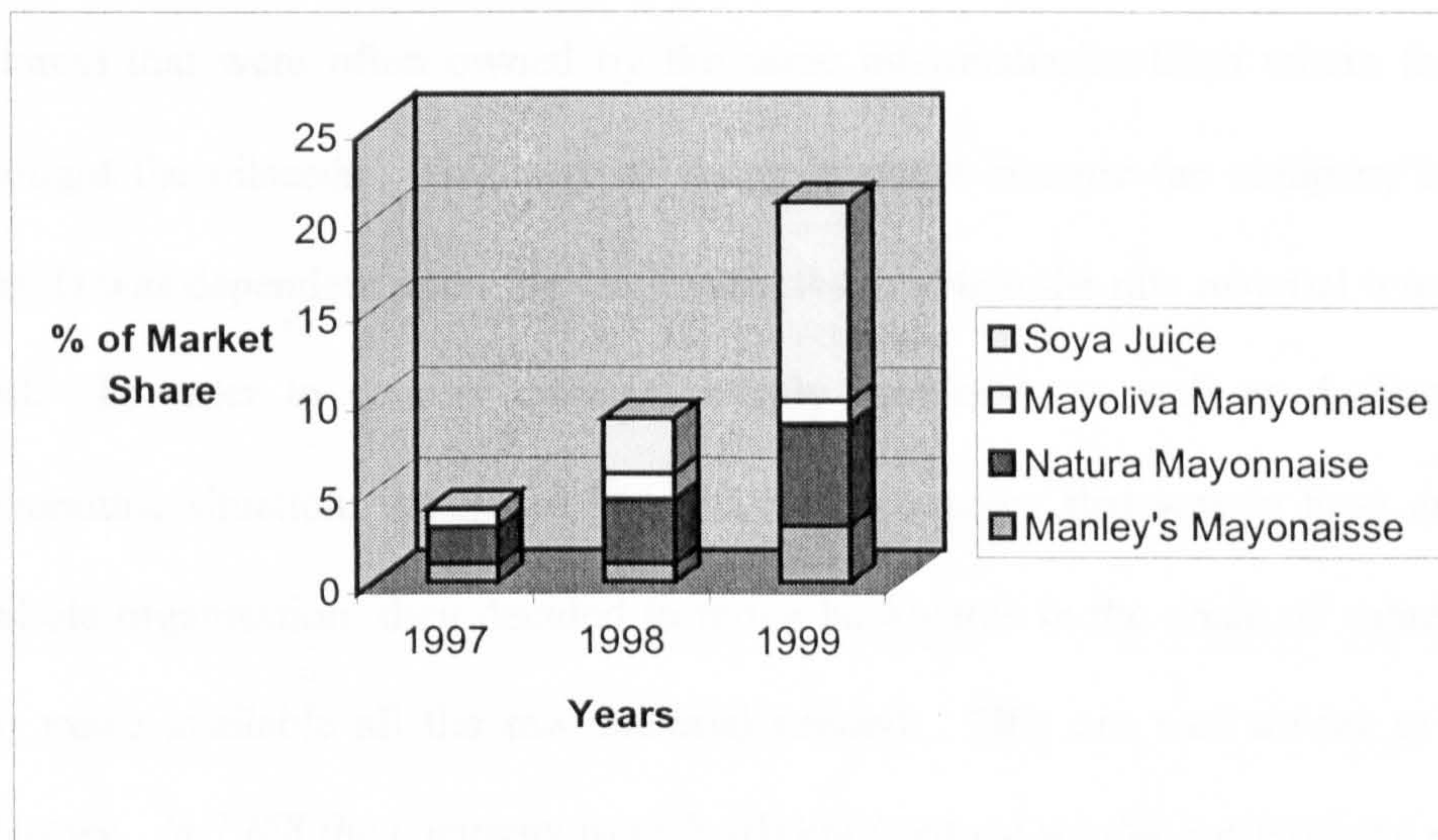


FIGURE 8.4: MARKET SHARE FOR AGD'S SOYA AND MAYONNAISE PRODUCTS 1997-1999²⁰⁴



²⁰³ Documentary data provided by Marketing Area of AGD; Revista Mercado, 1999; Ketelhohn *et al*, 1998

²⁰⁴ Documentary data provided by AGD's Marketing Department; Revista Mercado, 1999; Hinrichsen, 1999

Strategic initiatives: Origination and the logistics chain

The success of their entrance into the retail market made the Board and Managers more confident about the future of the company. AGD also started to evaluate the implications of macroeconomic measures that caused inflation to fall and prices to stabilise. It became increasingly important to achieve cost-effectiveness. The company reacted promptly and started to attack the weakest part of its value chain: 'the origination' process and its logistics chain.

Origination is the name the company uses for buying seeds, transporting and storing them. It is an activity which has always existed. AGD has always bought seeds, but their method of buying changed in the 1990s. Until then, the company had bought seeds from intermediaries or on the cereal stock market and stored them in silos (grain collecting stores) that were often owned by the same intermediaries from whom the company had bought the oilseeds. This way of doing business became the company's Achilles' heel: AGD was dependent upon the intermediaries to obtain the raw material it needed to process oil. In order to counter constant supply problems, as well as dealing with the new economic situation, the Board implemented a strategy that was to have an impact on the whole organisation: they decided to move backwards in the chain of value to enable them to make available all the raw material needed. *"We are well aware of our company's history. In 1968 the company went bankrupt because we did not have the raw materials to supply the plant. We are not going to go through the same thing again. We have learnt our lesson."*²⁰⁵ By 1999, the company had twenty two grain collecting plants and two purchasing offices spread throughout the country.

The firm's strategy gave them two advantages: firstly, it did not have to pay commission to the agent at the stock market because it bought the raw material directly from the farmer: and secondly, it provided the company with a commodity backup, thus not

²⁰⁵ Interview with Adrián Urquía-Director and CEO.

leaving them heavily dependent on market prices. The outcome was what the company wanted: achieving efficiency by reducing costs.²⁰⁶

The company saw that the logistics chain would have been incomplete without an adequate transportation system. Transport was also seen as critical for the business: *“Formerly the aim was to get the supplies needed for our processing facilities, but when you think that grinding a tonne of soya costs twelve or thirteen dollars and transport between Tucumán and Rosario comes out at fourteen dollars, you see that logistics are all-important in our business. And here is where you can achieve efficiency.”*²⁰⁷

In 1992 the company incorporated a fundamental link into its logistics chain: the Nuevo Central Argentina (NCA) railway which AGD operates. With a 40 year concession, and in partnership with other groups, AGD controls the 4,757 of kilometres of track, linking storage facilities with industrial plants and the port, making connections possible with the rest of the country. Furthermore, this strategy was complemented by the facilities at the Terminal 6 port. In 1996, Terminal 6 became the biggest private port in the country.²⁰⁸

*“The company gained a real advantage in the sector with this strategy. I think we are ten years ahead of the other companies. The few national businesses that survived are trying to copy our strategy. Even Molinos²⁰⁹ is trying to replicate our success.”*²¹⁰

Not only did this strategy help AGD become leaders in the industry, but it also allowed the company to incorporate new businesses and seize the opportunity in others. In 1993, following the strategy of making the very most of its logistics chain, the company

²⁰⁶ Interviews with Roberto Urquía and Miguel Acevedo.

²⁰⁷ Interview with Roberto Urquía-Director.

²⁰⁸ Archive material provided by the company (NCA, T6 and Board of Directors).

²⁰⁹ This is a different company to the one on the retail market. The Molinos that Miguel Acevedo refers to is a crushing company owned by the multinational Bunge, while the Perez Companc family owns the company on the retail market (previously both companies were owned by Bunge).

²¹⁰ Interview with Adriana Urquía-Director.

moved into the purchase and export of cereals as an independent activity. In 1997, AGD sold one million tons of cereals worldwide and in 1999 one and a half million tonnes.²¹¹

“The origination business made us broaden our perspectives at the same time. We started off buying only oilseeds, but to shut out possible competition from intermediaries we started to buy cereals too. That is how our Cereal Export Department came into being.”²¹²

The producer also required different services such as loans, agrochemicals, and seeds, so, in 1994, the company created the Agro-product Department, adding more businesses and services to the origination complex.

Summary and concluding remarks on the strategic initiatives undertaken by AGD.

In 1989 AGD launched *Natura*, the first branded product for the company. This decision meant that the company would be participating in a different market: AGD would not only be an export company selling edible oil in bulk, but would also participate in the internal retail market and achieve a leading position. Later, the company was to incorporate new products although always related to the oilseeds they processed. The aim and result of this policy was adding value to the raw material the firm exported in bulk.

In 1991 changes in the macro-economy encouraged the company to react speedily to improve efficiency by enhancing and expanding its origination area. The outcomes were cost reduction, the broadening of the business scope of the company and, finally, the strengthening of AGD's logistics chain.

Figure 8.5 aims to summarise the main changes the company underwent and how these strategic initiatives changed the nature of AGD as a business. The figure shows how AGD transformed itself from a company that focused on the crushing activity of the business and being dependent on intermediary agents (see top of the figure), to a firm that

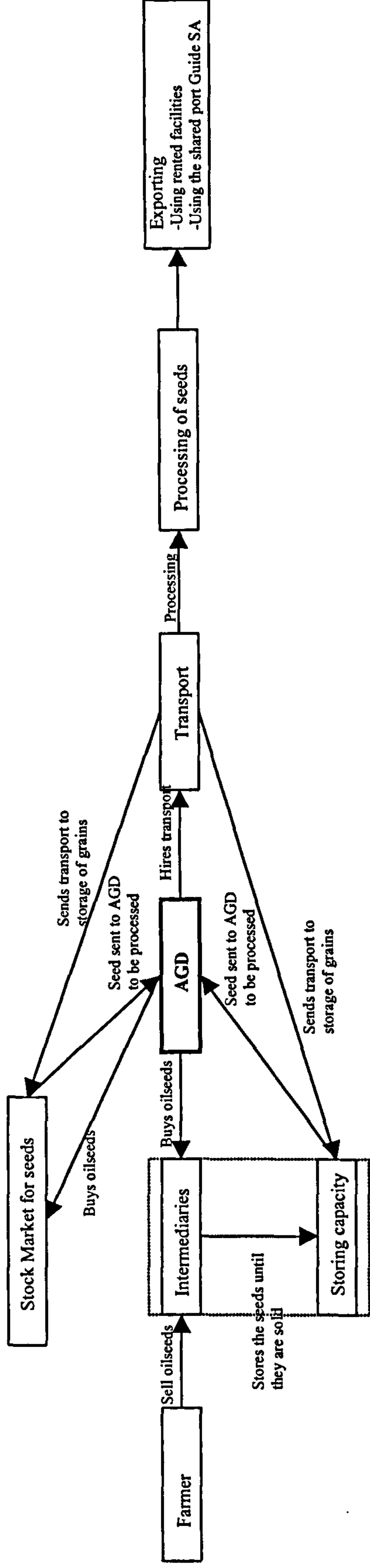
²¹¹ Archive material from the company (provided by the Cereal Export Department).

²¹² Interview with Roberto Urquía-Director.

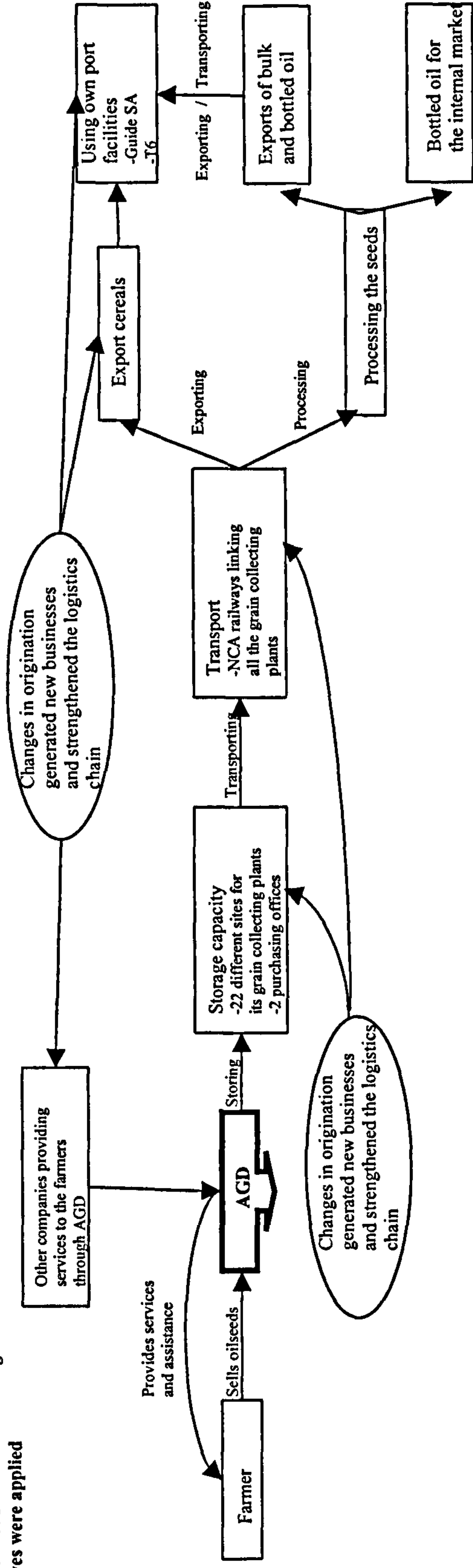
participated in the whole chain of value: farming, crushing, processing, storage, transport and export.

FIGURE 8.5: AGD'S STRATEGIC INITIATIVES: CHANGES IN THE BUSINESS' SCOPE

AGD's businesses before 1990



Changes at AGD after the strategic initiatives were applied



Thinking out a new business structure

In 1995, once the new strategic initiatives were running successfully, the Board decided to implement a new structural design. The growth the company underwent over the period 1989-1995 plus the intense competition and changes within the industry made the Board reformulate the way the company should be organised.

The Board hired a group of Consultants and started work on the most far-reaching and organisational changes in the firm's history. Behind such changes was a clear idea: *"We had a clear objective once we started making changes in the structure: we wanted a structural change which would enable the Board to have more time for planning strategies and spend less time on the operational side."*²¹³

The document presented by the consultants is revealing in terms of highlighting the aims behind the changes in the structure: firstly, seeking ways to liberate the Board from operative tasks but at the same time allowing them to keep control of the operation; secondly, clarifying the different departments of the company and differentiating between operative (business units) and support areas; and lastly, the idea that the structure should clarify the relationships between the different departments, customers and suppliers.²¹⁴

The new structure brought a new concept into the organisation: the idea of business units and support units. The concept of the business unit entailed each one taking responsibility for its own profits and business performance. Until 1996 the structure had been a functional one in which all the departments were dependent on the Board, and the Directors played the role of Directors and Managers at the same time. The new concept of

²¹³ Interview with Roberto Urquía-Director AGD.

²¹⁴ Documentary material "Ideas and criteria of the work done for AGD" (provided by Consultants).

business units meant giving more responsibility to the managers of different units and also meant that the Board should start to delegate operational tasks.²¹⁵

Support areas were either reformulated or created from scratch such as the New Businesses unit and the Economic Studies unit. An economist with extensive experience in market studies was appointed to head the Economic Studies unit. The idea of setting up this new department was to consider the *“short, medium and long-term future of the company, to centralise the economic information that the Board received and to interpret environmental information for the Board.”*²¹⁶

The figure below shows the different stages of the evolution in the company's structure. Units that could work together and had common elements were merged until they formed the business units seen in figure 8.6. The new structure meant that the different support units had to learn to offer services to the business units rather than working according to what the Board required. The business units, on the other hand, had to be more efficient in the use of resources, coordinate their different activities to avoid duplication and re-structure different processes to attain more effectiveness (i.e., administrative processes in the different business units and production processes).

²¹⁵ Documentary material “Ideas and criteria of the work done for AGD” (provided by Consultants).

²¹⁶ Interview with Carlos Haerberle- Economic Studies Unit Manager.

FIGURE 8.6: EVOLUTION OF THE COMPANY'S STRUCTURE²¹⁷

Functional structure till 1996	First stage of change year 1997	Business units and support areas since 1998
Administration and IT	Administration and IT	Administration and IT
Finance	Finance	Finance
Human Resources	Human Resources	Human Resources
Purchasing	Purchasing	Purchasing
Origination Soya-Sunflower- Peanuts	Origination Soya-Sunflower- Peanuts	Origination Soya-Sunflower- Peanuts
GD Plant	GD Plant	GD Plant
CH Plant	CH Plant	CH Plant
DV Plant	DV Plant	DV Plant
Trading	Trading	Trading
Cereals	Cereals	Cereals
Fractional distillation	Fractional distillation	Fractional distillation
Mayonnaise	Mayonnaise	Mayonnaise
Brands	Brands	Brands
Peanuts	Peanuts	Peanuts
Agro products	Agro products	Agro Products
Agriculture	Agriculture	Agriculture
Pigs	Pigs	Pigs
NCA	NCA*	NCA*
T6	T6*	T6*
		New Businesses*
		Economic Studies*

Cereals and Oilseeds business unit

Brand business unit

Peanuts business unit

Agriculture and Livestock business unit

Communicating the changes in structure

In November 1996, the Board met the top and middle management of the company. Roberto Urquía gave a speech prepared by the Board and the consultants. Some paragraphs of the speech are enlightening in terms of defining the Board's aims for the future of the company. Firstly Urquía stressed the importance of the company's stance once the process of change had begun: *"AGD is an organisation which, fortunately, is growing at the moment. The company is not in the critical position of some organisations*

²¹⁷ Documentary material "Ideas and criteria of the work done for AGD" (provided by Consultants) and Archival material from the company (provided by Human Resources Area).
*Directly dependent on the Board.

*in which re-organisation is undertaken not in order to be more efficient, but to avoid collapse.*²¹⁸

Customer focus was the reason given to justify the immediate need for change: *“In a phase of expansion like ours, we need to have a flexible organisation and a flexible structure which allows us to adapt quickly to the needs of the customer and the market. To achieve this we are thinking of giving more autonomy to the different areas to allow the businesses to develop better but within certain organisational guidelines, which will facilitate horizontal communication and allow the sectors to work together. This will be advantageous to the company and result in a better service for the customer.”*²¹⁹

The Board also decided that a new area of human resources was needed to operationalise the changes. The head of the HR area remembers the difficulties in implementing the organisational changes: *“There was resistance to implementing the ideas that the Board launched in November. At first, managers were keen to go ahead with the changes, but when we went to the departments they started to say, ‘why don’t we do it next week’; ‘I am very busy at the moment’ and gave plenty of other excuses. There was a lot of anxiety.”*²²⁰

Marcelo Vit’s work also resulted in flattening the hierarchical levels of the company. From the six levels that existed in the structure 1996, he streamlined down to the current three levels, eliminating the supervision level: *“One of the things that the Board wanted was for the managers to have more contact with the process. Having a top-heavy structure meant the middle managers had less of a hands-on approach towards the process.”*²²¹

²¹⁸ “Speech from the Board”-Roberto Urquía-November, 1996.

²¹⁹ “Speech from the Board”-Roberto Urquía-November, 1996.

²²⁰ Interview with Marcelo Vit-HR Manager.

²²¹ Interview with Marcelo Vit-HR Manager.

The tasks still underway

Some aspects of the process, nevertheless, are not yet complete. The structure shown in figure 8.6 has already been implemented, but the transformation of the different areas is lopsided: *"I believe that further clarification of the structures is necessary. Maybe certain people in charge don't have an ideal profile. They are older people whom AGD trusts."*²²²

The Peanuts business unit is the most advanced of the four in that its structure has been totally clarified: *"The Peanuts unit advanced a lot because of the pressure from the younger managers, while other areas such as the Deheza Plant were more difficult to restructure, the staff are older and the changes take longer to implement."*²²³

Changes in the Management of the company

A new generation of managers

The new businesses of the company and the need for better-prepared managers for running the business units opened the door to new managers with different skills and education. The profile of these new managers was stated in the speech given by the Board while launching the new organisational design of AGD: *"We sought and want people who are not afraid of a challenge; who are oriented towards both internal and external customers; who have the capacity to work in a team and the ability to interrelate; who think analytically and strategically; who are enterprising and oriented towards action; and above all we are looking for people who would risk everything for the company."*²²⁴

This was a challenge for a company used to low levels of employee turnover and a homogeneous culture. The running of the company's various departments required more sophisticated tools and those tools were brought to AGD by professionals who joined the

²²² Interview with Adriana Urquía-Director.

²²³ Interview with Adriana Urquía-Director.

²²⁴ "Speech from the Board"-Roberto Urquía-November, 1996.

organisation over the 10-year period analysed. *“With the new incorporations, we are looking for people with a more complete profile, not only professionally, but also with leadership and teamwork skills, things that we did not look for before, that were not prioritised. We had good managers, but we thought that we could be better than before and prepare for new challenges.”*²²⁵ (See the evolution over time of the profile required in different areas of AGD in table 8.2).

It was seen as important to professionalise the company so that it could face the challenges of the new context in Argentina. Nevertheless, there was a feeling of pride about the way the company was managed before 1990s. This pride arose from the idea within the company that its managers were different from these of the MNC companies. In the opinion of different managers, the difference stemmed from the fact that managers at AGD were closer to the process, knew the area and its problems and had closer ties with the producers. As one manager said: *“If we need to use a Poncho, we’ll use it and if we have to dance at farmers’ parties, we will. It is a different approach to those companies that send managers out in suits and ties.”*²²⁶

Whereas the company had not set high standards as regards what it expected from its new employees in the 1980s, the 1990s were to see conditions change as it became much harder to join the firm as indicated in table 8.2. At the same time the demographic conditions of the company were also changing in that it was reducing the average age of its personnel. This last aspect was the outcome of the incorporation of younger personnel throughout the 1990s (see table 8.3).

²²⁵ Interview with Adriana Urquía-Director.

²²⁶ Interview with Marcelo Vit-HR Manager AGD.

TABLE 8.2: DEGREES REQUESTED AND EXPERIENCE REQUIRED FOR JOINING VARIOUS DEPARTMENTS OVER THE PERIOD 1989-1999²²⁷

<i>Business Units</i>	1989	1999
<i>Brands*</i> *Includes Brand and the fractional distillation area in the 1980s	-University degree not required - Previous experience only needed in marketing or commercialisation in the edible oil industry	-University degree is a pre-requisite. -A minimum of 3 years experience required for middle management positions -Previous experience in the food sector rather than edible oil industry is welcomed.
<i>Cereals and Oilseeds (origination, industrial, trading)</i>	-Country people to deal with farmers -No higher education required -Technicians to work in the industrial complex -Internally trained people for trading	-A degree in Agricultural engineering required to run the purchase offices and grain collecting plants. -A degree in Industrial engineering is required to work in top positions in the plants; group leaders must be technicians. -Experienced traders with a university degree and previous experience in trading companies are required to fill these positions.
<i>Peanuts</i>	-Technicians to work in the field -Technicians to operate the plant	-Engineers to operate the plant -Agricultural engineers to work in the fields
<i>Agriculture and Livestock*</i> *Includes agriculture, pigs and agro-products areas in the 1980s	-Not specified	-A degree in Agricultural engineering needed for managerial positions

TABLE 8.3: AVERAGE AGE OF PERSONNEL IN SELECTED AREAS (TAKING INTO ACCOUNT THE WHOLE PERSONNEL OF THE DEPARTMENT/AREA)²²⁸

Areas of the company	1989 (Age-average)	1999 (Age-average)
<i>Administration and IT</i>	48	34
<i>Finance</i>	47	36
<i>Brands</i>	46	35
<i>Origination</i>	50	32
<i>Peanuts</i>	55	34
<i>DH Plant</i>	55	30

The challenge of having 'two generations of managers'

Probably one of the most important challenges, as the Board recognised, was dealing with the issue of having two generations fighting over the same power. The changes in the company structure and the possibility for a new generation of managers to

²²⁷ This table was prepared using AGD's archive material from the HR department and data provided by the interviews with Adriana Urquía, Marcelo Vit, Gonzalo Domínguez and, Ricardo Sáenz.

²²⁸ This table was prepared using AGD's archive material provided by the HR department

work more freely under the new conditions caused conflict: *“Around here, what happened was that before the process of change started, we had a few old leaders who were more in favour of the old system, more rigid, more for the establishment, less for teamwork. Now we have a group of young people who have come here and have been encouraged by the changes. They have had other ideas: to work as part of a group, to participate. This fact has generated conflict and strain sometimes.”*²²⁹

Nevertheless, AGD was able to handle the transitional stage firstly due to a good group of top managers *“aware of the future challenges”*²³⁰ and secondly, because of the company’s decision to avoid sudden or large-scale replacements of managers, unless absolutely necessary. *“We think that our company was lucky because in most cases the old generation and the new get on well, the old one gave the new one experience and customer-oriented service and the new one gave the old one the administrative tools the senior managers lacked.”*²³¹

Control and planning processes

The 1990s also introduced new managerial concepts into the company. Both planning and control emerged as two different and complementary aspects that the managers of AGD started to learn and apply. The different areas of AGD at different levels started to formalise more what had been impossible in the 1980s.

The mechanisms of control and planning, nevertheless, were supposed to provide *“not only short term control but also long term vision.”*²³² The company did not want to become more bureaucratic once the systems of control and planning were installed, nevertheless, these systems were necessary: *“Although we have grown as a company, we do not want to lose the virtue of being agile when it comes to decision making. It’s important to avoid bureaucracy. Otherwise you end up accumulating things but not*

²²⁹ Interview with Adriana Urquía-Director.

²³⁰ Interview with Adriana Urquía-Director.

²³¹ Interview with Adriana Urquía-Director.

²³² Interview with Ricardo Sáenz-Manager of Origination area.

attributing any value to them. We need control and planning, we need more formalisation, but not so much that we risk destroying the agility and promptness of our decision-making process that I would say we are proud of.”²³³

The following table shows the main indicators of control used by selected departments of the company over time. The table also shows how the indicators have increased over time. The fact that AGD was a company with a greater size and business scope caused these indicators to increase.

TABLE 8.4: INDICATORS OF CONTROL USED BY SELECTED AREAS OVER THE PERIOD 1989-1999²³⁴

Areas	1989	1999
<i>Brand</i>	Crude Oil: not considered Branded products: -Average price -Share in volume -Shares in US\$	Crude Oil: Cost effectiveness Branded products: -Average price -Share in volume -Share in US\$ -Profits with/without amortisation of debts -Evolution of markets -Evolution of each product
<i>Logistics</i>	-No indicators, estimates	-Cost of transport-evolution -Cost of stock (storing grains)

The Board of Directors: Strategy and family alignment

Governing the company: Structure and strategy

Until 1996, the year when AGD’s founder died, Urquía’s children had been working as company Directors but without specific responsibilities. Nevertheless, as soon as the first of his children started to work for the company in 1968, the Directors started to mould a profile that would shape the future of the Board. Adrian Jr. was very keen on technology and marketing. He was the one that pushed for the launch of the new branded products and developed the retail market. Roberto was very committed to the industrial complex – that comprised more than 60% of the company’s turnover. He was the force

²³³ Interview with Roberto Urquía-Director

²³⁴ This table was put together using AGD’s archive material and data provided by Gonzalo Dominguez and Ricardo Sáenz

behind the origination and plans for the logistics chain. Finally, Adriana, the youngest of the children was the last one to join the company. She liked the freedom that the very profitable Peanut area gave her and, at the same time, started to get involved in human resources (henceforth, HR).²³⁵

Adrian Urquía died in 1996. His children did not modify the way they were working. Adrian Jr. took over as President because the company needed a President. Nevertheless there was a verbal agreement that the President would be "*primus inter pares*."²³⁶

The changes the company went through after 1996 made the Board rethink its function. The Directors wanted to "*think strategically and act in consequence*;"²³⁷ they did not want to get involved in the day-to-day operation. Once the business and support units were set up the Board divided its responsibilities: Adrian Jr. would supervise the Brand business unit and the Purchasing unit; Roberto would control the Cereals and Oilseeds business unit, Administration and Information Technology, and Finance; and Adriana would be in charge of Peanuts and HR.

*"While Roberto and Adrian are the strategists of the company, Adriana had masterminded the organisational changes AGD had gone through."*²³⁸ It was Adriana who insisted on working in-depth on organisational issues once the Consultants were hired. She saw the opportunity to speed up the organisational changes that were needed.

The Board was also working, pushed by Adriana, on a family protocol: *"If you don't plan, or you don't shape it [family protocol] when things are calm, afterwards it might cause a lot of problems. We have plenty of time. Pomo is still single, Roberto has two young daughters and my daughter is just a baby."*²³⁹ The aim of the family protocol is to establish the pre-requisites family members had to fulfil to join the firm: *"It is really to*

²³⁵ By 1999, Adrian Urquía Jr. was 58 years old, Roberto Urquía was 54 and Adriana Urquía, 38.

²³⁶ Interview with Adriana and Adrian Urquía.

²³⁷ Interview with Roberto Urquía-Director AGD.

²³⁸ Interview with Marcelo Vit-Director.

²³⁹ Interview with Adriana Urquía-Director.

stop loads of relatives joining in the future."²⁴⁰ Only the brightest and most committed to the company's work culture will be granted a place in the firm.

The following table shows the main aspects of the family protocol signed by the Board.

TABLE 8.5: PRE-CONDITIONS FOR FAMILY MEMBERS WISHING TO JOIN AGD IN THE FUTURE²⁴¹

Aspects	Requisites
<i>General conditions for a family member to join the company</i>	<ul style="list-style-type: none"> -They must share the values of the company. -They must have a degree from a good university. Preferably a degree which suits the company's needs. -They must speak fluent English. -They must pass an entrance exam set by a different company that sets the exams for the rest of the employees.
<i>Career plan</i>	<ul style="list-style-type: none"> -During the university degree stage: It would be convenient if they worked in the company over this period (in internships for example). -Postgraduate stage: A two-year long Masters degree in Argentina or abroad.
<i>Training and Assessment</i>	<ul style="list-style-type: none"> -After training in the company, an assessment of the family member job will be undertaken. The company will decide if the family member will or will not continue working for the company. Family members will not reach high positions in the company simply because they are family members. Promotion will depend on their capabilities and performance. -Once the members are incorporated definitely, they will be evaluated by the normal assessment systems in the company. While these systems are still in development, the assessment of the family member will be made by an external consultant.
<i>Permanent attitude</i>	<ul style="list-style-type: none"> -The family members have to have a good attitude and disposition towards the rest of the employees. -Family members have to start to work in junior positions in the company and move between posts in different areas to get a deeper understanding of the company's businesses. -Being humble and respectful is an attitude expected from a family member. A lack of ostentatious behaviour is also a key attitude. -It is forbidden to have another job outside the role that the family member has within the company.

Strategic thinking and strategic decision-making

While the 1980s represented a period of economic turmoil in which strategic issues were set aside because of short-term problems related to the operational side of the business, the 1990s were seen as the opportunity to start focusing on strategy: *"In the*

²⁴⁰ Interview with Adriana Urquía-Director AGD.

²⁴¹ "Family protocol for members of the Urquía family"-Documentary material provided by the Board of AGD.

1980s there was so much time invested in the short term that you were not able to look to the medium and long-term.”²⁴²

In the 1990s the Directors wanted to focus on strategic issues. To do so, the Board started to prioritise strategic decisions over operational ones. The delegation process that began in the mid-1990s helped the Board to achieve this aim: “*The experience taught us to delegate, because in a family business this is not easy. We were starting to have a bottleneck situation. The bottleneck is the decision-making process that stops you moving forward.*”²⁴³

The Board made a firm decision to distinguish between those decisions that had to have the Board’s approval (considered by the Board to be strategic decisions) and operational decisions that did not need their intervention (see table 8.6).

In 1998, with the launch of the new structure, more frequent meetings took place to inform the Board of aspects related to the business units and to allow them to control their operation (see table 8.7).

TABLE 8.6: STRATEGIC DECISIONS NEEDING THE BOARD’S INTERVENTION²⁴⁴

Areas	Strategic decisions
<i>Brand</i>	-Investments -Product images (control of advertising)
<i>Origination</i>	-Investments -Annual amount of money available for farmers’ loans -Development of complementary activities such as production of materials, distribution of seeds and production of seeds

²⁴² Interview with Roberto Urquía-Director.

²⁴³ Interview with Roberto Urquía-Director.

²⁴⁴ Interviews with Ricardo Sáenz, Gonzalo Dominguez and Roberto Urquía.

TABLE 8.7: FOLLOW-UP ON MEETINGS BETWEEN THE BOARD AND THE BUSINESS UNITS²⁴⁵

Business Units	Frequency of meetings	Indicators/aspects required by the Board
<i>Brands</i>	Every two months	-Sales -Shares (Litres and US\$) -World markets -Profit Margin
<i>Cereals and Oilseeds</i>	Every two months	-Expenses -Sales -Gross profit margin -Follow up the grinding budget
<i>Peanuts</i>	Every two months	-Expenses -Sales -Gross profit margin
<i>Agriculture and Livestock</i>	Every six months (once before sowing time and once before harvesting)	-Surfaces to be sown -Evaluation of the harvest

In 1995 AGD hired the STRAT consultancy to start communicating the strategy down through the company, improving communication between the Board and the managers. In 1997 the company decided to start holding “*immersion days*” to discuss the strategic directions of the company with the top managers of the different Business and Support Units.

The Directors explained these changes as a positive aspect that allowed them to focus on strategic matters: “*Focus on strategy needs the strategist to have time to think. We need time not to lose sight of what is going on outside the company. We want to see our colleagues, we want to watch the international companies to see what they are doing better than us.*”²⁴⁶

The scale of the delegation process, however, gave some managers cause for complaint: “*I think that the Board still finds it hard to delegate*”; “*there was a peak at that time of trying to delegate, and afterwards they went back to taking the reins.*”²⁴⁷ The same Directors felt that the delegation process was only half-complete: “*We have still not completed total delegation, but I would say that we have taken a big step forward. I spend much more time in meetings with different departments in the company than before. I am*

²⁴⁵ Interviews with Ricardo Sáenz, Gonzalo Dominguez and Roberto Urquía. Reports sent to the Board by the Peanuts and Brands business units.

²⁴⁶ Interview with Roberto Urquía-Director.

²⁴⁷ Interview with Marcelo Vit-HR Manager.

*not concerned now about the Chicago stock market, whether it rises, sells or doesn't sell.*²⁴⁸

The unresolved issues

There are two issues which the Board is very sensitive about. The first is the possibility of floating the company on the stock market; the second is the higher profile that the company needs in the internal market.

The researcher detected a general feeling of a lack of courage and audacity to float the business on the capital market. The Board is split over this topic. While Roberto and Adriana want to move forward with this plan, Adrian Jr. is not comfortable with the idea of opening up the company to share holders. *"From an individual's point of view, I would have done it already, two years ago. This is a big advantage we are giving other companies by not capturing capital in the market. This is one area where I think we are lacking in audacity and decisiveness."*²⁴⁹

Adriana highlighted the limitations for growth as an outcome of not opening up the company to the stock market: *"We have projects and we do not work on them basically because we do not want to spoil the solvency equation of the company. If we were to open up to the capitals market, I think things would turn out better."*²⁵⁰

The other topic that has preoccupied the Board is the higher profile the company needed in the internal market. As this is a firm that used to export oil in bulk there was no need to cultivate an institutional image. However, this changed once AGD launched its branded products on the retail market. At that time the Board felt the need to encourage a higher profile to push its new products. Nevertheless, the company still has a low profile in Argentinian society. The products are not associated with the company. Everybody knows *Natura* oil, but few people realise who the company is behind it (Benechi, 1999).

²⁴⁸ Interview with Roberto Urquía-Director

²⁴⁹ Interview with Roberto Urquía-Director

²⁵⁰ Interview with Adriana Urquía-Director

“Today you can offer thirty percent of your company for sale and it makes no difference. I think that it would not even lose the family profile, that is the first point. Another point I think is important is that we are not keen on opening up the company because we are worried about the higher profile the company can achieve. We should not be scared of having a higher profile if this could considerably help our own brand products. When you are already in the retail market I think it is important that whatever product you pull out of your sleeve, you know that you have the company to fall back on, and we are weak in this respect.”²⁵¹

²⁵¹ Interview with Roberto Urquía-Director.

Chapter 8B: Case Study: Vicentín

8.3 Brief overview of the history of Vicentín 1929-1999

In 1929, Pedro and Francisco Vicentín set up what would become one of the most important companies in the edible oil industry in Argentina: Vicentín. Nowadays Vicentín is considered an important crushing company in the edible oil industry and ranks 26th among the 500 top exporters in Argentina in terms of the value of its exports (Revista Mercado, 1999).

The first generation tenure (1929-1973) was shaped by the work done by its two founders, Pedro and Francisco Vicentín. They saw the company reach many milestones, for example, when in 1943 the company first started processing oilseeds (mainly cotton seeds), or when in 1966 it incorporated solvent extraction, thus updating its production facilities and making them among the best in the world (Ketelhohn *et al*, 1998).

The third generation tenure started right after the death of its founders in 1973. Herman Vicentín, grandson of Francisco, became President. The third generation bypassed the second generation and took control of the firm. The explanation for this was very straightforward: *“The foundational stage was very long. The founders had a grip on the business for a long time until they died. With forty years running the business along with their children, when the time came to change the tenure, the second generation of family members were tired and preferred their children to be in charge.”*²⁵² (See stages of Vicentín’s history in figure 8.7).

This tenure witnessed the soya boom in the 1970s and 1980s. The boom in production and exports of soya in the 1970s made many companies in the edible oil industry shift their crushing production towards more profitable soya. And this is what Vicentín did, but always maintaining the importance of the cotton activity. However, the

²⁵² Raúl Gonzalez Arceluz-Corporate Lawyer.

problem of the cotton business was twofold: it was shrinking over time and necessitated heavy investments in infrastructure, thus preventing the company from investing heavily in fast growing markets such as soya crushing.²⁵³ In 1979 the company also entered the bottled edible oil market and attained, at that time, 14% of the market share.²⁵⁴

Although the Board initially held back while it decided whether it should retain cotton ginning as its primary activity, the company invested in production and shipping facilities in the Port of San Lorenzo that were completed by April 1987. Ten years later, in 1997, these shipping facilities would become Port Vicentín.

1987 saw a turnaround in the company's activities. One result of the investments in crushing and shipping facilities, which allowed the company to start FOB exports,²⁵⁵ was that turnover and crushing production doubled, thus becoming even more important than before.

Vicentín, however, did not abandon investments in the cotton market. The investments in cotton ginning plants took off from 1985 onwards after the purchase of Buyanor S.A., a ginning plant in Formosa Province. During the 1980s and 1990s, Vicentín advanced in the cotton business by incorporating four more plants.²⁵⁶ The deep involvement of the company in the cotton industry caused them to suffer when it faced the crisis which began in 1997.

The 1990s found a company that depended more and more on crushing activities but had heavy investments in a declining cotton industry. As shown in figure 8.8, by the

²⁵³ Archival material Vicentín: "Vicentín's ginning and crushing operations: a review."

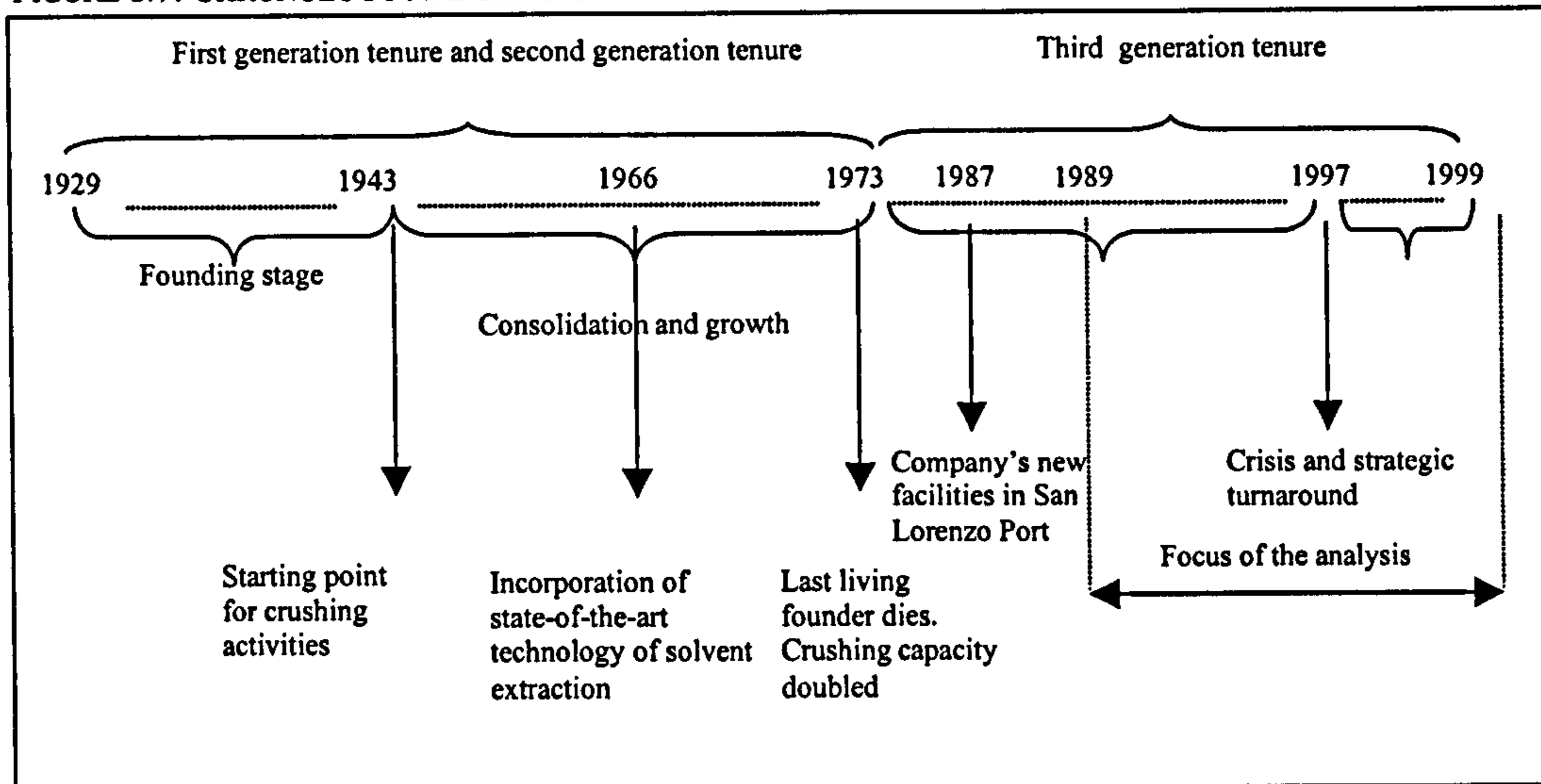
²⁵⁴ Data provided by the Commercial department.

²⁵⁵ FOB exports are goods sold to a local or multinational company – generally large trading companies – which is then responsible for their distribution and re-location. CIF export, on the other hand, is when the company that exports ships and distributes the merchandise on its own, thus dealing directly with end customers.

²⁵⁶ Archival material in Vicentín "Financial Presentation years 1996-1999" prepared by the company in May 2000.

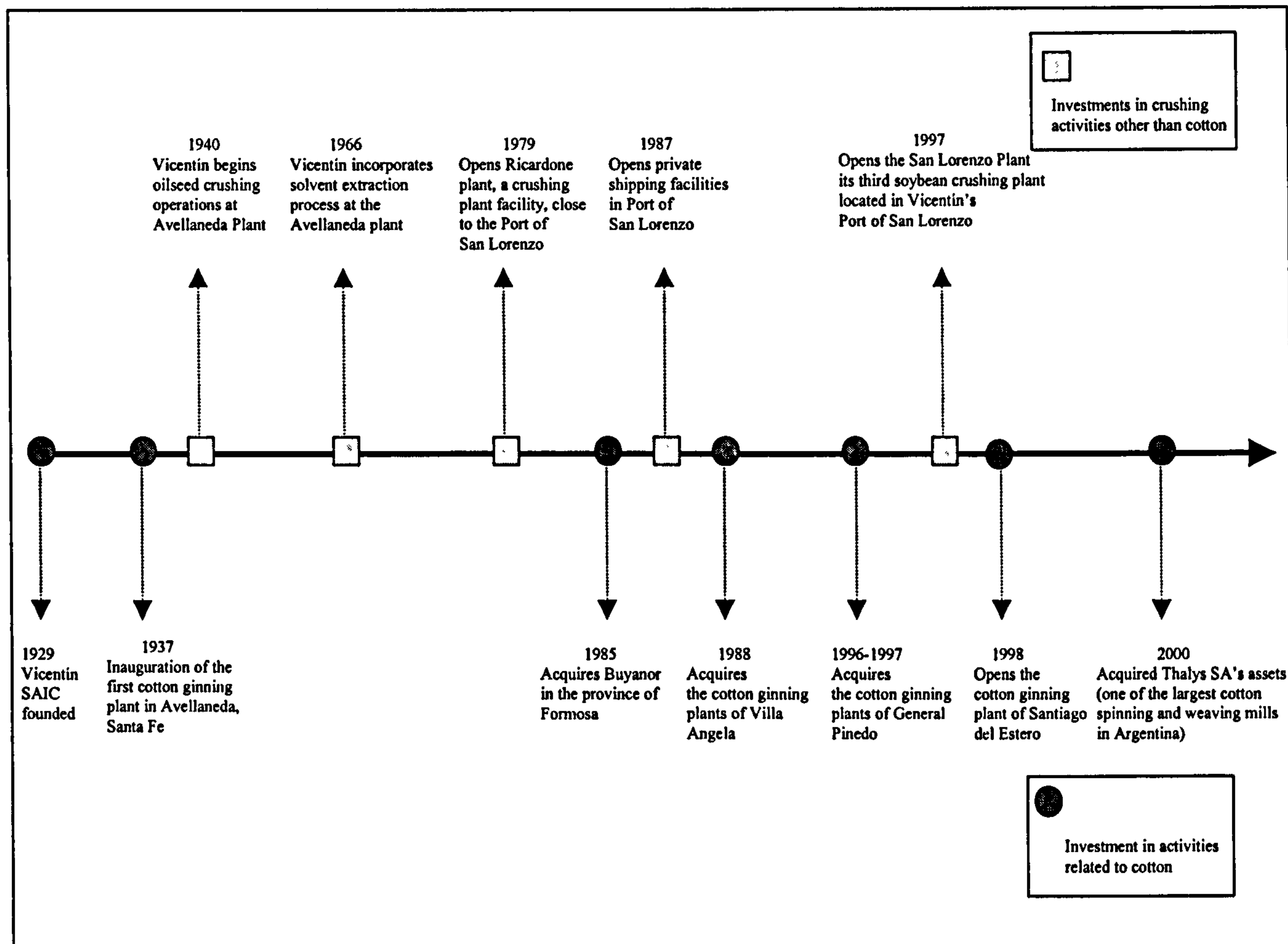
end of the decade it had increased its commitment to the cotton industry by integrating its activities from processing to spinning and weaving.²⁵⁷

FIGURE 8.7: CHRONOLOGY AND STAGES IN VICENTÍN'S HISTORY



²⁵⁷ In February, 2000 Vicentín integrated the cotton business vertically by acquiring one of the largest cotton spinning and weaving mills in the country.

FIGURE 8.8: VICENTÍN'S EVOLUTION 1929-2000



8.4 Chronological and analytical tracing of key elements over the period 1989-1999

Markets and products: The pendulum strategy 1989-1997

The 1990s brought major challenges for the industry as a whole: the opening up of the economy brought into the market the last competitors that were not already in the Argentine edible oil industry. Furthermore, a wave of mergers and acquisitions of local businesses was initiated because local companies found they were not large enough to compete. Vicentín realised the importance of scaling up its plants to enable them to compete. However, decisions were taken regarding the scale of cotton plants rather than crushing plants: *“We had made a great effort in cotton processing in terms of attaining the*

right scale. However, the crushing activity, our main business, was demoted. Therefore, from 1997 to 1999 we invested a lot in increasing daily production. Nowadays both activities –cotton and crushing – produce 10,000 tons a day.”²⁵⁸

From 1989 to 1997 Vicentín invested a lot in cotton and port facilities. The crushing capacity was lagging behind its competitors who had already started to invest in updating technology and increase scale: *“By 1995-1996 there was a strong consensus in the company that we did not have to invest in scaling up crushing capacity but use the idle capacity that existed in the market. We tried to use slack capacity and increase sales volume. We were also aggressive with our price policy, lowering our prices in the internal market for edible oils.”²⁵⁹*

Many interviewees stated the incoherence of this strategy, bearing in mind the importance of the crushing activity for the company and the declining cotton market: *“The Board was split into those that wanted to follow industrialisation and processing cotton and those that preferred crushing of other oilseeds. I could never understand this division in the Board. The numbers speak for themselves: crushing represents more than 80% of the company’s activity while cotton accounts for only 10 percent!”²⁶⁰*

As another interviewee pointed out: *“The problem arose because Vicentín started as a cotton processing company, so the senior members of the Board were reluctant to shift from that strategy although it was a loss-making strategy.”²⁶¹*

1979-1997: The failure of the brand strategy

In 1979 Vicentín launched its edible oil “Vicentín” onto the internal market. The edible oil launched was mixed oil. In a few years the company reached 14% of the market share, an important slice of the market taking into consideration the predominance of

²⁵⁸ Interview Daniel Buyatti-Head of Technology Department, Director of the Board and third generation family member.

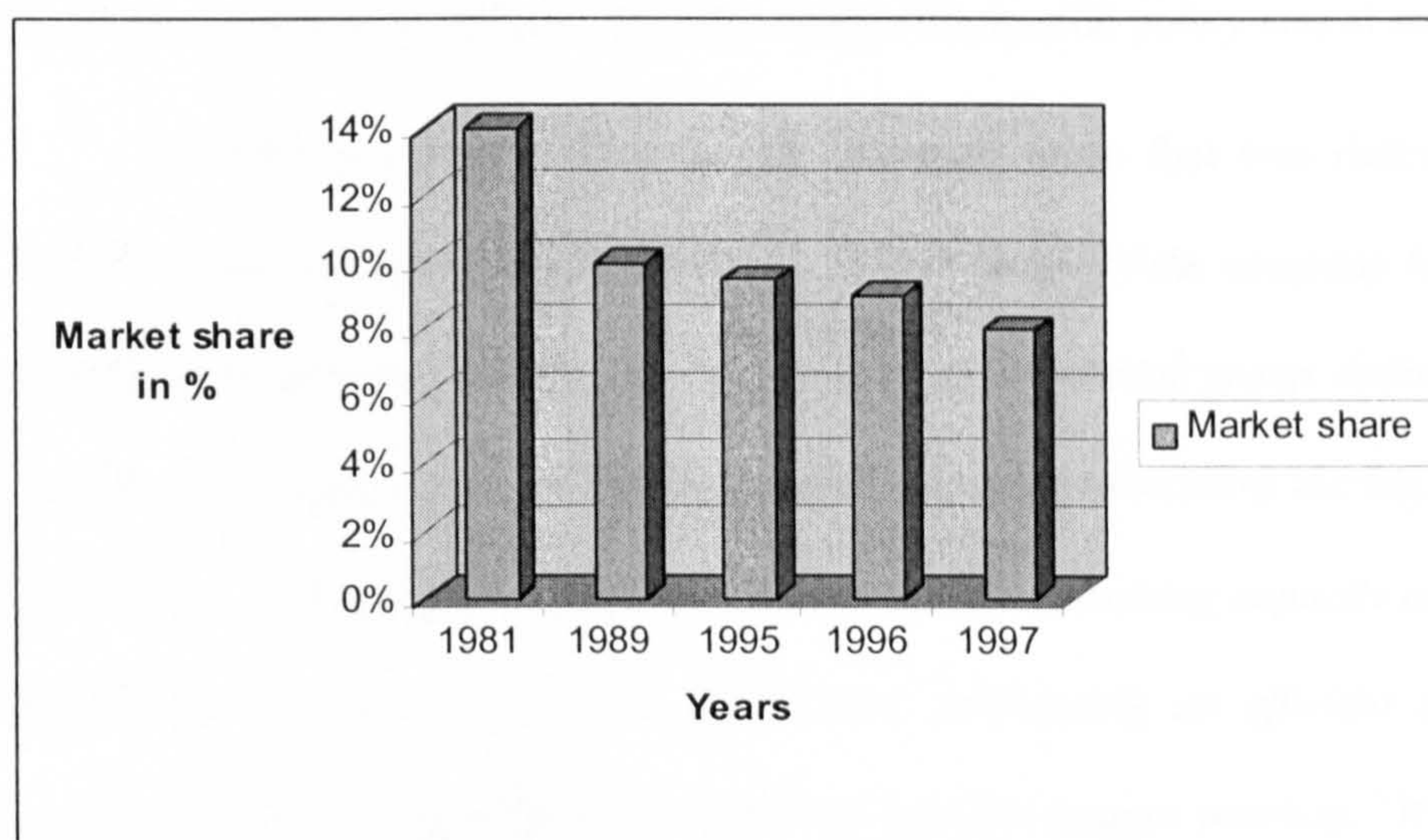
²⁵⁹ Interview with Osvaldo Arciniegas-Commercial Department.

²⁶⁰ Interview with Máximo Paduán-Commercial area and fourth generation family member.

²⁶¹ Interview with Osvaldo Bochini-Director.

companies such as Molinos. However, the company's market share, which reached its peak in 1981, had been falling over the period up until 1997 (see figure 8.9). One manager explained this reduction in the market share: *"The problem was that Vicentín could not consolidate its brand strategy. It was a pity because the company had taken up this strategy before many of today's successful companies in the edible oil market. Had the company consolidated its brand strategy in the 1980s, today we would be leading this profitable market."*²⁶²

FIGURE 8.9: MARKET SHARE OF VICENTÍN'S BRANDED EDIBLE OILS 1979-1997²⁶³



Over the period 1979-1997 the company did not change the packaging or the type of oil sold, and therefore lagged behind more innovative brands that were introducing new packaging (such as PET bottles), or new types of edible oils (such as pure sunflower instead of mixed oil). *"The company did not understand the customer. We just sold oil and we did not care about what our customers did. The consequence was evident – we lost market share. This loss was considerable and difficult to recover because the market now is much more competitive than in the 1980s."*²⁶⁴

²⁶² Interview with Juan Rodríguez-Commercial Department.

²⁶³ Data provided by the Commercial department.

²⁶⁴ Interview with Máximo Paduán-Commercial area and fourth generation family member.

1997: The company's strategic turnaround

In 1997 changes regarding the company's strategy were paramount. That year, due to weather problems, the production of cotton fell. Over this period many companies in the industry closed down and Vicentín suffered as well because of its investments in the cotton industry. However, the company reacted swiftly and in 1997 realised that its tripartite strategy (cotton, crushing and branding) was over. It was the crushing activity that supported Vicentín's heavy losses in the cotton industry.

Moreover, the branding strategy failed to secure substantial market share for Vicentín's edible oils products, thus the whole commercial policy was at stake as well.

In 1997 the Board agreed a new strategic focus that was described as follows: *"1997 is a turning point for the company. A new image of the company has emerged. The Management of Vicentín sees the company as an industrial group dedicated to crushing oilseeds and cotton ginning. By doing so it is seeking to achieve the highest standards of efficiencies, being a leading company in terms of both crushing capacity and technology. It does what it believes it is able to do best, performing an efficient role between the production of bulk commodities and international consumer markets. We are also of the opinion that the marketing function, in our particular case, is at present performed more efficiently and at a lower cost by the multinational trading companies with whom the company has developed very strong relationships over time. We have a strong focus within our company on our two core activities. Many services, not directly related to our core businesses, have therefore been outsourced."*²⁶⁵

The strategic objectives of the company can be seen in the following table:

²⁶⁵ Interview with Roberto Gasse-Finance Director, Director of the Board and third generation family member.

TABLE 8.8: STRATEGIC OBJECTIVES OF VICENTÍN SINCE 1997²⁶⁶

Strategic Objectives	Obtained through...
<i>Focus on crushing and cotton ginning</i>	<ul style="list-style-type: none"> -Investment in technology -Stable supply of raw material at competitive prices -Efficient logistics -Outsourcing (IT, transport, storage) -Competitive crushing costs through economies of scale, location of plants and technology -Multiseed production facilities -Solid financial structure
<i>Invest to become a low cost and efficient provider in each market it participates in</i>	<ul style="list-style-type: none"> -Investments in production facilities such as crushing plants and cotton ginning plants -Investments in port facilities
<i>Maintain profitability through high production flexibility</i>	-Crushing three different oilseeds (soybean, sunflower and cotton) at the Ricardone Plant (in the port)

The first decision, which was a product of the new strategic objectives the company defined, was that the factories in the north of the country that were used for crushing should be closed down and the crushing facilities located in the San Lorenzo Port area, thus saving money on logistics. Crushing scale was boosted by investments in technology. In 1999 the company crushed up to 10,000 tons of seed per day, the fourth largest company in terms of crushing capacity that year.

Crushing, became the most important business for Vicentín throughout the ten year-period analysed. From 1997 onwards, Vicentín would focus on crushing, and other activities besides crushing, such as production and direct exports, would no longer be a priority. Vicentín would be an intermediary company buying oilseeds from farmers and selling bulk oil to traders.²⁶⁷

The company also decided to make some investments in cotton ginning plants. Because of the crisis in the cotton industry caused by three years of floods, in February 2000 Vicentín bought a spinning and weaving mill, thus vertically integrating its activities in the cotton industry.

²⁶⁶ Archival material of the company "Strategic outlines and objectives of Vicentín."

²⁶⁷ Interview with Sergio Nardelli-Commercial Director, Director of the Board and third generation of family member.

After 1997, the brand strategy was considered a marginal business: *“The policy our company decided to adopt was to carry on with the crushing business. There are great risks in the area of the diversification of products because it means you begin to compete with companies which are already present in the market. It would require huge investments in marketing and research into how we could best penetrate the market, and we simply could not afford that. We did not want to produce finished products such as soya milk and launch it onto the internal market. Our market is to export bulk products. The internal market is a marginal one.”*²⁶⁸

Vicentín wanted to position itself as a low price, good quality brand. However this strategy was not the success the company was expecting. By the year 2000 the market share of brand products was 7%, that means less than in 1997 when the company decided to change its branding strategy. Furthermore, market studies suggested that consumers' perception of Vicentín's brands was that they were cheap and low quality products (Ketelholn, *et al*, 1998).

The following figure shows the business segments in Vicentín taking into consideration exports and the domestic market. The former is more important than the latter, accounting for 85.2% of the turnover, while the domestic market accounts for 14.8%.

²⁶⁸ Interview with Raúl Gonzalez Arceluz-Corporate Lawyer in Vicentín.

FIGURE 8.10: MAJOR BUSINESS SEGMENTS IN VICENTÍN IN 1999: EXPORTS²⁶⁹

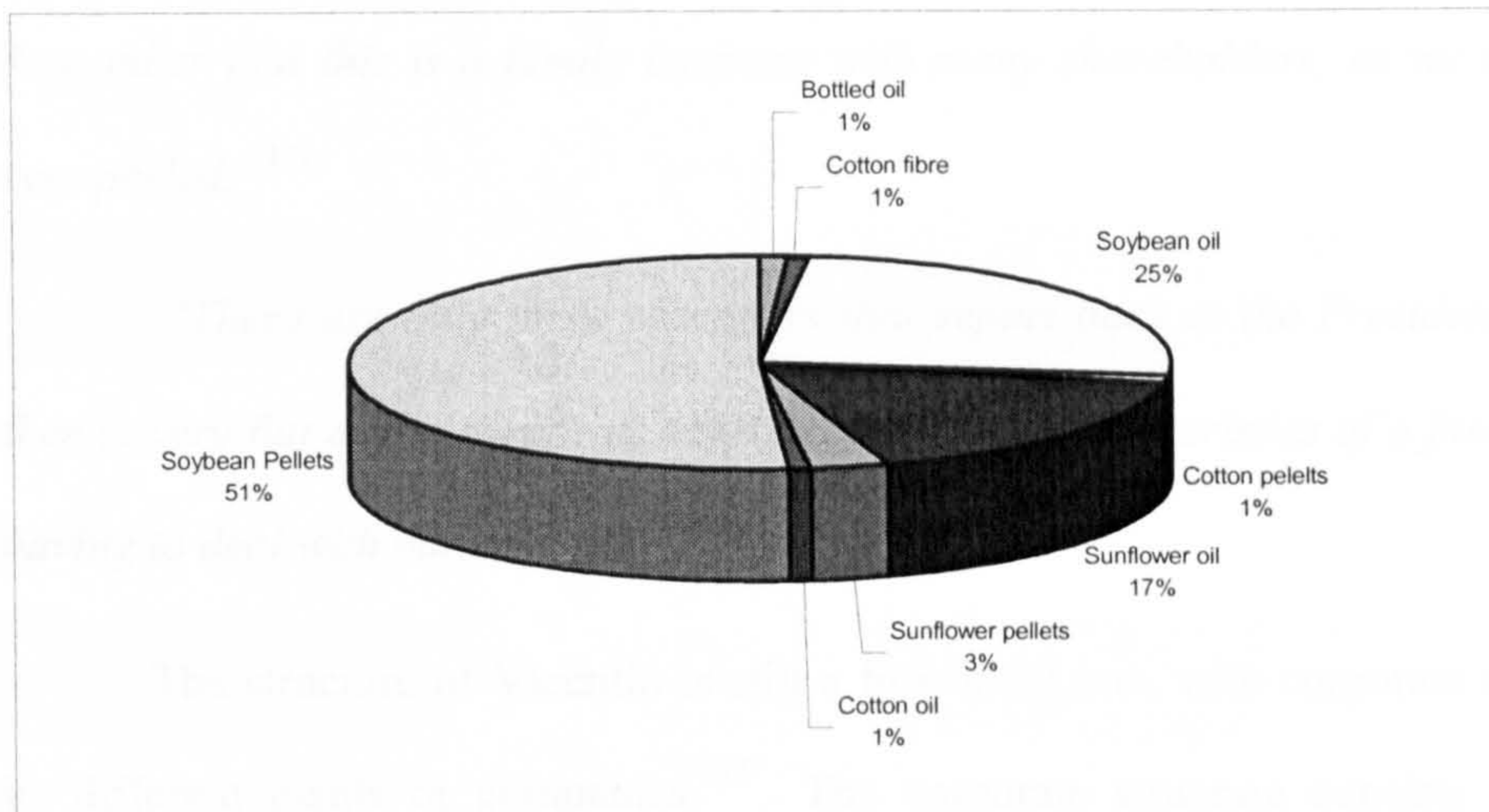
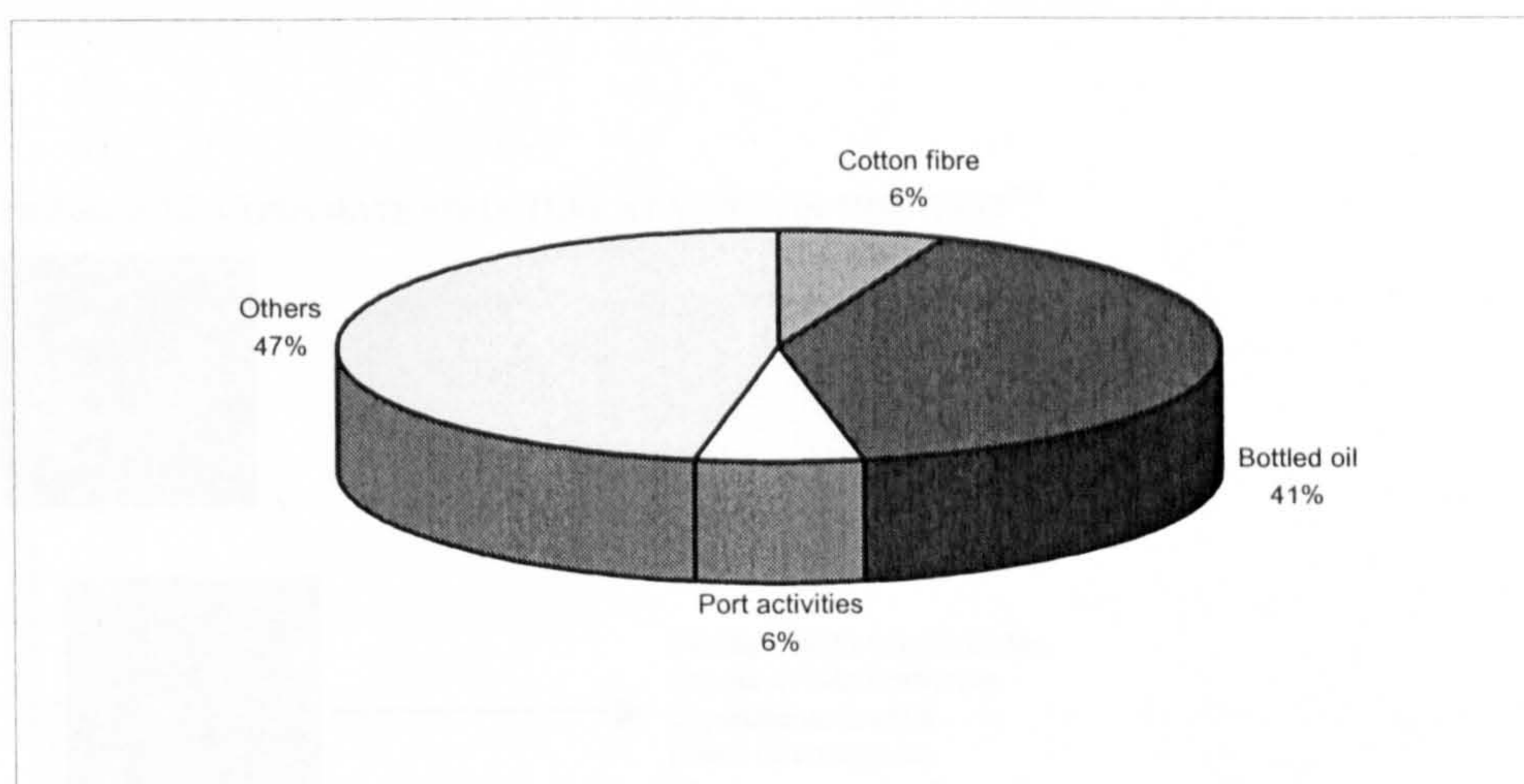


FIGURE 8.11: MAJOR BUSINESS SEGMENTS IN VICENTÍN IN 1999: DOMESTIC MARKET²⁷⁰



Organisational and managerial changes in Vicentín 1989-1999

Neither the structure of the company nor the managerial team have changed significantly over the ten year period analysed. The high level of centralisation of decision making at the Board level and the reliance on family-members to cover managerial positions might explain the lack of changes.

“We did not see the need to change the structure. I think this is a trend in the industry. We do not think that changes in the structure would change much in the

²⁶⁹ Source: Archival material Vicentín provided by Finance Department.

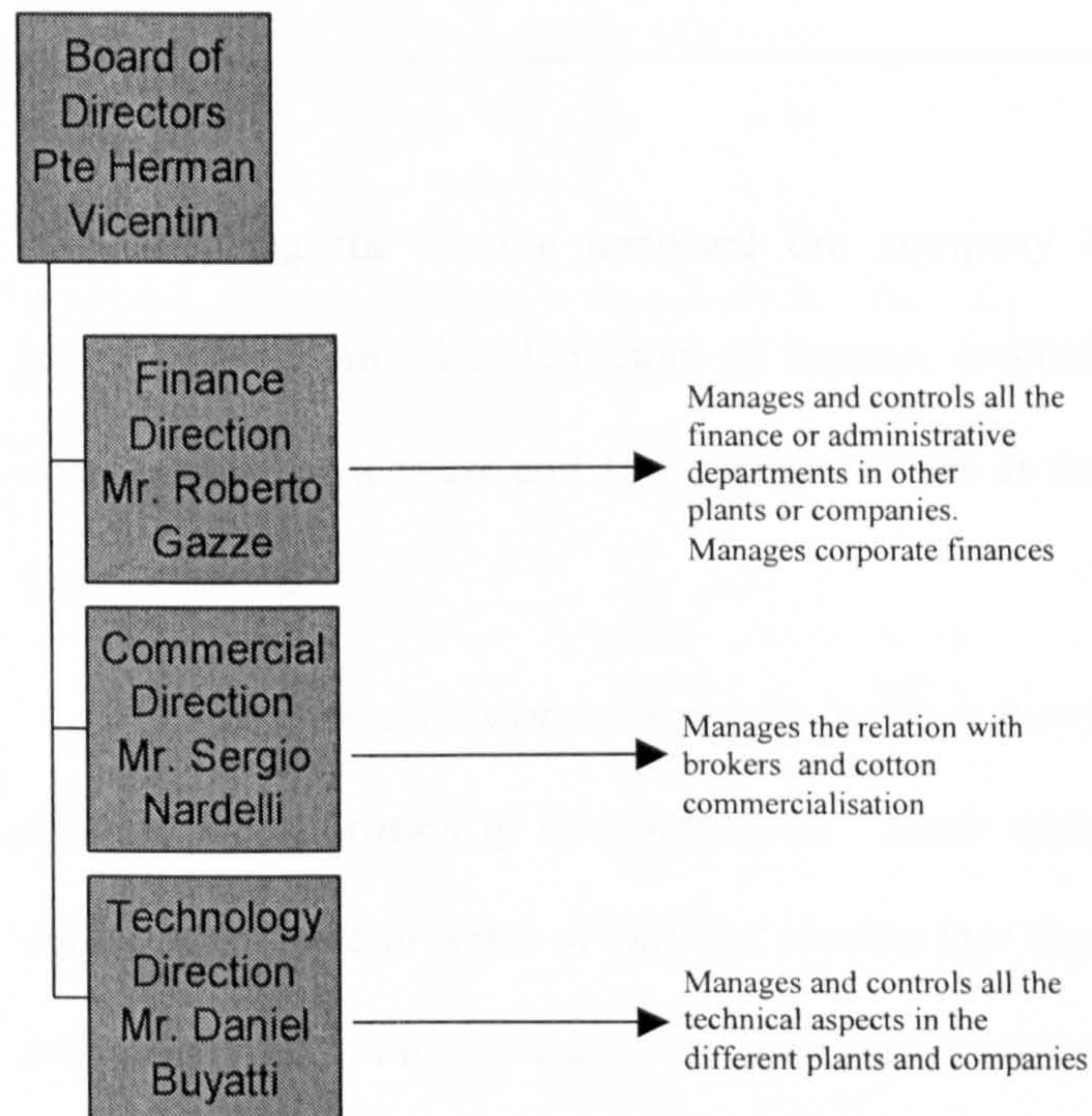
²⁷⁰ Source: Archival material Vicentín provided by Finance Department.

company. We have a centralised structure. Everything is decided at the corporate level. Remember that this is a family business with many shareholders, so we need to keep our eyes peeled.”²⁷¹

“There are only three managers that report back to the President. Our structure then is very flat at the corporate level, with all the characteristics of a family run business, having to deal with minor details.”²⁷²

The structure of Vicentín is still a functional one, with corporate areas that control its different plants or companies.²⁷³ The corporate structure consists of the Board of Directors and three Departments: Commercialisation, Technology and Finance (see figure 8.12 and 8.13).

FIGURE 8.12: CORPORATE STRUCTURE AT VICENTÍN 1989-1999²⁷⁴



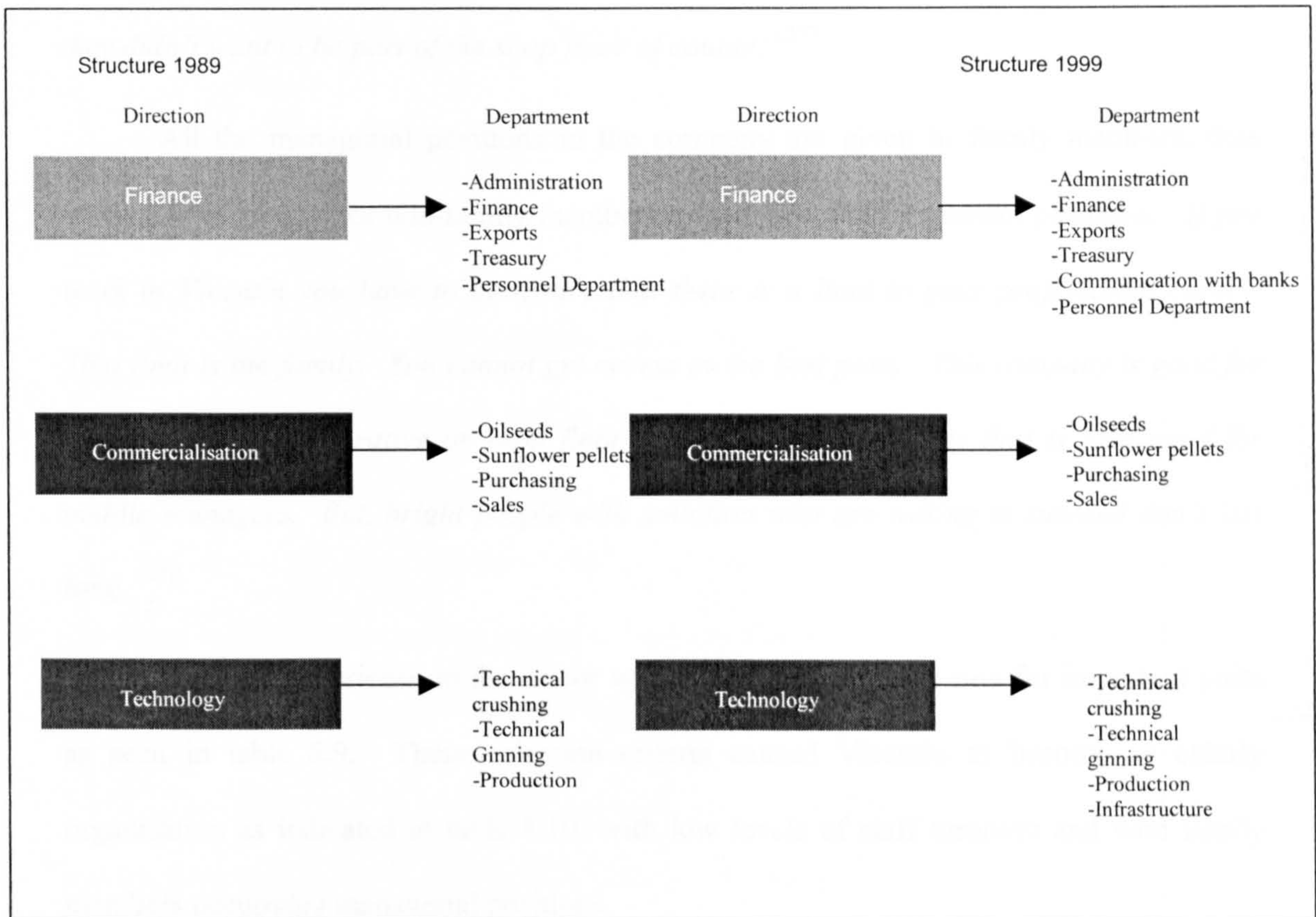
²⁷¹ Interview with Herman Vicentín-President.

²⁷² Interview with Roberto Gazze- Finance Director, Director of the Board and third generation family member.

²⁷³ For legal and fiscal reasons, some of the plants or ginning facilities are considered companies in their own right. However, they are centrally managed.

²⁷⁴ Data provided by the Board of Directors of Vicentín.

FIGURE 8.13: STRUCTURE IN VICENTÍN: 1989-1999²⁷⁵



During the decade analysed the company has experienced no changes in its management team. The Directors of finance, technology and commercialisation have not changed in recent years and few incorporations at the departmental level of the hierarchy have occurred.

“We have seen many companies in the industry that have gone through big changes and the incorporation of new managers. Those companies that did not go bankrupt had such a nightmare in terms of cultural clashes that they would have preferred not to change anything at all. I think this answers your question about the company’s management.”²⁷⁶

The main criteria for appointing managers did not change significantly over the period 1989-1999 (see table 8.9): *“To be able to fill one of the managerial positions, you had to be a family member or forget it! There had been no change in this respect over the*

²⁷⁵ This figure was constructed using data provided by the different areas of the company and archival material of Vicentín (Document “Organisational Structure”).

²⁷⁶ Interview with Herman Vicentín-President.

last ten years. On the contrary, new generations were pushing to enter the company and they didn't want to be part of the shop floor of course!"²⁷⁷

All the managerial positions in the company are given to family members, thus leaving little leeway for non-family members to gain access to important positions: "If you work in Vicentín you have to be aware that there is a limit to your professional career. That limit is the family. You cannot get access to the best posts. This company is good for trainees and administrative or shop floor employees. I would say that is also good for middle managers. But, bright people with ambition who are willing to succeed don't last long."²⁷⁸

Age and experience in the sector was a condition *sine qua non* for important posts as seen in table 8.9. These selection criteria caused Vicentín to become an elderly organisation as indicated in table 8.10, with low levels of staff turnover and with family members occupying managerial positions.

TABLE 8.9: REQUIREMENTS FOR ENTERING THE DIFFERENT AREAS OF THE COMPANY OVER THE PERIOD 1989-1999²⁷⁹

Areas of the company	1989	1999
<i>Finance</i>	-Family member for managerial positions -Accounting, Finance or Business studies degrees for intermediary positions -No specific requirement for administrative positions -Experience in edible oil industry	-As in 1989 -As in 1989 -As in 1989 -Experience in edible oil and food processing industries
<i>Commercialisation</i>	-Family member for managerial positions -Experience in branding in the industry	-As in 1989 -As in 1989 -Experience in brokering
<i>Technology</i>	-Family member for managerial positions -Technical or engineering studies	-As 1999 -Engineering studies

²⁷⁷ Interview with Juan Carlos Romero-Personnel Department San Lorenzo.

²⁷⁸ Interview with Juan Carlos Romero-Personnel Department San Lorenzo.

²⁷⁹ This table was prepared using archive material from Vicentín's Personnel Department and data provided by the interviews with Roberto Gazze, Sergio Nardelli and Daniel Buyatti.

TABLE 8.10: AVERAGE AGE OF PERSONNEL IN THE AREAS OF THE COMPANY (TAKING INTO ACCOUNT THE WHOLE PERSONNEL OF THE AREA)²⁸⁰

Areas of the company	1989 (Age average)	1999 (Age average)
<i>Finance</i>	48	57
<i>Commercialisation</i>	45	56
<i>Technology</i>	56	59

The fact that after 1997 Vicentín decided that crushing and cotton ginning would be its most important activities also had an impact on the professionalisation of the company. Neither activity needs a wide variety of skills. Technical skills are the most important requirement for understanding the problems of crushing and ginning. Cotton ginning, on the other hand, is a manpower intensive industry that requires staff with technical skills rather than professionals from different backgrounds.

The company, also lacked an HR area. It had, however, two Personnel departments: one in the Port of San Lorenzo and the other in the north of the country in the cotton ginning facilities: *“Why do we not have an HR department? Because we do not need it of course! Because all the most important managers are family members, all the problems are sorted out at the Board level. All other problems are sorted out by the heads of the different areas. The main aim of our personnel department is to hire shop floor employees and they also carry out administrative functions.”*²⁸¹

While there were not many changes regarding structural or managerial issues, the governance of the company and family related issues have changed a lot, thus raising concerns over the future of the firm. The next section will discuss this aspect further.

²⁸⁰ This table was prepared using Vicentín’s archive material provided by the Personnel Department San Lorenzo.

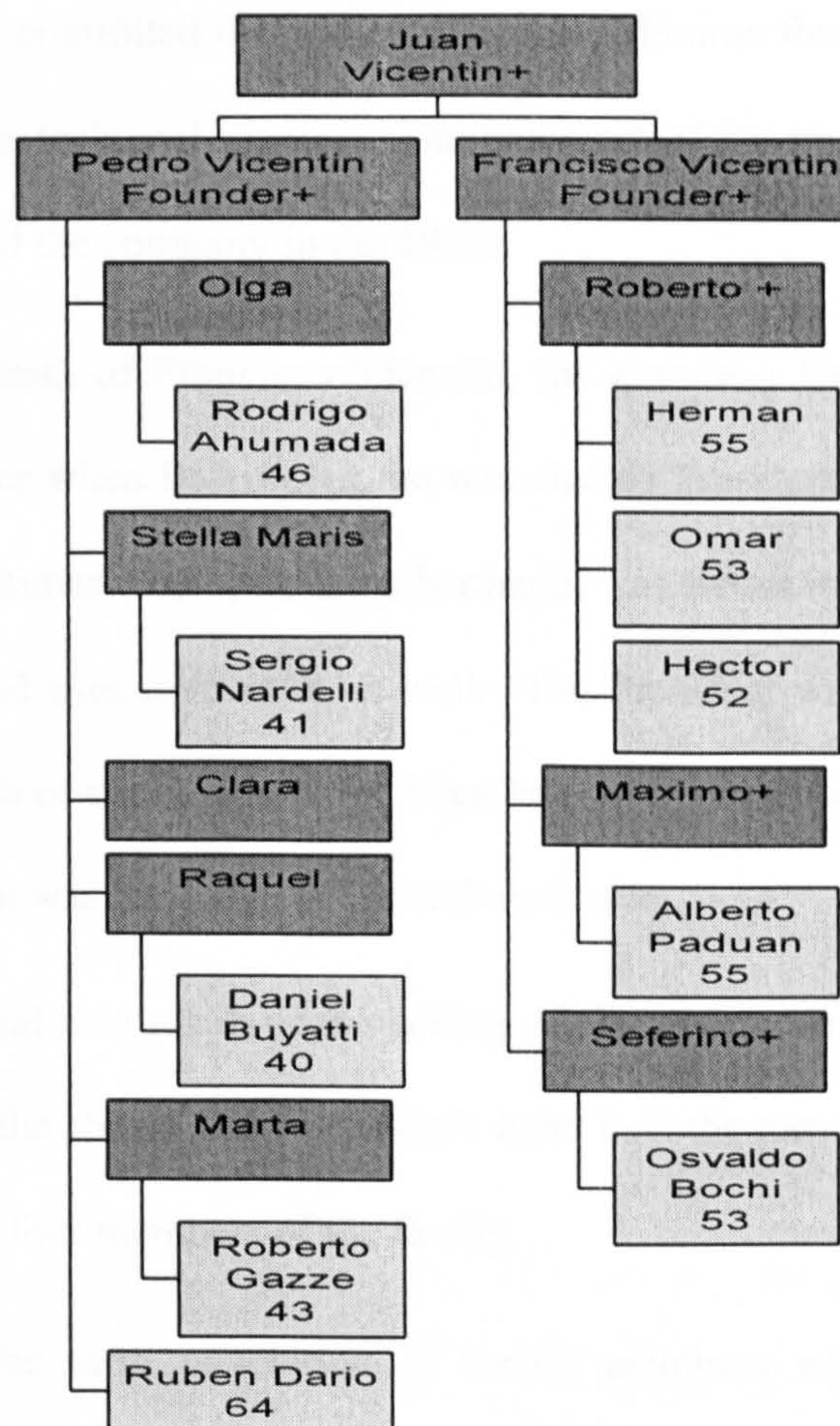
²⁸¹ Interview with Herman Vicentín-President.

Corporate governance in Vicentín

As time passes and more generations of family members have been incorporated into the company, the evolution of the governance in Vicentín highlights two main issues: the interest of the shareholders and the best way of running the business effectively and efficiently.

A family tree will help to explain the different relationships within the family and the composition of the Board of Directors.

FIGURE 8.14: VICENTÍN'S FAMILY TREE IN 1999²⁸²



²⁸² Data provided by the Board of Vicentín.
The + sign indicates those family members have already died.

Figure 8.14 shows the heirs of both founders and also the third generation that currently participates in the company. Light shading shows the current directors in the company and their ages are also highlighted. In most cases, the third generation is represented by the grandchildren of Pedro and Francisco. However, in the case of Alberto Paduán and Osvaldo Bochi, they are the granddaughters' husbands.

When Pedro and Francisco were in charge of the firm – from 1929 to 1973 – the governance of the company was simple. Francisco was the President and Pedro the Vice-President and both ran the company together. There was no Board of Directors in the company until one of the founders died.

In the 1960s Francisco's children (the second generation) started work in the company. Roberto controlled the commercial area, Máximo the administration and Serafin was involved in the technical aspects. The youngest of the male cousins, Ruben Dario – Pedro's son – joined the company in the 1970s.

After the death of Francisco Vicentín, his grandson Herman took over the Vice-presidency.²⁸³ Later when Pedro died, he was elected President by a general consensus of the shareholders. Ruben Dario, on the other hand, was sworn in as Vice-President. All the Board members had executive roles as well. The President was therefore responsible for the commercial side of the business, the Vice President and Máximo for administration and finance, and Serafin was in charge of the technical area.

By 1976, and as a result of the selling of shares between family members, Pedro's heirs held 40% of the shares and Francisco's heirs held the remaining 60%. Until 1980 the Board consisted of four members of the family.

By 1985 the third generation of family members was already working in the company and the first quarrels regarding the Board's arrangements flared up. The 1970s saw Francisco Vicentín's children pass away. Plans to make the Board represent the whole

²⁸³ Herman's father was already death.

family were left in tatters. For more than ten years the Board had been *“something for the books and auditing. The company was run by Herman and Ruben Dario and the rest of the family did not participate at all.”*²⁸⁴ Furthermore, Ruben Dario’s sisters wanted their children to participate in the firm as well as Francisco’s grandchildren.²⁸⁵

A new Board arrangement was created when in 1990 the Board was restructured and the seventy-five shareholders were represented by ten directors: four directors were Pedro’s heirs and six Francisco’s heirs. Only one Director –the Vice President – was a second-generation member, the rest were third generation family members.

*“The Board’s arrangements are not perfect. But they are still better than nothing. Today more or less everybody feels represented in the company and we listen to everybody’s suggestions regarding its future. However, this is far from perfect. I could mention that over time jealousy builds up, that is a problem between members of the same family.”*²⁸⁶

New problems, however, are emerging among the fourth generation of family members who feel underestimated and dismissed: *“The Board does not represent us [fourth generation], they do even not think about taking one of us onto the Board. I think that it is time our voice was heard on that Board of bone idle leeches. We are more dynamic and entrepreneurial, open to what is happening in the sector and we are more determined to change things in the company.”*²⁸⁷

Strategy, delegation and control

The Board participates in everyday operations. Three of the Directors have an operational area under their responsibility. The heads of the commercial, finance and technology areas are Directors of the company; the President is deeply involved in the

²⁸⁴ Raúl Gonzalez Arceluz-Corporation Lawyer.

²⁸⁵ Interview with Ruben Dario Vicentín-Vice President.

²⁸⁶ Interview Daniel Buyatti-Head of Technology Department, Director of the Board and third generation family member.

²⁸⁷ Máximo Paduán-Commercial area and fourth generation family member.

commercial area, and the Vice President in the administration. The rest of the Directors also have an operational responsibility in the different areas of the company.

“Without the Board’s agreement, nothing related to investments or spending can be processed. The Board started to centralise these decisions even more after 1997 when they saw that being cost-efficient was a crucial aspect for the company’s survival.”²⁸⁸ The Board therefore made all the decisions regarding investments in the company, such as buying cotton ginning plants, scaling up the crushing capacity, and hiring people. It also authorised all expenditure over US\$ 500.

This concentration of power sometimes makes it hard to move forward: *“On the one hand, I can understand that keeping costs down is a key issue, but on the other hand, you waste your time and decisions are delayed until the Board makes up their mind if they are going to let you go ahead with the spending. Why is the Director of the area not in charge of authorising you to spend? Why should everything be concentrated at the Board level? Sometimes they [Directors] are involved in minor things and I do not think this should be the role of a Director, do you?”²⁸⁹*

“Our Board meetings are exhausting. We sit around the table and first of all we discuss the different topics that range from important strategic decisions to buying paper for the photocopier. I think that this should change in the future so that we can have more time to think, analyse and work on important strategic matters.”²⁹⁰

The control mechanisms of the company are based on personal control exercised by the members of the Board: *“Sometimes I have to give three members of the Board the answer to the same question on the same day. It is quite a tiresome experience to deal with them. They think you want to rip them off or take their money. Their control is inquisitive rather than professional.”²⁹¹*

²⁸⁸ Interview with Miguel Valazza-Finance department and Administration office Buenos Aires.

²⁸⁹ Interview with Domingo de la Rosa-Technology department.

²⁹⁰ Interview with Rodrigo Ahumada-Port San Lorenzo Operation and Director.

²⁹¹ Miguel Valazza- Finance department and Administration office Buenos Aires.

The Board receives three monthly reports, one from each area. The reports are discussed at the monthly Board meeting and decisions are taken accordingly. The following table shows the information/indicators required by the Board in the different reports.

TABLE 8.11: REPORTS TO THE BOARD IN VICENTÍN-YEAR 1999²⁹²

Area	Main Indicators
<i>Commercial</i>	-Market share (branding products) -Investment requirements -FOB Exports by product
<i>Finance</i>	-Cash flow -Domestic sales -Export sales -Export rebate -Cost of goods sold -Gross Income -Administrative, commercial and financial expenses -Operating income -Net income
<i>Technology</i>	-Needs for investment -Technological updates -Productivity cotton ginning/crushing -Quality of products

Incomplete tasks

Two main issues concerned the Board regarding its governance. Both issues are considered to be *“hindering the company’s potential for success and its ability to survive as a family business.”*²⁹³ The issues are the succession process and the role and entrance of family members.

Regarding the first issue – the succession process – the President is thinking of retiring but he is afraid that this will give rise to problems regarding the succession process. *“There are three candidates, natural candidates to replace me. They are the heads of the three departments of the company. Since I said that in five years I would bow out, wrangles have broken out and alliances have started to build up in the Board. This*

²⁹² This table was prepared with the result of the interviews with different managers and a copy of the latest follow-up reports in the selected areas.

²⁹³ Interview with Herman Vicentín-President.

situation might destroy the harmony I have tried to establish since the enlargement of the Board was decided."²⁹⁴

Another important problem the company has to solve concerns the entrance of family members. The fourth generation has shown an interest in having a more active and dynamic role. However, the Board is still thinking about how to do this: *"We are thinking about writing down a family protocol that would help us to have the best family members in the company. This is crucial because family members are the managers of the company. There are seventy-five shareholders. In a few years there will be more than a hundred of us. A hundred shareholders would mean that the company was no longer viable.*"²⁹⁵

Challenges for the future and unresolved issues

There are two issues that the company's managers have highlighted as important to the company's future: the first is the possibility of finding a partner as a way of injecting capital into the company. The second issue, which is related to the first, is finding ways for the company to grow.

The first issue was emphasised by many family members. There was a great concern among many managers that the market concentration in the industry would affect the viability of the company if Vicentín does not acquire the right size to allow it to compete: *"The future shows that we are going to need to look for a partner, a buffer, with whom we can guide the company forward and weather the storm.*"²⁹⁶

Having a partner was also seen as a way of sorting out financing problems. Furthermore, a partnership would accelerate decisions concerning the future of the family shareholders: *"With seventy-five shareholders, any partnership or alliance looks impossible. There would be resistance but I think in the end and after a long fight among*

²⁹⁴ Interview with Herman Vicentín-President.

²⁹⁵ Interview with Roberto Gazzo- Finance Director, Director of the Board and third generation family member.

²⁹⁶ Interview with Roberto Gazzo- Finance Director, Director of the Board and third generation family member.

*family members some of them will get rid of their shares. The first step is to concentrate the shares in three or four family branches. To reduce the number of shareholders by a third or even more than that.*²⁹⁷

The second issue is the current concern among several managers regarding future growth of the company. Many interviewees pointed out that this is the first issue to sort out because it is a process that can be managed by the company unlike finding a partner which is a long-term project that will depend on the company's market position.

The managers seemed to lack any clear vision as to where to start work to enable the company to grow faster. The concentration on the crushing industry and the low-margin profits that characterise it, affected Vicentín's opportunities for investments in other areas. Furthermore, managers did not attempt to take risks, but waited for changes in the industry first, saw how leaders responded and after that made a decision: *"The processes of expansion have not been produced by strategic questions within the company, but by a movement that the whole industry has taken. So wait and see is our strategy."*²⁹⁸
*"Someone who thinks about how much his company is going to grow in two or three years will not get there. This is why you have to wait till the market shows you the ways to grow."*²⁹⁹

Following the leaders and avoiding risks were stressed by other managers: *"I think that we are first of all going to see what Cargill, Dreyfuss and AGD have done. If we can compete we are going to copy the strategy, otherwise we will try to find a niche market that the big companies are not interested in and take advantage of that."*³⁰⁰

²⁹⁷ Interview with Daniel Buyatti-Technology Department, Director of the Board and third generation family member.

²⁹⁸ Interview with Roberto Gazze- Finance Director, Director of the Board and third generation family member.

²⁹⁹ Interview with Sergio Nardelli-Commercial Department, Director of the Board and third generation family member.

³⁰⁰ Interview with Miguel Valazza-Finance Finance department and Administration office Buenos Aires.

Chapter 9: Concluding remarks on the transformation process of the firms analysed

It is beyond the scope of this thesis to discuss the different ways organisations can undertake organisational change. However, the fact that the four firms analysed underwent a process of transformation throughout the 1990s means that we need at least to understand the depth and scope of such a process. Moreover, writers in the field of organisational flexibility such as Volberda (1999) point out that adaptability can be achieved because flexible firms can transform when needed. For this reason, understanding how the firms in this study transformed also helps to shed light on their flexible capabilities (Volberda, 1996, 1999; Djelic and Ainamo, 1999).

It is therefore important to establish the basic differences between the concepts writers have used to explain change in organisations. Greenwood and Hinings (1996) differentiate between two aspects of organisational change. Firstly, they distinguish between radical (or what we call transformational) and convergent change. It is radical not convergent change in which we are interested. Secondly, they draw a distinction between revolutionary and evolutionary change.

For Greenwood and Hinings (1996:1024) radical change involves the transformation of the organisation while convergent change “*is fine tuning the existing orientation*”. Under great pressure from the competitive environment that characterised Argentina in the 1990s, indigenous firms needed to respond rapidly and transform the company’s activities to be able to compete efficiently with MNC companies (Toulán and Guillén, 1997; Guillén and Toulán, 1997; CEP,1998; Volberda, 1999).

The pace of adjustment, on the other hand, defines revolutionary and evolutionary change. While revolutionary change occurs swiftly, evolutionary change happens gradually. Many writers have argued that mounting competitive pressures prompt revolutionary changes in organisations (as in the case of the hospitals analysed by Meyer *et*

al, 1990 or in the airline industry analysed by Kelly and Amburgey, 1991). In understanding the transformational process of organisations it is important to know whether change has evolved (Miller and Friesen, 1982) or has exploded on to the scene as a revolutionary transformation (Thomson and Millar, 2001, Tushman and Smith, 2001).

Questions also arise regarding the process of transformation undertaken in the four firms in our sample, for example, how did the firms under analysis tackle the challenge of transformation in their organisations? What were the main differences between flexible and less flexible firms? Did firms differ in terms of the speed of their transformation process, and if so, why? In the following pages we briefly examine the trajectories of transformation in both the flexible companies and the less flexible companies.

The flexible firms: The transformational renewal journey

The flexible firms in this research have transformed themselves through a process of organisational and strategic renewal. Thus far, the literature has analysed the implications of organisational and strategic renewal in organisations. Floyd and Lane (2000) depict renewal as an iterative process of beliefs, action and learning, with the purpose of aligning the organisation and its strategy with changing environmental circumstances (see also Huff *et al*, 1992).

Volberda *et al* (2001) have used the concept of transformational renewal to refer to those organisational transformations that are associated with significant unlearning, new ways of thinking and new mindsets, and different paths of technology. According to Volberda and his colleagues (2001) a transformational renewal journey is characterised by periods of systemic exploration as the organisation renews and changes its skills and competencies. For them, transformational renewal demands that the whole organisation should be involved in radical changes at both the strategic and organisational level.

So, how did the flexible firms undertake their transformational journey? Both AGD and Sidus were able to undertake radical changes by renewing both their strategies and their organisations. The strategic renewal of the companies (i.e., through their strategic initiatives) was accompanied by organisational renewal (i.e., in terms of structural, managerial and governance changes) in order to align the whole organisation and its strategy to the demands of the environment. Let us consider some examples of how both AGD and Sidus undertook their transformation process through organisational and strategic renewal.

Since 1986 AGD has introduced different strategic initiatives that have transformed not only the company but also the industry (Ketelhohn *et al*, 1998). From being dependent on the crushing side of the business in 1989, AGD diversified and integrated its activities. Among the most important strategic initiatives in which AGD invested are the logistic investments in 1986, the launch of branded products in 1989, and farming investment in 1990.

But while exploring new strategies AGD was also able to go through broad organisational and managerial changes. By 1999, AGD had modified its functional structure to one based on business units. This structure provided a higher level of delegation and responsibility for the managerial team in running the company. The overriding intention behind the structural changes was to grant the Board more time to concentrate on strategic issues.

The new business AGD added during the 1980s was complemented in the early 1990s by the opening up of the firm to new managers with different educational backgrounds and experience. The governance structure of the company was also consolidated. The transition after the founder's death towards the second-generation tenure occurred smoothly and without problems. The Board had complementary roles in the process of transformation: Roberto and Adrian (Jr) Urquía masterminded the company's strategic change; Adriana Urquía was the one pushing for internal changes.

In the 1980s, Sidus began a series of strategic initiatives that transformed the company from a small nationally-owned laboratory to “*a health company.*”³⁰¹ From the creation of the Biotechnology company in 1989 to the setting up of the Retail Business unit in 1999, Sidus diversified and integrated its activities both backwards and forwards throughout the value chain. This strategy had three outcomes: firstly, the company no longer depended on selling traditional pharma-chemical products; secondly, it was a more efficient company that enjoyed economies of scale; and, finally, it became a company that was ahead of its competitors in terms of reaching different stages of the chain of value.

The strategic renewal of Sidus went hand in hand with a renewal of its organisation. By the time Sidus launched its second strategic initiative in 1990 (i.e., the distribution company) the firm had changed its functional structure to a divisional one. Each new venture of Sidus became an independent company. This new structure was designed to give the Board more time for strategic issues.

At the same time the company also experienced changes at the managerial level. The homogeneous culture of Sidus in the 1980s was transformed when the company started to diversify its activities. Professionals with different experience and from different backgrounds entered the company to run the different businesses Sidus had launched.

The case studies also illustrate the pace of change in AGD and Sidus. Although the changes in both companies were profound and transformational, the changes were neither dramatic nor revolutionary but continuous (Brown and Eisenhardt, 1997). Therefore, punctuated equilibrium explanations of the transformation of AGD and Sidus are not adequate to capture and explain such a process (see Tushman and Romanelli, 1985 and Tushman and Smith, 2001). Our two flexible firms were quick to adapt to new changes by means of continuous explorative and simultaneous changes at different levels of the organisation (i.e., strategic and organisational changes).

³⁰¹ Interview with Marcelo Argüelles, CEO Sidus

The less flexible firms in this research, however, display a different change journey. For reasons that we will explain, the companies were reluctant to change their strategies and the way they were organised although the context had already changed. In the next section, therefore, we analyse the way the transformation process was undertaken by both Vicentín and Andrómaco.

The less flexible firms: Transformation through revolution

While the punctuated equilibrium model did not offer an adequate explanation of the change process in AGD and Sidus, the theory helps to answer an important question concerning the process of transformation in the less flexible firms: why was the transformation process at Vicentín and Andrómaco revolutionary?

Tushman and Romanelli's (1985:190) seminal paper on the punctuated equilibrium model of organisational change sheds light on the reasons for revolutionary changes in organisations. They state that resistance to change and inertia cause delay in aligning the organisation to environmental requirements. Therefore, fundamental change "*occurs only via simultaneous and discontinuous interruption of on-going activities and interrelationships.*"

Tushman and Romanelli (1985) also discuss conceptually the internal and external forces that resulted in the revolutionary transformation of firms. They mention as external forces the evolution of products in markets. As internal forces for fundamental change they point out that sustained low performance and/or a change in the balance of power may disrupt the organisation. In another piece of research, Romanelli and Tushman (1994) report the results of their study of the causes of revolutionary transformation in 25 minicomputer producers in the USA. They suggest that revolutionary transformations were influenced by major changes in environmental conditions and successions of chief executive officers (CEOs).

The circumstances surrounding the revolutionary transformation of Vicentín and Andrómico are similar to those described by Tushman and his associates. Both Vicentín and Andrómico were laggards in their own industries. For a long time both firms resisted any far-reaching changes. In Vicentín, the Boards' attachment to the tradition of cotton ginning delayed the decision to switch investments to the profitable activity of crushing. As one manager stated, the company "*was born and raised on it [cotton ginning]*."³⁰² Thus Vicentín's interest in that business was the result of conservatism regarding the activity that lay at the origin of the company and was not due to any consideration of the profitability of the cotton industry. Only after the performance crisis in 1997 did Vicentín decide to shift its strategy and focus its activities on the crushing business. That sudden transformation was necessary to allow the firm's survival.

Andrómico, on the other hand, had been influenced by its past success and the fact that the company had participated with its products in all the market niches. After years of bad commercial and financial decisions, the company modified its strategy to focus on the shrinking dermatology niche in which Andrómico had a certain competitive advantage. The decision to transform, again, came late and in a revolutionary way. This happened after a new CEO took over in response to the critical situation that was threatening the survival of the company. In a few months the new CEO of Andrómico replaced the top management team (i.e., immediately dismissing 22 managers), shifted the strategy of the company (i.e., towards a focus on dermatology) and started to change some key processes in the company (i.e., new HR policies, IT investments). The newcomers, as Gersick (1991) states, facilitated the task of breaking up the old deep structure and reorienting the organisation by removing sources of inertia and resistance to change.

Sull's study of adaptation and inertia in Firestone and Laura Ashley suggests that inertia and resistance to change are reinforced when firms resist transformation of their main activity and prefer to rely on old formulas that brought about their initial success

³⁰² Interview with Roberto Gaze-Finance Director Vicentín

(Firestone continued to produce bias tyres instead of shifting to the new radial technology. Laura Ashley did not move from its outdated designs and expensive manufacturing.) This, in turn, inhibits experimentation and organisational responsiveness to environmental shifts (Sull, 1999 a&b).

In delaying their transformations, Andrómaco and Vicentín could not explore the most convenient alternatives (i.e., in Andrómaco, to diversify into other niches such as paediatric medicine; in Vicentín, to boost the brand strategy). Rather, the firms were pressed by the critical situation, and the selection of new strategies and organisational arrangements was made in a revolutionary way and according to one criterion: organisational survival.

We have explored the differences between the flexible and less flexible firms in terms of their transformational process. We have analysed how the flexible firms transformed by means of a process that included organisational and strategic renewal. We have also defined the process of transformation as continuous throughout time and occurring simultaneously at the strategic and organisational level. The less flexible firms, on the other hand, attempted a process of revolutionary transformation. These firms were slow to undertake the process of transformation that was eventually attained only in the late 1990s by means of a sudden change.

The continuous transformation experienced by the flexible firms involved a good deal of trial and error. These companies continuously explored new strategies and organisational arrangements. As the flexible firms changed what they were and what they offered through continuous transformation, they migrated into new strategic and competitive domains. As a result of this migration, they needed to regenerate competitive advantages relative to the new competitors they encountered in these domains. Rindova and Kotha's (2001) analysis of what they call "*continuous morphing*" in two internet firms shows that firms in a continuous state of transformation ("*morphing*") were able to

regenerate competitive advantages when competitive conditions changed. Rindova and Kotha (2001) also highlight that dynamic capabilities (i.e., determinants of organisational flexibility) facilitated continuous transformation in the companies they analysed.

Conversely, the less flexible firms stressed exploitative activities and delayed any changes until a preponderance of evidence suggested that a major shake-up was necessary. Not only does the latter approach stifle experimentation, but action may also be delayed until time is too limited and resources are constrained.

The analysis of the transformation of the four firms is revealing in terms of the depth and scope of the changes undertaken. So far, however, we have not analysed what enabled the companies to transform and adapt so quickly in conditions of environmental turmoil that characterised Argentina in the 1990s. Therefore, questions arise as to what capabilities allowed flexible firms to engage effectively in the process of continuous transformation. What capabilities did the flexible firms have that helped them to be early adopters or first movers of strategies? Why were the less flexible firms laggards in their industry? Chapter 10 will introduce and analyse the determinants of organisational flexibility.

Chapter 10: Determinants of Organisational Flexibility

10.1 Introduction

In the last two chapters, we described the findings of our case studies of the transformation process in four firms: two of which were considered to be flexible and two less flexible companies. A number of themes were apparent in our data which highlighted a range of managerial, organisational and contextual factors related to the ability of the firms to adapt quickly under environmental pressure. These themes included the effect of new managers coming in from outside the industry, the firms' relationship with its industry peers, the nature of the decision-making process and the early adoption of strategies and organisational changes in the flexible firms.

Our review of the literature (see chapter 2) indicated that research on the determinants of organisational flexibility and innovativeness and institutional embeddedness offer an insight into the explanation of patterns or mechanisms of adaptation.

At the sectoral or industry level, the institutional perspective provides an explanation of the possibilities firms have to adapt and avoid isomorphic and inertial forces. Haveman (1993) argues that members of an industry group tend to imitate the actions of industry leaders. The speed at which firms will adopt new initiatives, and therefore whether they will be early or late adopters, will be influenced by the degree to which they are embedded within the industry macroculture (Abrahamson and Fombrun, 1994; Greenwood and Hinings, 1996; Oliver, 1991). The degree of embeddedness varies between organisations according to different factors. These include the connectedness of the organisation to other members of the industry group, the extent to which the firm perceives itself to be similar to other firms in the industry and the homogeneity of management within the firm (DiMaggio and Powell, 1983; Greenwood and Hinings, 1996; Greenwood *et al*, 2002).

At the organisational level, the literature on organisational flexibility and innovativeness offers two predictions: firstly, that the decision-making process will be decentralised in flexible firms; and, secondly, that fast adaptation requires low levels of formalisation. The literature on organisational innovativeness, however, stresses the importance of the conflicting demands on the organisation in terms of the appropriate degree of centralisation and formality in the different phases of the innovation process (i.e., initiation or implementation). Flexible firms are those that are able to accommodate these conflicting requirements (Adler, 1996, 1999; Volberda, 1999; Damanpour, 1991).

As far as the top managerial level is concerned, the three bodies of literature reviewed (i.e., determinants of organisational flexibility, innovativeness and institutional embeddedness) make one prediction: that only those firms with a heterogeneous dominant coalition are likely to adapt successfully in conditions of environmental turmoil (Volberda, 1996; Damanpour, 1991, 1996; Fox-Wolfgramm *et al*, 1998). The heterogeneity of the dominant coalition reflects the composition and internal interaction of the top team. The heterogeneity of the top team would therefore influence their cognitive models for interpreting the reality and their capacity to act (Pettigrew and Whipp, 1991; Greenwood and Hinings, 1996; Webb and Pettigrew, 1999).

From our inductive analysis of the case studies two other determinants of organisational flexibility emerged: environmental scanning and a strong organisational identity. These two determinants and the literature that underpins them are operationalised and analysed later in this chapter.

While the literature on determinants of organisational flexibility, innovativeness and that on institutional embeddedness describe different organisational capabilities as enablers of transformation and adaptation, there is no mention of how the nature of the firm can affect the creation of those capabilities. In this research, we are dealing specifically with family-owned businesses. Before analysing the determinants of organisational flexibility, questions arise as to what the main features of family firms are and how these

characteristics can impact on the formation of the flexible capabilities necessary for them to adapt and transform under constantly changing environments.

Issues affecting organisational flexibility of family firms

Family businesses face very particular challenges in their attempt to achieve organisational flexibility. These challenges arise at different stages in the life of a family firm. Ward (1987) point out that over these stages (e.g. the founding stage, and second generation tenure, among others) family firms need to learn to delegate authority (i.e., decentralising operational and strategic decisions), cope with transitional stages, and professionalise the company by bringing in new managerial skills from outside the company (i.e., non-family members). Family companies that are not able to meet these challenges stagnate, and thus their ability to adapt to new market conditions is impaired (Ward, 1987:33).

Broadly speaking, the factors mentioned by Ward (1987) as affecting the development of organisational flexibility within family-owned firms fall into three categories. These categories are: the life cycle of the family firm and the role of the founder; the control systems and professionalisation of the management team; and finally, ownership issues.

Life cycle of the family firm: the role of the founder

Many organisational writers have emphasised the relationship between a firm's history and its current capabilities (Selznick, 1957). Teece *et al* (1997) and Rosenbloom (2000) recognise that the development of organisational capabilities is strongly related to the history of the firm (the "*path dependencies*" for Teece *et al*, 1997). Thus, a firm's previous choices shed some light on its current organisational capabilities. Similarly, Raff

(2000), studying the transformation of two book retailers in the USA, states that the founders' vision and values influence what the companies become and the capabilities they can develop (see also Helfat, 2000). These writers consider history to be one of the factors contributing to the development of organisational capability.

Based on his longitudinal study of the birth and early development of a medical school, Kimberly (1979) underlines the problems that the organisation had to confront during the different stages of its development. Being influenced by its founder's ideals of innovativeness, Kimberly shows how this imprint constituted a significant constraint for the organisation's subsequent choices. He also points out the tensions between the innovativeness of the early phases and the institutionalisation and formalisation that occur at later stages in the organisation's development.

In his empirical study in a British boarding school, Pettigrew (1979) also explores the critical role of the founder of an organisation (in this case the founder of the boarding school) in creating organisational culture and set of beliefs. The founders, "*entrepreneurs*" in Pettigrew's words, give energy, purpose and commitment to the organisation they are creating (Pettigrew, 1979:580).

Kimberly's (1979) and Pettigrew's (1979) findings are particularly revealing of the role of the founder and the imprint he leaves on the organisation. In family firms it is particularly important to understand the role of the founder in determining the company's set of beliefs and how this value system can help the firm to confront the demands of new organisational stages. The fact that our sample contains family firms at different life stages (the second and third generations of family leadership) also illustrates the process of how the family firms in this study move from one stage to the next (i.e., through the succession process) and how they cope with the requirements for institutionalisation (i.e., more formal mechanisms and professionalisation). These issues are addressed in the following section.

Control systems and professionalisation of the management team in family firms

Control systems also evolve throughout the life cycle of a family firm. In the first tenure of the company – the founder or entrepreneurial experience – control tends to be informal, with little planning and coordination. Decision making, on the other hand, is highly centralised in the founders (Moore and Mula, 2000; McCollom Hampton, 1996). Moore and Mula (2000) show empirical evidence in Australian family firms to suggest that at successive stages of life, family firms tend to formalise mechanisms of control and decentralise decision making. This happens because after the founder's tenure, the different family branches need to keep abreast of company issues, and accordingly control and formalisation must increase. On the other hand, the size and scope of some businesses and the increasing professionalisation of the firm make decentralisation a necessary process (Moore and Mula, 2000).

How professionalisation is handled in family firms can often determine whether or not the firm will continue to grow and thrive (Dyer Jr., 1996). There are a number of reasons why a family firm might want to professionalise its current management team. Dyer Jr (1996) states that one reason for bringing non-family managers into the company is because there is sometimes a lack of management talent within the family. A second reason Dyer stresses is that professionalising the management is a way to change the norms and values of the firm.

Ward (1987) highlights the fact that family firm's health might suffer if, in the middle or late stages of its organisational development, it does not learn to professionalise, delegate authority and establish formal management systems. Success in business, states Ward (1987), hinges on the development of new management processes according to the different stages of the company's life.

Ownership issues

The structure and distribution of ownership – who owns how much of what kind of stock – can have profound effects on the governance and growth of the firm (Gersick *et al*, 1997). Ward (1987) proposes a progression of ownership from founder to sibling partnership, and finally to the family dynasty. Gersick *et al* (1997) introduce an ownership developmental dimension with three stages: controlling owner, sibling partnership and cousin consortium. What the different classifications show, however, is simply how ownership becomes increasingly diluted from a single majority owner (i.e., the founder stage for Ward or the controlling owner for Gersick *et al*) to a few or several owners.

The possibilities for growth are linked with the ownership structure of the family business. In successive generations of family members, as Haynes *et al* (1999) underline, family firms intermingle business and family resources. However, relying on a firm's profits and family savings may restrict a company's growth. Family firms, as Mahéroul's (2000) empirical study on family firms' finance shows, prefer not to open the company up to the public because they are afraid that the dilution of equity structure will diminish family power. The result of this process for family firms is a crisis of identity (Mahéroul, 2000).

The previous analysis leads us to raise the following questions: How did the family firms in this study build up the flexible capabilities needed to adapt under environmental pressure? How did the character and particular features of the family firms under study shape the determinants of organisational flexibility? Why were some firms able to achieve flexibility while others could not? The analysis of the determinants of organisational flexibility will seek to answer these questions.

The structure of the analysis is similar for the five determinants analysed: firstly we explain how the determinants are operationalised; secondly, we analyse and compare the

highly flexible and less flexible firms in each industry (i.e. AGD and Vicentín on the one hand, and Sidus and Andrómaco on the other). Finally, we present some patterns common to the flexible firms (i.e., Sidus and AGD) and the less flexible firms (i.e., Vicentín and Andrómaco).

10.2 Heterogeneity of the dominant coalition

What it is understood by dominant coalition and what does heterogeneity of the dominant coalition mean? Hambrick (1989) states that the area of strategic leadership studies incorporates individual executives (i.e., CEOs), the top management team, or other governing bodies (i.e, a Board of Directors) as the subject of the analysis. This study uses a broad definition of the dominant coalition as the individuals responsible for determining a firm's direction (Wiersema and Bantel, 1992. See also Cyert and March (1963) for organisational coalition). This means that Directors of the companies and the top management team are included in the definition of dominant coalition used in this research.³⁰³ This broad definition of the dominant coalition derives from the fact that in family businesses the Directors of the company have a crucial role in executive decisions (Neubauer and Lank, 1998). Thus, to leave them out of the analysis would be to ignore the particularities of a family business as a special type of organisation (Neubauer and Lank, 1998; Gersick *et al*, 1997).

To understand what heterogeneity is, let us start by understanding what homogeneity means in terms of group dynamics. A homogeneous group is one whose members have a similar age, tenure and background and who may have been together for a long time. A homogeneous group is said to exert more influence on its members and produce greater conformity (Murray, 1989), contribute towards a firm's efficiency, and be more inclined to maintain the status quo (Hambrick and Mason, 1984). There would also be more solidarity among similar individuals, and more congruence in beliefs, giving rise to consensus in decision making (Wiersema and Bantel, 1992).

Heterogeneity in the top management team has the potential to enhance the adaptability and creativity of the group. The diversity of skills and backgrounds mean that heterogeneous groups are more adaptable (Murray, 1989). Demographic heterogeneity may also lead to diversity in information sources and perspectives and more creativity and

³⁰³ In the family firms analysed in this research some of the executive team members are also Directors

innovation in decision making (Wiersema and Bantel, 1992). Furthermore, the different, competing views in such heterogeneous teams may facilitate radical change (Webb and Pettigrew, 1999).

The study of the heterogeneity of the dominant coalition as a determinant of organisational flexibility is operationalised through the demographic studies tradition that analyses demographic variables to understand the characteristics of the management team in terms of their homogeneity and heterogeneity (Hambrick and Mason, 1984; Murray, 1989; Hambrick, 1989). In particular two empirical studies inform this analysis and the variables used here: firstly the research done by Bantel and Jackson (1989) in which the demographic features of the top management team in the banking industry are analysed (i.e., average age, organisational tenure, educational level and background); and secondly, Wiersema's and Bantel's (1992) study of a hundred firms listed in Fortune 500, which uses similar variables to Bantel and Jackson (1989) and which sheds light on the relationship between a firm's diversity and strategic change.

To gain a holistic view of the features of the members of the dominant coalition, in this research we have analysed the following variables over three periods of time³⁰⁴: age, tenure in the company, tenure in the role, experience in the industry, experience in the industry and related industries, and finally, experience in other industries. We calculated the mean (average), standard deviation and ranges (maximum and minimum), for all the variables. Table 10.1 summarises the variables used and their use in the literature. Tables 10.2 and 10.5 and figures 10.1 and 10.2 show the statistical analysis undertaken.

We also used a significance test that, when applied to a set of observations, results in a P-value relative to some hypothesis. A P-value is the probability of having observed our data when the null hypothesis is true and highlights the statistical differences between the different variables (Everitt, 1998). The significance test used in this case is known as

³⁰⁴ The three periods of time are: 1989, the starting point of the analysis; 1996, the year before the radical changes happened in the less flexible companies and; 1999, the end of our period of analysis.

“hypothesis test for comparing two population means” (Everitt, 1998). This test was chosen because we need to determine whether there are differences between a variable in one company and the same variable in another company where the variable is considered to be a continuous one (i.e., we would like to determine whether the average age of the top team in AGD in 1989 is the same average age for the top management team in Vicentín for the same period of time).

The significance test will tell us whether the null hypothesis has been rejected or not. If the null hypothesis has been rejected, this means that there is statistical difference between the variables analysed in the companies. This is indicated in tables 10.3 and 10.6 with a Yes (i.e., when the average age between AGD and Vicentín are statistically different for the period of time analysed). However, if there is no statistical difference (i.e., when there is statistical evidence to say that the average age between AGD and Vicentín is similar for the period of time analysed) the null hypothesis is not rejected and it is indicated in table 10.3 and 10.6 with a No.

TABLE 10.1: VARIABLES USED IN THE DEMOGRAPHIC ANALYSIS AND THEIR USE IN THE LITERATURE

Variables	Use of the variable in the literature (theoretically and empirically)
Age of members of the dominant coalition	Hambrick and Mason, 1984 Wiersema and Bantel, 1992 Bantel and Jackson, 1989 Murray, 1989 Webb, 1999 Pitcher and Smith, 2001
Tenure company of members of the dominant coalition	Wiersema and Bantel, 1992 Hambrick, 1989 Bantel and Jackson, 1989 Murray, 1989 Webb, 1999 Pitcher and Smith, 2001
Tenure role of members of the dominant coalition	Hambrick, 1989 Bantel and Jackson, 1989 Murray, 1989 Webb, 1999
Experience in the industry of members of the dominant coalition: AGD and Vicentín: Edible Oils Sidus and Andrómaco: Pharmaceuticals	Hambrick and Mason, 1984 Webb, 1999 Eisenhardt and Schoonhoven, 1990 Pitcher and Smith, 2001
Experience in the industry and related industries of members of the dominant coalition AGD and Vicentín: Food Sidus and Andrómaco: Health	Hambrick and Mason, 1984 Webb, 1999 Eisenhardt and Schoonhoven, 1990
Experience in other industries of members of the dominant coalition	Hambrick and Mason, 1984 Murray, 1989 Webb, 1999 Eisenhardt and Schoonhoven, 1990
Indicator	Use of the indicators in the literature (theoretically and empirically)
Educational background of the dominant coalition	Hambrick and Mason, 1984 Wiersema and Bantel, 1992 Bantel and Jackson, 1989 Murray, 1989

The data on the dominant coalition was obtained from three sources: interviews; archival material provided by the HR departments; and, in those cases in which the information was missing or incomplete, a questionnaire with details of the information required was sent to the manager to be completed and sent back to the researcher. On a few occasions the information was collected by means of a telephone interview.

Pettigrew (1992b) criticises the narrow demographic approach favoured in some studies of top management team. His main criticism stems from the “*enormous interpretative leaps*” that are made from “*distant*” demographic data about the managerial

team characteristics to various kinds of organisational outcomes with no direct analysis of intervening processes (Pettigrew, 1992b:176). In his view, this approach leads to a loss of perspective regarding important issues such as organisational processes, structure and the performance of top teams. Consequently, in this study the quantitative results of the demographic analysis are combined with qualitative data drawn from the interviews, and this helped the researcher to interpret the data.

AGD and Vicentín

Our analysis of the demographics of the dominant coalition shows the differences between the two companies (see table 10.2 and figure 10.1). In AGD, the average age, tenure (company and role) and experience (in industry and also related industries) dropped over time while experience in other industries increased. Vicentín, on the other hand, followed a more irregular pattern: average age fell until it reached a plateau in 1996. After a trough in 1996, tenure (role and company) and experience (in industry and related industries) rose again in 1999. The only indicator with a decreasing tendency is experience in other industries (see figure 10.1).

As table 10.3 shows, the demographic differences between AGD and Vicentín are supported by the significance test undertaken. The test underlines statistical differences between AGD and Vicentín in most of the variables. In the case of the two variables 'tenure in the present role' and 'years of experience in the industry an related industries,' the significance test shows there is no statistical difference in 1989 and 1996 but there is in 1999.

How can these changes in the variables be explained? In AGD the fall in the different variables is an indicator of the renewal of the number of professionals in the company. A closer look at the demographic analysis shows that the renewal of professionals in the early 1990s brought an increase in the variable 'years experience in

other industries' (see figure 10.1), thus producing a reduction in the average length of company tenure and industry experience between 1996 and 1990.

The case of Vicentín, on the other hand, should be understood by reference to the changes the top management underwent during the 1990s. The sharp changes in the variables between 1989 and 1996 are the outcome of a reorganisation of the Board of Directors when the third generation set up a new Board. Having a new generation of managers made all the indicators fall although to a lesser extent than in the case of AGD. The rise of the variables in 1999 is due to the fact that the top management team did not vary much and new managers did not have much experience in other industries. On the contrary, all of their work experience was in the edible oil industry (see figure 10.1).

The rise of the variables analysed in Vicentín in 1999 and the fall of those variables in AGD is reflected in the fact that the significance test highlights statistical differences in all the variables between the companies. With the passing of the time, the differences between the companies become deeper and more noticeable (see table 10.3).

What stands out in the analysis of the standard deviation in both AGD and Vicentín is the high dispersion AGD had in 1989 in variables such as tenure in the company and role and experience in industry and related industry, while in Vicentín the standard deviation was lower. This difference stemmed from the homogeneous management team in Vicentín at that time (in terms of the variables analysed) and the diversity of managers' backgrounds in AGD (see table 10.2).

TABLE 10.2: DEMOGRAPHICS OF THE DOMINANT COALITION TEAM AT AGD AND VICENTÍN (MEAN AND STANDARD DEVIATION)

Mean (Average)	Companies	Average	1989	1996	1999
Age	AGD	42.1	43	42.6	40.8
	Vicentín	53.9	60.5	51	50.2
Tenure in company	AGD	11.6	12.3	11.8	10.6
	Vicentín	21.1	27	17.1	19.1
Tenure in present role	AGD	7.8	10.8	7.1	5.4
	Vicentín	12.7	15.5	9.9	12.7
Years experience in industry (pharmaceuticals)	AGD	13.6	15.9	13.9	10.9
	Vicentín	22.6	30	18.1	19.8
Years experience in industry and related industries ³⁰⁵	AGD	14.6	18.7	14.2	10.9
	Vicentín	23.3	31	18.7	20.2
Years experience in other industries ³⁰⁶	AGD	4.7	1.3	5.9	6.8
	Vicentín	1	1.25	0.9	0.8

Standard Deviation	Company	1989	1996	1999
Age	AGD	10.5	6	6.4
	Vicentín	10.8	5.4	7.6
Tenure in company	AGD	11.7	8.4	8.8
	Vicentín	6.1	6.4	6.9
Tenure in present role	AGD	11	7.9	7.3
	Vicentín	1.3	7.6	7.8
Experience in industry	AGD	10.3	7.2	8.7
	Vicentín	9	5.9	7.1
Experience in industry and related industry	AGD	13.5	7	8.9
	Vicentín	9.8	6.5	7.6
Experience other industries	AGD	1.7	3.4	3.7
	Vicentín	1.5	1.5	1.2

³⁰⁵ Years experience in the industry and related industry refers to the number of years working in a traditional pharmaceutical industry and related industries such as health and biochemistry.

³⁰⁶ Years experience in other industries refers to the number of years working in industries other than pharmaceuticals.

TABLE 10.3: SIGNIFICANCE TEST IN AGD AND VICENTÍN: HYPOTHESIS TEST FOR COMPARING TWO POPULATIONS MEANS³⁰⁷

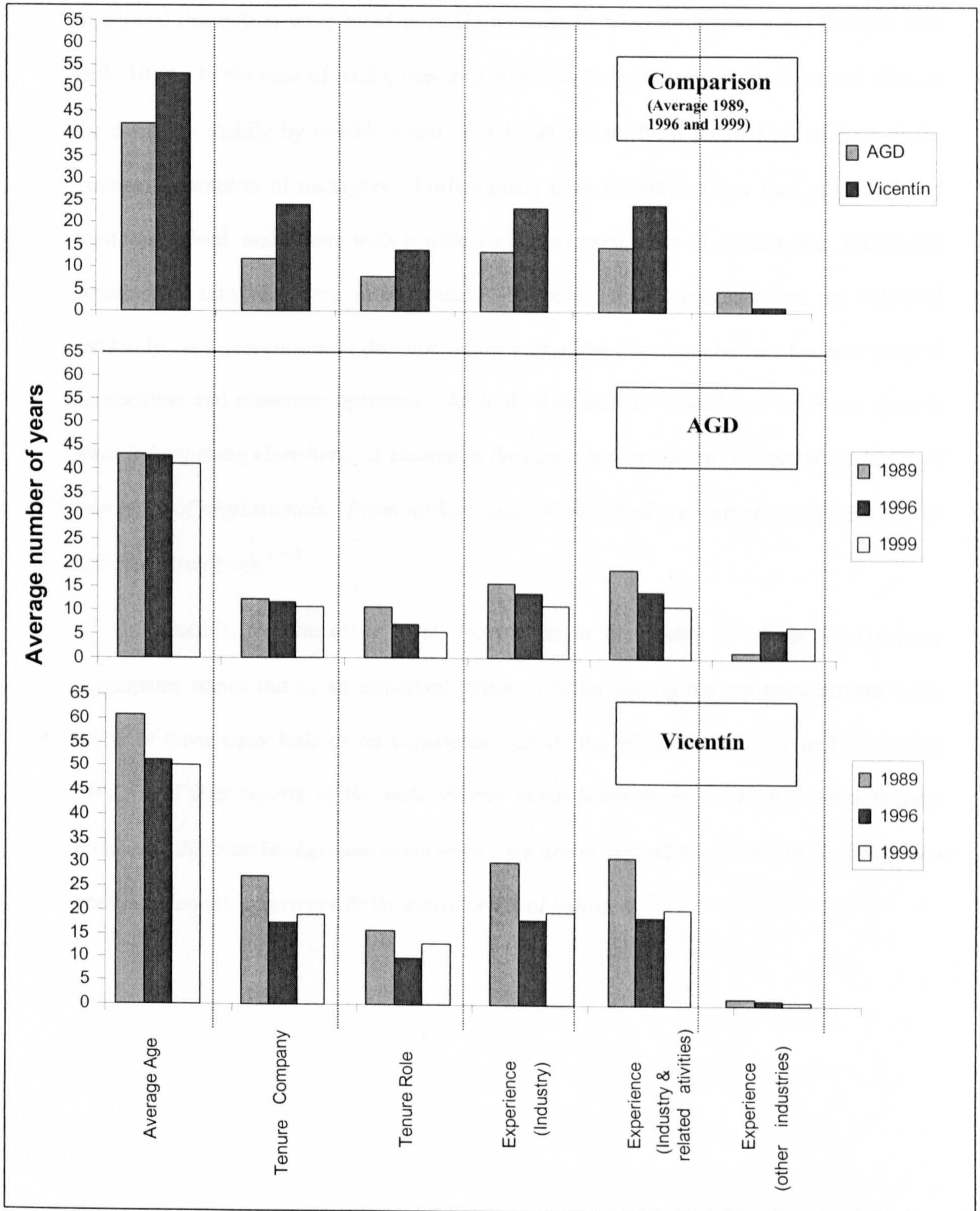
1989					
Variables	AGD Average	Vicentín Average	Difference	p value	Reject Ho
<i>Age</i>	43	60.5	17.5	0.012	YES
<i>Tenure in the company</i>	12.3	7	14.7	0.033	YES
<i>Tenure in the role</i>	10.8	15.5	4.7	0.419	NO
<i>Years experience in the industry</i>	15.9	30	14.1	0.029	YES
<i>Years experience in the industry and related industries</i>	18.7	31	12.3	0.118	NO
<i>Years experience in other industries</i>	1.3	1.25	0.05	0.959	NO

1996					
Variables	AGD Average	Vicentín Average	Difference	p value	Reject Ho
<i>Age</i>	42.6	51	8.4	0.010	YES
<i>Tenure in the company</i>	11.8	17.1	5.3	0.182	NO
<i>Tenure in the role</i>	7.1	9.9	2.8	0.477	NO
<i>Years experience in the industry</i>	13.9	18.1	4.2	0.225	NO
<i>Years experience in the industry and related industries</i>	14.2	18.7	4.5	0.201	NO
<i>Years experience in other industries</i>	5.9	0.9	5	0.00	YES

1999					
Variables	AGD Average (A)	Vicentín Average (V)	Difference (A-V)	p value	Reject Ho
<i>Age</i>	40.8	50.2	9.4	0.007	YES
<i>Tenure in the company</i>	10.6	19.1	8.5	0.026	YES
<i>Tenure in the role</i>	5.4	12.7	7.3	0.040	YES
<i>Years experience in the industry</i>	10.9	19.8	8.9	0.021	YES
<i>Years experience in the industry and related industries</i>	10.9	20.2	9.3	0.021	YES
<i>Years experience in other industries</i>	6.8	0.8	6	0.000	YES

³⁰⁷ The first column of each table contains the variables that are being analysed. The second and third columns show the mean of each variable for AGD (A) and Vicentín (V). The fourth column (i.e., difference A-V) indicates the difference between the averages presented in columns two and three. With that difference and a test statistic we obtained a p-value (see the fifth column). Conventionally a cut-off of 0.05 is chosen. If P is smaller than the cut-off value (i.e., 0.05) the null hypothesis is rejected and the result of the p value is called statistically significant. When the result of the p value is above 0.05 it is called not significant.

FIGURE 10.1: DOMINANT COALITION DEMOGRAPHICS IN AGD AND VICENTÍN (AVERAGE YEARS)



People with different educational qualifications and work experience in non-traditional disciplines were hired in AGD whereas in Vicentín this was not the case (see table 10.4). In the case of AGD, new expertise was brought into the management team of the company mainly by outsiders and, to a lesser extent, from internal promotions of the younger generation of managers. Professionals from industries other than edible oil and food were hired, and others with a wide variety of experience in consultancy, textile and commercial activities were incorporated. However, these changes were not achieved randomly. It was a conscious decision on the part of the Board to confront the new wave of competition and economic openness. At AGD they stated: *“The Board is always open to what is happening elsewhere. A change in the contextual conditions triggered the hiring of new types of professionals. From nothing you will now find a group of professionals from different disciplines.”*³⁰⁸

In Vicentín, on the other hand, experience in the sector in which the company participates stands out as an important common factor among the top management team. Some of them show little or no experience outside the edible oil industry or food sector: *“We found that experts in the industry can make better decisions than other managers hired with different background experience. We are in the edible oil industry, so we do not need people with experience in the petrol or retail industry.”*³⁰⁹

³⁰⁸ Interview with Marcelo Vit-HR Manager AGD

³⁰⁹ Interview with Herman Vicentín-President of Vicentín

TABLE 10.4: BACKGROUND EXPERIENCE OF THE DOMINANT COALITION IN AGD AND VICENTÍN OVER THE PERIOD 1989-1999³¹⁰

	1989	1999
Background experience/ Areas of work experience	<p>AGD: Edible oil, Food, Cereals and Agriculture, Marketing, Accounting.</p> <p>Vicentín: Edible oil, Food processing, Marketing, Agriculture, Engineers.</p>	<p>AGD: Edible Oil, Food, Public Sector, Commerce, Agriculture, Steel, Accountancy, Textiles, Auditing, Trading.</p> <p>Vicentín: Edible oils, Food processing, Agriculture and Cereals, Trading, Logistics, Engineers.</p>
Formal education	<p>AGD:</p> <ul style="list-style-type: none"> • 8% Postgraduate degrees • 50% University degrees • 50% Technical degrees <p>Vicentín:</p> <ul style="list-style-type: none"> • 25% University degrees • 75 % Technical degrees 	<p>AGD:</p> <ul style="list-style-type: none"> • 40% Postgraduate degrees • 80% University degrees • 20% Technical degrees <p>Vicentín:</p> <ul style="list-style-type: none"> • 10% Postgraduate degrees • 50% University degrees • 40% Technical degrees • 10% No degrees

Sidus and Andrómico

While AGD and Vicentín presented dissimilarities in the variables analysed that were evident right from the beginning of the period of analysis, this was not the case with Sidus and Andrómico. Prior to the 1990s, Andrómico had low average levels in all of the variables except the average age if compared to Sidus. This is mainly why the significance test shows no statistical difference in most of the variables in 1989 (see table 10.6).

A closer look at table 10.5, however, shows that at Sidus all the variables analysed fell over time while in Andrómico variables reached a peak in 1996 only to fall again in 1999 but always remaining higher than in Sidus. The significance test also illustrates these changes in the demographic variables by demonstrating statistical differences between the companies in 1996. However, by 1999 the significance test shows no statistical difference between the companies (see table 10.6). The reasons for such a difference in the statistical

³¹⁰ This table was developed using archival material from AGD and Vicentín over the period 1989-1999. We also used data collected from the interviews and in a few cases we collected information by means of telephone calls.

analysis can be explained by looking at the internal changes the firms went through over the ten-year period analysed.

By 1990, Sidus was a consolidated pharmaceutical company and running a biotechnology project successfully. By 1996, the company had incorporated new managers to run the new distribution business. In 1999 Sidus was a group of companies ranging from traditional pharmaceuticals and biotechnology to retail. These new strategic initiatives needed managerial skills to manage diverse businesses. New appointments are illustrated in the variable “experience in other industries” in figure 10.2. As can be seen, this variable began to rise in 1989.

The high dispersion indicated by the standard deviation found in Sidus in 1999 is the result of the business diversification undertaken by the company (see table 10.5). This diversification meant the incorporation of new managers from backgrounds other than traditional pharmaceuticals (giving rise to the high dispersion in the variable ‘experience in other industries), and with little experience in the pharmaceutical industry (hence, the high dispersion in the variable ‘experience in the industry’ and ‘tenure in company’).

At Andrómico, on the other hand, things were not so promising. The long tenure of Tuchi, the CEO (1981-1997), had a detrimental effect on the renewal of the top management team. Until 1997 there were few changes in Andrómico’s top management team. The sudden drop in all the variables in 1999 is a direct consequence of the reshuffle of the top team (see figure 10.2). Twenty-two managers were dismissed when Pablo Roviralta became the new CEO in 1997. These managerial changes had a direct impact on the significance test undertaken in that we could not find any statistical difference in the variables analysed between Sidus and Andrómico (see table 10.6). Most of the variables, however, showed a higher average compared to those found in Sidus in the same period of time (see figure 10.2).

TABLE 10.5: DEMOGRAPHICS OF TOP MANAGEMENT TEAM AT SIDUS AND ANDRÓMACO (MEAN AND STANDARD DEVIATION)

Mean (Average)	Companies	Average	1989	1996	1999
Age	Sidus	46.3	48.4	45.6	45
	Andrómaco	54.2	54	58.9	49.8
Tenure in company	Sidus	15	19	13.4	12.6
	Andrómaco	14.3	16.1	17.8	8.9
Tenure in present role	Sidus	7.9	13	5.4	5.2
	Andrómaco	10.7	11.2	14.3	6.7
Years experience in industry (pharmaceuticals)	Sidus	18.4	21.6	17.3	16.2
	Andrómaco	19.7	19.1	23.1	16.8
Years experience in industry and related industries³¹¹	Sidus	19.7	23.8	18.1	17.3
	Andrómaco	23.4	23.8	28.1	18.7
Years experience in other industries³¹²	Sidus	5.2	0.8	7	7.8
	Andrómaco	2.9	2.4	3.2	3

Standard Deviation	Company	1989	1996	1999
Age	Sidus	3.3	9.1	10.3
	Andrómaco	10	11	9
Tenure in company	Sidus	5	10.4	11
	Andrómaco	9	8.5	5.6
Tenure in present role	Sidus	3.6	4.2	3.7
	Andrómaco	5	6.4	6.8
Experience in industry	Sidus	4.5	10.3	11.1
	Andrómaco	9.1	10.7	10.7
Experience in industry and related industry	Sidus	3.9	9.9	10.3
	Andrómaco	11.1	12.6	12.6
Experience other industries	Sidus	1.3	11.1	11.2
	Andrómaco	1.7	2.1	2.1

³¹¹ Years experience in the industry and related industry refers to the number of years working in a traditional pharmaceutical industry and related industries such as health and biochemistry.

³¹² Years experience in other industries refers to the number of years working in industries other than pharmaceuticals.

TABLE 10.6: SIGNIFICANCE TEST IN SIDUS AND ANDRÓMACO: HYPOTHESIS TEST FOR COMPARING TWO POPULATIONS MEANS³¹³

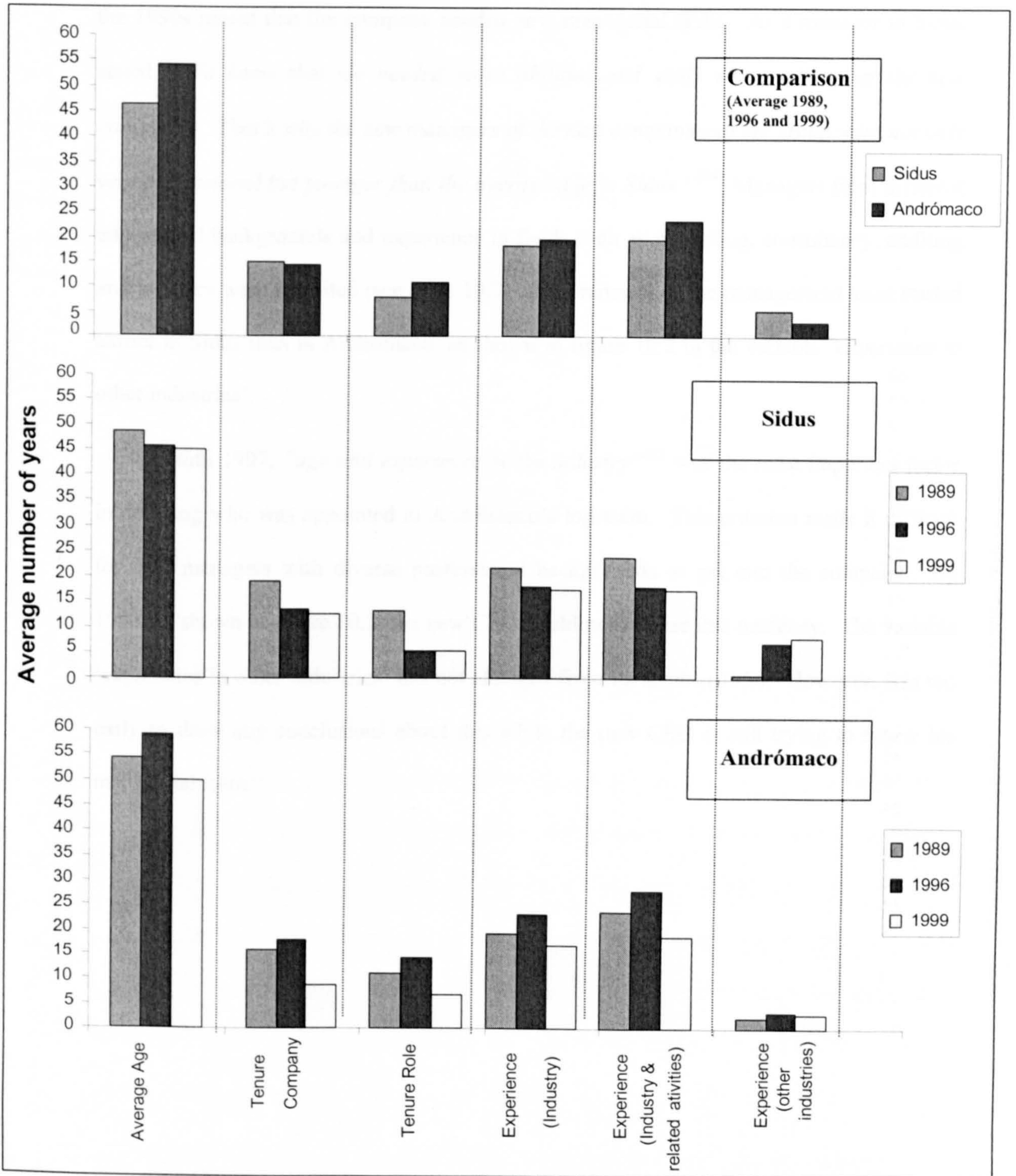
1989					
Variables	Sidus Average (S)	Andrómaco Average (A)	Difference (S-A)	p value	Reject Ho
<i>Age</i>	48.4	54	5.6	0.078	NO
<i>Tenure in the company</i>	19	16.1	2.9	0.335	NO
<i>Tenure in the role</i>	13	11.2	1.8	0.316	NO
<i>Years experience in the industry</i>	21.6	19.1	2.5	0.399	NO
<i>Years experience in the industry and related industries</i>	23.8	23.8	0	1.000	NO
<i>Years experience in other industries</i>	0.8	2.4	1.6	0.015	YES

1996					
Variables	Sidus Average (S)	Andrómaco Average (A)	Difference (S-A)	p value	Reject Ho
<i>Age</i>	45.6	58.9	13.3	0.003	YES
<i>Tenure in the company</i>	13.4	17.8	4.4	0.255	NO
<i>Tenure in the role</i>	5.4	14.3	8.9	0.000	YES
<i>Years experience in the industry</i>	17.3	23.1	5.	0.173	NO
<i>Years experience in the industry and related industries</i>	18.1	28.1	10	0.033	YES
<i>Years experience in other industries</i>	7	3.2	3.8	0.256	YES

1999					
Variables	Sidus Average (S)	Andrómaco Average (A)	Difference (S-A)	p value	Reject Ho
<i>Age</i>	45	49.8	4.8	0.260	NO
<i>Tenure in the company</i>	12.6	8.9	3.7	0.360	NO
<i>Tenure in the role</i>	5.2	6.7	1.5	0.488	NO
<i>Years experience in the industry</i>	16.2	18.8	2.6	0.579	NO
<i>Years experience in the industry and related industries</i>	17.3	18.7	1.4	0.769	NO
<i>Years experience in other industries</i>	7.8	3	4.8	0.220	NO

³¹³ The first column of each table contains the variables that are being analysed. The second and third columns show the mean of each variable for Sidus (S) and Andrómaco (A). The fourth column (i.e., difference S-A) indicates the difference between the averages presented in columns two and three. With that difference and a test statistic we obtained a p-value (see the fifth column). Conventionally a cut-off of 0.05 is chosen. If P is smaller than the cut-off value (i.e., 0.05) the null hypothesis is rejected and the result of the p value is called statistically significant. When the result of the p value is above 0.05 it is called not significant.

FIGURE 10.2: DOMINANT COALITION DEMOGRAPHICS IN SIDUS AND ANDRÓMACO (AVERAGE YEARS)



The new strategic initiatives Sidus undertook in the early 1980s and then again in the 1990s meant that the company needed new managerial skills. As a manager in Sidus stated: *"We knew that we needed more abilities and skills when setting up the new companies. That's why the new managers of the new companies of the group were not only very professional but younger than the average age in Sidus."*³¹⁴ Managers from different educational backgrounds and experience in fields such as marketing, consultancy, auditing and logistics were recruited (see table 10.7). This renewal of the management team started earlier in Sidus than in Andrómaco, as shown in figure 10.2 in the variable 'experience in other industries'.

Until 1997, *"age and experience in the industry"*³¹⁵ was the most important factor in deciding who was appointed to Andrómaco's top team. This criterion made it difficult for new managers with diverse professional backgrounds to get into the company. By 1999, as shown in figure 10.2, the new CEO could not reverse this tendency. The variable 'experience in other industries' has not changed from its level in 1996. However, it is too early to draw any conclusions about this while the new CEO is still trying to renew his managerial team.

³¹⁴ Interview with Santiago García Belmonte-Executive Director of Retail Businesses

³¹⁵ Interview with Hugo García-Logistic Manager in Andrómaco

TABLE 10.7: BACKGROUND EXPERIENCE OF THE DOMINANT COALITION IN SIDUS AND ANDRÓMACO OVER THE PERIOD 1989-1999³¹⁶

	1989	1999
Background experience/ Areas of work experience	<p>Sidus: Pharmaceuticals, Biochemistry, Consultancy, Public Service (Health), Health</p> <p>Andrómaco: Pharmaceutical, Chemistry, Biology, Marketing, Accounting</p>	<p>Sidus: Pharmaceuticals, Academia (research), Marketing, Logistics, Transport, Cereals and Agriculture, Finance, Consultancy, Auditing</p> <p>Andrómaco: Pharmaceutical, Chemistry, Finance, Marketing</p>
Formal education	<p>Sidus:</p> <ul style="list-style-type: none"> • 6% Postgraduate degrees • 67% University degrees • 33 % Technical degrees <p>Andrómaco:</p> <ul style="list-style-type: none"> • 54% University degrees • 31% Technical degrees • 15% No degrees 	<p>Sidus:</p> <ul style="list-style-type: none"> • 40% Postgraduate degrees • 80% University degrees • 20% Technical degrees <p>Andrómaco:</p> <ul style="list-style-type: none"> • 11% Postgraduate degrees • 55% University degrees • 45% Technical degrees

The dynamics of the dominant coalition and organisational flexibility: The cognitive diversity of the dominant coalition

The literature on the top management teams and cognitive processes have signalled the importance of the cognitive diversity of the top managerial team (Wiersema and Bantel, 1992; Hambrick and Mason, 1984). According to Hambrick and Mason's (1984) seminal paper on the role and influence of the top management team in organisations, a team of more heterogeneous managers interpret reality from a different cognitive base, with different visions and managerial perceptions. The result, for Hambrick and Mason, would be a decision-making process that would contain an array of innovative alternatives.

We found strong evidence to suggest that the most flexible companies in our study had broadened their cognitive bases, bringing new mental models into the firms over time. Two indicators illustrate the existing cognitive diversity in the most flexible firms: firstly,

³¹⁶ This table was developed using archival material from Sidus and Andrómaco over the period 1989-1999. We also used data collected from the interviews and in a few cases we collected information by means of telephone calls.

the capacity of the top managerial team to act; and secondly, the constructive conflict among the members of the management team. How these indicators influence the ability of an organisation to be flexible and to adapt to market changes is described in the literature on cognitive processes and managerial elites.

Various theorists have suggested that different mental models in an organisation might enhance the organisations' ability to adapt, to change and to succeed (Thomas and McDaniel, 1990; Barr *et al*, 1992; Webb and Pettigrew, 1999), enhancing the capacity for action (Greenwood and Hinings, 1996) or action orientation of an organisation (Grinyer *et al*, 1988). Greenwood and Hinings (1996:1039) defined the capacity for action as "*the ability to manage the transition process from one template to another.*" Capacity for action, according to Greenwood and Hinings, is the key to accomplishing radical change. This capacity for action will boost risk-taking behaviour. Three components are proposed as influencing a firm's capacity of action: first, the willingness of management to explore new strategic alternatives; secondly, the eagerness of the firms to take risks; and, finally, the keenness of the top team to confront difficult issues (Webb and Pettigrew, 1999; Greenwood and Hinings, 1996). In the light of these observations questions were asked about the capacity for action in the four firms under analysis.

There is also a rich array of research stating that a diverse cognitive base among the members of the management team might bring potential for conflict. However, the literature states that this conflict is valuable and essential "*for effective strategic choice*" (Eisenhardt *et al*, 1998:142). To be constructive, this conflict should be issue-oriented rather than interpersonal (Eisenhardt, 1989b; Eisenhardt *et al*, 1998) to sharpen the debate, create more options and energise the entire organisation (Biggadike, 1998). A lack of cognitive diversity, on the other hand, will cause a group to have low conflict levels, thereby diminishing effectiveness and reducing its ability to offer alternatives (Eisenhardt *et al*, 1998). The interviewees were therefore asked: were there different views as to what the organisation was? (Webb and Pettigrew, 1999) Were there new ideas as to how to

change the status quo? (Eisenhardt, 1989b; Webb and Pettigrew, 1999); Did the CEO help to differentiate personal disagreement from disagreement on issues? (Eisenhardt *et al*, 1998).

The use of visual mapping as applied by Webb (1999) and Webb and Pettigrew (1999) provides insight into the comparison between highly flexible and less flexible firms in terms of cognitive diversity over three periods of time: 1989, 1990-1995; and 1996-1999.³¹⁷

Figures 10.3 to 10.6 were created by coding the transcripts of each interview in the four companies under analysis according to the response the top management team provided to a range of questions that were indicative of the two components of the cognitive diversity of the dominant coalition: capacity to act and constructive conflict. In some cases, questions were sent by e-mail or post. In a few cases, questions were asked by means of telephone call. Four responses were allowed – ‘yes’, ‘no’, ‘it was increasingly changing or varied across the company’ or ‘no data’ (n/d), when the manager was not able to give any answer because he/she lacked data or because he/she was not at the company in the period of time analysed. Responses were shaded according to whether the interviewees answered ‘yes’ (black shading), ‘increasingly changing or varied across the company’ (grey shading), or ‘no’ answer (no shading). The shadings are shown against the related question and under the interviewee’s initials. An inter-coder reliability check gave a score of between 76% and 81%.³¹⁸

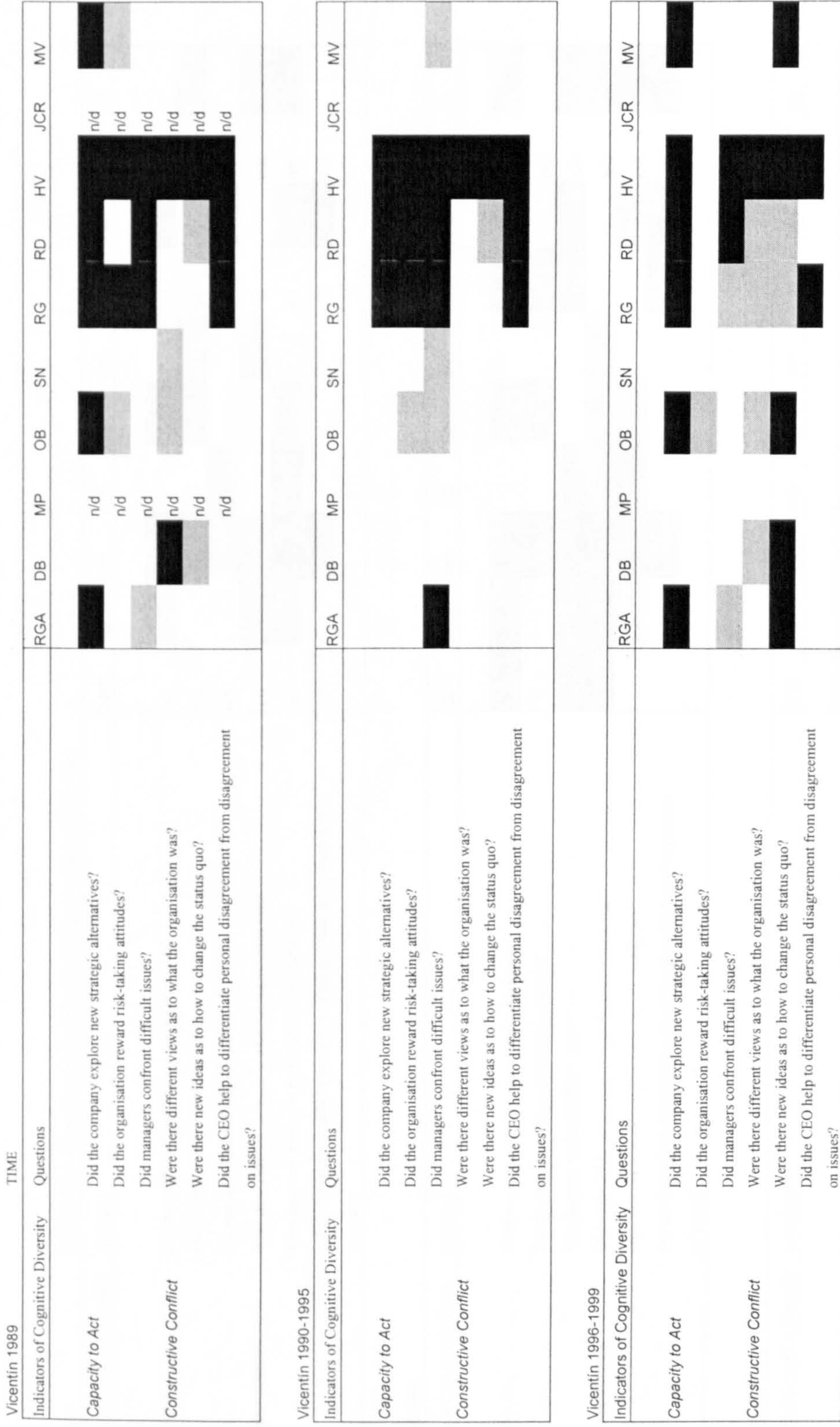
³¹⁷ The three periods of time in the analysis were decided according to the following criteria: 1989 represents the starting point of the analysis and shows the companies before the opening up of the markets for competition. 1990-1995 indicates the period of far-reaching changes up to the Mexican crisis. This is also a period during which the companies under analysis underwent important changes in terms of the renewal of their top managerial team. Finally, the period 1996-1999 represents a turnaround for the less flexible companies due to strategic changes these companies underwent, thus impacting on the formation of the top team. For the most flexible firms this period represents a consolidation of their strategies.

³¹⁸ The reliability score was calculated by the researcher re-coding three interview transcripts for the sets of questions asked as influencing the cognitive diversity of the dominant coalition of the firms under analysis. The re-coding was then compared to the original coding and the percentage score calculated according to Huberman and Miles (1994) formulae: reliability=number of agreements/total of agreements + disagreements.

FIGURE 10.3: INDICATORS OF COGNITIVE DIVERSITY AT AGD OVER TIME

AGD 1989	Indicators of Cognitive Diversity	Questions	AU	MA	GD	CH	MV	RS	RU	ADU	AB	MF
Capacity to Act	Did the company explore new strategic alternatives? Did the organisation reward risk-taking attitudes? Did managers confront difficult issues?	Were there different views as to what the organisation was?	█	n/d	█	█	n/d	█	█	█	n/d	█
		Were there new ideas as to how to change the status quo?	█	n/d	█	█	n/d	█	█	█	n/d	█
Constructive Conflict	Were there different views as to what the organisation was? Were there new ideas as to how to change the status quo? Did the CEO help to differentiate personal disagreement from disagreement on issues?	Were there different views as to what the organisation was?	█	n/d	█	█	n/d	█	█	█	n/d	█
		Were there new ideas as to how to change the status quo?	█	n/d	█	█	n/d	█	█	█	n/d	█
Constructive Conflict	Did the CEO help to differentiate personal disagreement from disagreement on issues?	Did the CEO help to differentiate personal disagreement from disagreement on issues?	█	n/d	█	█	n/d	█	█	█	n/d	█
		Did the CEO help to differentiate personal disagreement from disagreement on issues?	█	n/d	█	█	n/d	█	█	█	n/d	█
AGD 1990-1995	Indicators of Cognitive Diversity	Questions	AU	MA	GD	CH	MV	RS	RU	ADU	AB	MF
Capacity to Act	Did the company explore new strategic alternatives? Did the organisation reward risk-taking attitudes? Did managers confront difficult issues?	Were there different views as to what the organisation was?	█	█	█	█	█	█	█	█	█	█
		Were there new ideas as to how to change the status quo?	█	█	█	█	█	█	█	█	█	█
Constructive Conflict	Were there different views as to what the organisation was? Were there new ideas as to how to change the status quo? Did the CEO help to differentiate personal disagreement from disagreement on issues?	Were there different views as to what the organisation was?	█	█	█	█	█	█	█	█	█	█
		Were there new ideas as to how to change the status quo?	█	█	█	█	█	█	█	█	█	█
Constructive Conflict	Did the CEO help to differentiate personal disagreement from disagreement on issues?	Did the CEO help to differentiate personal disagreement from disagreement on issues?	█	█	█	█	█	█	█	█	█	█
		Did the CEO help to differentiate personal disagreement from disagreement on issues?	█	█	█	█	█	█	█	█	█	█
AGD 1996-1999	Indicators of Cognitive Diversity	Questions	AU	MA	GD	CH	MV	RS	RU	ADU	AB	MF
Capacity to Act	Did the company explore new strategic alternatives? Did the organisation reward risk-taking attitudes? Did managers confront difficult issues?	Were there different views as to what the organisation was?	█	█	█	█	█	█	█	█	█	█
		Were there new ideas as to how to change the status quo?	█	█	█	█	█	█	█	█	█	█
Constructive Conflict	Were there different views as to what the organisation was? Were there new ideas as to how to change the status quo? Did the CEO help to differentiate personal disagreement from disagreement on issues?	Were there different views as to what the organisation was?	█	█	█	█	█	█	█	█	█	█
		Were there new ideas as to how to change the status quo?	█	█	█	█	█	█	█	█	█	█
Constructive Conflict	Did the CEO help to differentiate personal disagreement from disagreement on issues?	Did the CEO help to differentiate personal disagreement from disagreement on issues?	█	█	█	█	█	█	█	█	█	█
		Did the CEO help to differentiate personal disagreement from disagreement on issues?	█	█	█	█	█	█	█	█	█	█

FIGURE 10.4: INDICATORS OF COGNITIVE DIVERSITY IN VICENTIN OVER TIME



Sidus 1989

FIGURE 10.5: INDICATORS OF COGNITIVE DIVERSITY IN SIDUS OVER TIME

Indicators of Cognitive Diversity	Questions	SBG	JQ	MA	MB	JC	MC	LGB	AGB	RP	CB
<i>Capacity to Act</i>	Did the company explore new strategic alternatives?	n/d						n/d		n/d	
	Did the organisation reward risk-taking attitudes?	n/d						n/d		n/d	
	Did managers confront difficult issues?	n/d						n/d		n/d	
<i>Constructive Conflict</i>	Were there different views as to what the organisation was?	n/d						n/d		n/d	
	Were there new ideas as to how to change the status quo?	n/d						n/d		n/d	
	Did the CEO help to differentiate personal disagreement from disagreement on issues?	n/d						n/d		n/d	

Sidus 1990-1995

Indicators of Cognitive Diversity	Questions	SBG	JQ	MA	MB	JC	MC	LGB	AGB	RP	CB
<i>Capacity to Act</i>	Did the company explore new strategic alternatives?									n/d	
	Did the organisation reward risk-taking attitudes?									n/d	
	Did managers confront difficult issues?									n/d	
<i>Constructive Conflict</i>	Were there different views as to what the organisation was?									n/d	
	Were there new ideas as to how to change the status quo?									n/d	
	Did the CEO help to differentiate personal disagreement from disagreement on issues?									n/d	

Sidus 1996-1999

Indicators of Cognitive Diversity	Questions	SBG	JQ	MA	MB	JC	MC	LGB	AGB	RP	CB
<i>Capacity to Act</i>	Did the company explore new strategic alternatives?										
	Did the organisation reward risk-taking attitudes?										
	Did managers confront difficult issues?										
<i>Constructive Conflict</i>	Were there different views as to what the organisation was?										
	Were there new ideas as to how to change the status quo?										
	Did the CEO help to differentiate personal disagreement from disagreement on issues?										

FIGURE 10.6: INDICATORS OF COGNITIVE DIVERSITY IN ANDRÓMACO OVER TIME

Andrómaco 1989	Indicators of Cognitive Diversity	Questions	PR	AR	PC	JR	JI	HG	HA	WM	JS	JPR	
<i>Capacity to Act</i>	<i>Constructive Conflict</i>	Did the company explore new strategic alternatives?				n/d		n/d		n/d	n/d	n/d	
		Did the organisation reward risk-taking attitudes?				n/d		n/d		n/d	n/d	n/d	
		Did managers confront difficult issues?									n/d	n/d	n/d
		Were there different views as to what the organisation was?									n/d	n/d	n/d
		Were there new ideas as to how to change the status quo?									n/d	n/d	n/d
Did the CEO help to differentiate personal disagreement from disagreement on issues?									n/d	n/d	n/d		
Andrómaco 1990-1995													
Andrómaco 1990-1995	Indicators of Cognitive Diversity	Questions	PR	AR	PC	JR	JI	HG	HA	WM	JS	JPR	
<i>Capacity to Act</i>	<i>Constructive Conflict</i>	Did the company explore new strategic alternatives?									n/d	n/d	
		Did the organisation reward risk-taking attitudes?									n/d	n/d	
		Did managers confront difficult issues?										n/d	n/d
		Were there different views as to what the organisation was?										n/d	n/d
		Were there new ideas as to how to change the status quo?										n/d	n/d
Did the CEO help to differentiate personal disagreement from disagreement on issues?										n/d	n/d		
Andrómaco 1996-1999													
Andrómaco 1996-1999	Indicators of Cognitive Diversity	Questions	PR	AR	PC	JR	JI	HG	HA	WM	JS	JPR	
<i>Capacity to Act</i>	<i>Constructive Conflict</i>	Did the company explore new strategic alternatives?											
		Did the organisation reward risk-taking attitudes?											
		Did managers confront difficult issues?											
		Were there different views as to what the organisation was?											
		Were there new ideas as to how to change the status quo?											
Did the CEO help to differentiate personal disagreement from disagreement on issues?													

The capacity of the top management team to act

Sondergaard (2001) and Webb (1999) underline the importance of managerial intentionality as a way of explaining why some firms were able to respond more swiftly to market changes than others. With competitive pressures increasing in the different sectors after the opening up of the Argentinian economy early in the 1990s, a rapid adaptation to the new market was critical for the survival and success of the companies. However, as our analysis of the top management team's capacity to act shows, some firms were able to respond more rapidly than others.

Our interviewees in AGD stated the importance of the capacity for action by highlighting the significance of exploring different strategic alternatives over time (see figure 10.3). AGD started to explore new fields before the 1990s. From 1990 onwards the company started to incorporate new businesses into its repertoire. Although originally a crushing company, AGD invested in transport, brands, farming, storage and soya sub-products – all this in a twelve-year period (1986-1999).

Managers at ADG explained how this risk-taking attitude evolved over time: *“As a family business, AGD was not keen on taking risks, commercial risks. However, after the investments in our own brands, AGD started to pluck up courage and look at different possibilities in the market. Besides that, the incorporation of a new generation of managers helped AGD in this respect. They brought more ideas into the company and they were less worried about trying to innovate and less wary as well.”*³¹⁹

Vicentín presents a different case. Figure 10.4 shows how the interviewees perceived that their capacity to act was fading over time. The period 1990-1995 is indicative of a drop in the company's capacity to act and take risks. This is illustrated in figure 10.4 by more negative answers to our questions regarding the capacity to act (no shading). This represents the interviewees perception of a low capacity for action compared to 1989. This period coincides with a lack of investment and exploration of new

³¹⁹ Interview with Miguel Acevedo-Finance Manager AGD

businesses. The period 1997-1999 is marked by the strategic reorientation of the company after many years of downturn.

After the strategic changes in 1997 there was a widespread feeling in the company that the capacity for action was damaged: *“1997 was a watershed for the company in many respects. But one of the aspects that strikes me the most is our passivity. We preferred to avoid confronting problems.”*³²⁰

The fact that Vicentín relies on family members for its top managerial positions might be an explanation for the downturn in its capacity to act. As a manager and family member said: *“I believe that organisations need fresh blood and ideas. But we had been inviting family members into the company for as long as I could remember. This situation makes me remember something I studied about the Egyptian kings. They married their sisters. The result was that their heirs were so weak or so stupid that they could not govern. I am afraid that this situation will happen here. We need to open the company up to professional managers that will bring fresh ideas and action. Otherwise the Egyptian syndrome will affect us.”*³²¹

The capacity for action in Sidus and Andrómaco also illustrates the influence of the cognitive diversity brought by new managers. As a product of the increasing managerial diversity in the company over time, Sidus presents a growing explorative attitude as well as major exposure of its managers to difficult situations. Figure 10.5 illustrates the incremental evolution of the firm’s capacity for action (see in figure 10.5 where the black shading –indicating the presence of factors positively related to the development of the firm’s capacity to act – has increased over time).

From the 1980s onwards the company pioneered the pharmaceutical sector, investing in diverse businesses such as biotechnology, distribution, OTC, retail and

³²⁰ Interview with Roberto Gazzo-Finance Manager-Vicentín

³²¹ Interview with Máximo Paduán-Commercial department and fourth generation family member-Vicentín

intermediary companies. It also started up the first strategic alliance in the industry and it acquired a company.

“The new professionals were thought-provoking. The professionals that entered the company in this decade were different in that they were not afraid of changing the status quo, in fact they were very happy to change it.”³²²

In Andrómaco, on the other hand, the capacity for action has been influenced by the absence of cognitive diversity in the company over time: *“For many years the company lacked the managerial skills needed to confront the market changes. Managers were executors of orders. However, you needed a different type of manager, someone that could or would change things. We did not have this.”³²³*

However, the reshuffle of the managerial team in 1997 brought the winds of change to the company. The exploration of new alternatives was boosted by seeking new strategic alternatives for growth. Figure 10.6 shows that the exploration of new alternatives began to appear in the period 1996-1999 (coinciding with the reshuffle of the top team). However, the support for risk-taking actions was reduced over time as the company became financially more cautious and the focus on dermatology meant that fewer spare resources were available to try new alternatives (see in figure 10.6 that none of our interviewees considered that Andrómaco had a risk-taking attitude in the period 1996-1999. This is indicated in the figure by a lack of shading).

The cognitive diversity of the most flexible firms enhanced their capacity for action as can be seen by the support for the exploration of new strategic alternatives, risk-taking attitudes, and the ability of the management team to face difficult situations. In the less flexible companies, however, the capacity for action was diminished (mainly in Vicentín) by the lack of the new managerial capabilities needed to confront market changes.

³²² Interview with Marcelo Burstein-HR manager in Sidus

³²³ Interview with Pablo Roviralta-CEO Andrómaco

The cognitive diversity found in the most flexible firms, however, made the management team more prone to disagreement. How this conflict evolved in both highly flexible and less flexible firms is the focus of the next section of this analysis.

Stimulating constructive conflict

Our interviewees in the flexible firms highlighted the importance of an increase in disagreements among the top management team. The increasing conflict was seen by the interviewees as providing flexible firms with more alternative views. The differences in this respect between AGD and Vicentín are revealing.

Figures 10.3 and 10.4 show the differences between AGD and Vicentín in the way the conflict (i.e., constructive conflict) differed and varied over time. Figure 10.3 illustrates how different views of what the organisation was and new ideas about how to change the company had followed the entrance of new managers in AGD (see how the black shading follows an incremental pattern). Figure 10.4, on the other hand, illustrates the lack of such a conflict in Vicentín from 1989 to 1995 (i.e., little or no black shading). Only during the period 1996-1999 did new ideas as to how to change the status quo begun to appear.

AGD encouraged its managers – both new and old – to interact more. However, the effect of this was more conflict: *“We thought that more interaction would help managers to iron out differences. On the contrary these meetings sharpened the differences among them.”*³²⁴

The diversity in the managerial team was, however, considered very positive in the long run: *“Dissension flared up in the early 1990s and we thought it would delay decision-making. On the contrary, it made us think twice before launching ourselves into a new*

³²⁴ Interview with Adriana Urquía-Director AGD

*business, and be prudent but certain when we took a decision. It was like a brainstorming exercise.*³²⁵

Vicentín, on the other hand, had seen a low level of conflict until 1997 when the strategy of the company changed. The low level of conflict had its consequence in terms of seeking new scenarios for the company: *“For a long time, the management of the company was too complacent and failed to offer alternatives.”*³²⁶

On the other hand, interaction among the management team was too low: *“Everybody is too busy to meet. If you do not meet, you do not interact. And if you do not interact you do not exchange ideas, so you are not constructive.”*³²⁷

The pharmaceutical firms present a similar perspective to that of the edible oil companies. As before, the amount of black shading shows when firms have had more or less constructive conflict. Figures 10.5 and 10.6 illustrate the contrasting patterns found between Sidus and Andrómico: Sidus has emphasised constructive conflict in order to achieve a greater openness to alternative views; Andrómico avoided conflict among its top team for most of the period analysed (see in figure 10.6 the evolution of black and grey shading for 1989 and 1990-1995). A diversity of views only began to appear in the late 1990s after the new CEO took over and after the top management reshuffle took place.

Sidus managed the potential for conflict among the various managers by creating new companies. As the CEO of the company said: *“We interact a lot in meetings, but on a day-to-day basis we are in different companies, therefore allowing interpersonal animosity to subside.”*³²⁸

The CEO is also conscious of the advantages and disadvantages of conflict among members of the management team: *“So, I reckon that you may lose time arguing but in the*

³²⁵ Interview with Adriana Urquía-Director AGD

³²⁶ Interview with Roberto Gazzo-Finance Manager in Vicentín

³²⁷ Interview with Roberto Gazzo-Finance Manager in Vicentín

³²⁸ Interview with Miguel Argüelles-CEO Sidus

end we not only have different alternatives, but we also envision the future, as is the case with many of our initiatives.”³²⁹

The case of Andrómaco is one in which a powerful CEO impeded dissension: *“Tuchi [the CEO until 1997] found conflict unpleasant. So he crushed it. None of the top team members at that time wanted to appear to be offending him, so they avoided conflict.*”³³⁰

The changes in the top management team in Andrómaco from 1997 brought about new ideas as to what the company should be doing in order to grow. The role of the CEO also changed: *“The new managerial team was open to dissent. I therefore acquired a different role. I not only had to think about the strategy but also make sure that dissension did not open up a chasm between managers.*”³³¹

Brief remarks on the differences between flexible and less flexible firms

Our analysis of the demographics of the top management team and our interviews in the different companies revealed significant differences between highly flexible and less flexible firms. While in the highly flexible firms more heterogeneity prevailed among the top team, the less flexible firms presented a more compact and homogeneous managerial elite. We also revealed a second main difference between flexible and less flexible firms: the former are cognitively diverse compared to the latter. In addition to highlighting the contrasts suggested by our interviewees’ comments, the coding of the interview transcripts also demonstrated the consistency of the findings (as shown in figures 10.1 to 10.6).

Our discussion of the demographics of the dominant coalition in the firms shows that AGD and Sidus are more heterogeneous than Andrómaco and Vicentín. AGD and Sidus appointed managers from outside the firm before the changes in the Argentinian

³²⁹ Interview with Miguel Argüelles-CEO Sidus

³³⁰ Interview with Pablo Roviralta-CEO Andrómaco

³³¹ Interview with Pablo Roviralta-CEO Andrómaco

economy had begun. AGD started to appoint executives from outside the firm earlier in the 1980s when the company made its first logistic investments. Sidus, on the other hand, did the same when the strategic alliance with Merck was forged. In addition, the inflow of managers with non-traditional backgrounds in edible oils (i.e., in AGD) and pharmaceuticals (i.e., in Sidus) reduced the degree to which the company was influenced by institutional pressures (this also links to another determinant of organisational flexibility – macroculture embeddedness). As a manager at AGD stated *“The variety of experience and backgrounds of our top team allowed us to leapfrog the competition because we were better prepared with more skills than them.”*³³²

These appointments, together with internal promotion of young executives with different backgrounds and great potential, increased the diversity of views and cognitive mindsets among the top management team. That diversity of mental models generated a variety of interpretations of the firm and its environment. As Eisenhardt and Schoonhoven (1990) argue, the presence of divergent cognitive frameworks is essential in a turbulent environment. It granted AGD and Sidus a deeper understanding of the patterns of change that were occurring and allowed them to decide on the most appropriate actions to take or develop (i.e., in both companies the different strategic initiatives). So, in the hypercompetitive environment in which the pharmaceutical and edible oil industries operated in the 1990s, Sidus and AGD were better able to understand the new environment and act more quickly than the less flexible firms.

In contrast, in the less flexible firms the flow of outsiders into senior positions started either late in the 1990s (i.e., in the case of Andrómaco, after 1997) or it did not start at all (i.e., the case of Vicentín in which the managerial positions are all occupied by family members). As a result, in both companies the top team in the 1990s was highly homogeneous both as regards its background and the way they saw the company and its environment. This homogeneity increased the degree to which the company was embedded

³³² Interview with Marcelo Vit, HR Manager in AGD

in the industry macroculture. The lack of cognitive diversity that stemmed from the prevailing homogeneity in Andrómaco and Vicentín's top team also made it difficult for the firms to interpret the signals from the environment and be proactive.

The finding of this determinant of organisational flexibility is also important in understanding strategic decision-making in organisations. Hickson *et al* (1986) in analysing how decisions are made at the top of organisations question whether the management of the organisation is more influential in decision making than those on the outside, such as trade unions and government departments. The cases of the flexible firms reveal the importance of those inside the firm in shaping decisions internally and even influencing decisions at the industry level. A great majority of decisions of this order arose from deliberate managerial strategies. On the other hand, the less flexible firms demonstrated how they were influenced by decisions taken by other actors such as industry leaders and government departments.

10.3 Centralisation and formalisation of the decision-making process

From our review of the literature on organisational flexibility and innovation (Volberda, 1999; Damanpour, 1991, among others), we would expect that the more formalised and centralised decision-making is, the less flexible an organisation will be. However, high degrees of autonomy and laxity in control might constrain the implementation of innovation (Nicholson *et al*, 1990; Damanpour, 1992) and strategies (Fredrickson, 1986).

Formalisation reflects the emphasis on rules, procedures and control when carrying out organisational activities. Formalisation is frequently measured by the presence of manuals, job description, procedures and mechanisms of control (Webb, 1999; Caruana *et al*, 1998; Damanpour, 1991; Corwin, 1975).

Centralisation, on the other hand, reflects the extent to which decision-making autonomy is dispersed or concentrated. It is generally measured by the degree of participation of organisational members in decision-making (Webb, 1999; Damanpour, 1991; Aiken and Hage, 1971).

To avoid misinterpretation, the interviewees were consistently informed how the concepts of centralisation and formalisation of decision-making were to be applied in this research. We also gave some examples of those concepts. In the light of these definitions, the interviewees were questioned about their perception of the levels of strategic and operational centralisation and formalisation in their companies throughout the period 1989-1999. For example, was strategic decision-making (i.e., strategic planning, strategic meetings) formalised? Were strategic decisions (strategic decision such as investments, new strategic initiatives) taken mainly by the CEO or the Board?

The interviewees were also asked to assess the question according to degree: low, medium-low, medium, medium-high and high.³³³ The answers were coded on an ordinal scale starting from 1 (low) to 5 (high). An inter-coder reliability check gave a score of 87.5%.³³⁴ Figures 10.7 and 10.8 demonstrate both the difference between the companies (AGD and Vicentín; Sidus and Andrómaco) and the differences within each company between two periods of time, 1989-1999.

To illustrate the similarities and differences between the firms analysed, a hypothesis test – using the Mann-Whitney-Wilcoxon test – was calculated for each company and the results were then compared (the comparison was made between AGD and Vicentín, and between Sidus and Andrómaco) (Gopal, 1995). This test is used when there is an ordinal scale to answer the questions the interviewees are asked (as in this research in which questions were answered according to a scale from 1 to 5). With this test it is possible to determine statistically whether there are differences between the responses between companies (Gopal, 1995). Tables 10.8 and 10.9 show the comparison between AGD and Vicentín, on the one hand, and Sidus and Andrómaco, on the other. These results are analysed in the following pages.

Organisational flexibility and the degree of centralisation and formalisation

AGD and Vicentín

AGD showed lower levels of centralisation (both strategic and operational) in 1999 than in 1989. However, strategic and operational formalisation rose over the time analysed (see figure 10.7).

³³³ We have asked all our interviewees questions related to the centralisation and formalisation of decision making in the firms. Hence, 15 interviews in AGD, Andrómaco and Sidus and 14 interviews in Vicentín (see chapter 3 to more details on the interviewing process).

³³⁴ The reliability score was calculated by the independent re-coding of four interviews in each company of a set of questions related to the centralisation and formalisation process in the companies under study. The recoding was then compared with the original coding and the percentage score calculated using Huberman and Miles (1994) formulae: $\text{reliability} = \frac{\text{number of agreements}}{\text{total number of agreements} + \text{disagreements}}$.

In AGD, our interviewees stressed that the Board was more detached from operative decisions in 1999 than in 1989. *“In the 1980s the Board was involved directly in day-to-day operations. They were Executive Directors and Managers at the same time. Every decision taken at the operational level had to be agreed by one of them.”*³³⁵

The organisational changes the company undertook in the 1990s – such as the changes in the structure from a functional to a business unit one - were deliberately made in an attempt to change the role of the Board: *“The changes in the structure are a strong indicator of the Board’s attitude regarding the operational side of the business. The change from a functional structure to a structure based on the business unit conveyed a message from the Board: ‘look, the operation is your business, we are going to concentrate on the important matters.’”*³³⁶

However, strategic decisions were still highly centralised in the Board: *“The Directors were very clever: while they stood apart from the operation, they concentrated on strategic issues. They still have a strong grip on these issues.”*³³⁷

The control mechanism grew over the 10 years analysed. This is probably why managers’ perceptions of the degree of formality over the period 1989-1999 also increased (see in figure 10.7 the interviewees’ mounting perception of AGD’s level of formalisation in 1999). In the 1980s there was an absence of control systems such as budget and planning. This low degree of formalisation was the result of turbulence in the Argentinian economy, which prevented the company from working with control systems and planning. The 1990s drew attention to the necessity of updating and incorporating more formal mechanisms that did not entail, in the opinion of different managers, more bureaucracy.³³⁸

³³⁵ Interview Miguel Acevedo-Finance Manager AGD

³³⁶ Interview Miguel Acevedo-Finance Manager AGD

³³⁷ Interview Marcelo Vit-HR Manager AGD

³³⁸ Interview with Roberto Urquía, Adriana Urquía and Marcelo Vit of AGD

“AGD is at a halfway point now: we do not have a hefty formalisation process but some formalisation is required to succeed. We try to be flexible and to avoid bureaucracy. This is the most important thing to us.”³³⁹

Vicentín, on the other hand, presents a different picture (as seen in figure 10.7). By 1999, centralisation levels were still very high. Whereas formalisation at the strategic level remained at low levels, the formalisation of operative decisions increased substantially.

Regarding the high levels of centralisation in the company, the interviewees pointed out that: *“Decisions in this company are centralised by the Board. They decide everything. You will not find an issue or decision in the company that has not been discussed by the Board.”³⁴⁰*

Having Directors that also participate in the operation of the company caused decisions concerning the operation of Vicentín to become highly centralised: *“Remember that they [Directors] are working on the operation of the company, so they know about day-to-day operations. They like to wander around and ask questions and decide about these issues.”³⁴¹*

Some managers and employees also complained about the high levels of formalisation on a day-to day basis (see in figure 10.7 how this variable rose over time). There is also a perception that after the enlargement of the Board early in the 1990s, the formal procedures increased: *“Decisions concerning investments are formalised. There are procedures you have to follow. However, in this company there is always a way of bypassing rules otherwise you would get stuck in bureaucratic paperwork. Things were better when the Board consisted of only four members of the family.”³⁴²*

Formalisation at the strategic level showed a slight variation and remained at a low level compared to that of AGD. This low level of formalisation at the strategic level may

³³⁹ Interview with Roberto Urquía-Director AGD.

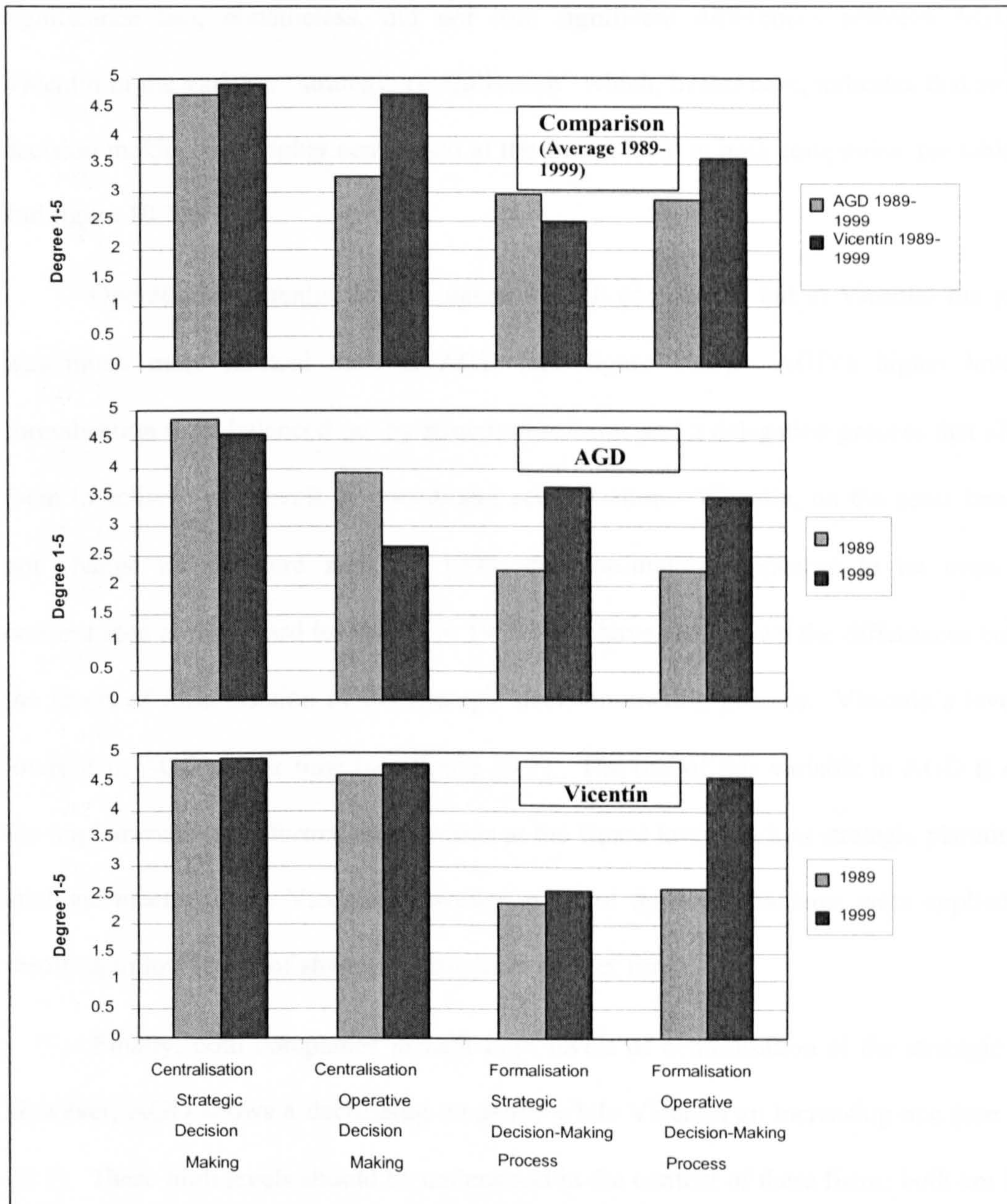
³⁴⁰ Osvaldo Arciniega-Commercial department-Vicentín.

³⁴¹ Interview with Sergio Nardelli-Commercial Department, Director of the Board and third generation family member.

³⁴² Interview with Juan Carlos Romero-Personnel Department San Lorenzo.

be explained by the lack of “strategic planning”³⁴³, “lack of strategic agenda”³⁴⁴ or because of the size of the Board that “[...] prevents us from moving forward in strategic issues. Therefore our meetings are shallow and disorganised.”³⁴⁵

FIGURE 10.7: CENTRALISATION AND FORMALISATION AT AGD AND VICENTÍN 1989-1999



³⁴³ Interview with Roberto Gazze, Finance Director-Vicentín

³⁴⁴ Interview with Daniel Buyatti-Technology Department Director

³⁴⁵ Interview with Sergio Nardelli-Commercial Director

What stands out between AGD and Vicentín is the differences between the levels of operational centralisation and formalisation (both strategic and operational). Our significance test found that operational centralisation was statistically different in both firms in 1989 and 1999. Formalisation processes (i.e., strategic and operational), however, were statistically different between AGD and Vicentín in 1999 (see table 10.8). The significance test, nonetheless, did not find significant differences between AGD and Vicentín in the variable “strategic centralisation” which, in this case, indicates that strategic decision making was highly centralised at the Board level in both companies (see table 10.8 and figure 10.7).

Operational formalisation increased in both companies, but in Vicentín the growth was much more marked than in AGD (see figure 10.7). AGD’s higher levels of formalisation were balanced out by structural reforms and a delegation process that allowed them to achieve low levels of operational centralisation. Vicentín, on the other hand, did not change its structure and, by 1999, decision-making appeared to be even more concentrated at the Board level than in 1989. We have also shown the differences between the levels of formalisation of the strategic decision-making process. Vicentín’s level was lower than AGD’s over time (see figure 10.7). The rise of this variable in AGD is due to the implementation of formal mechanisms at the Board level, such as strategic planning and strategic meetings. In Vicentín, however, none of these mechanisms were applied, thus resulting in low levels of strategic formalisation over time.

Finally, both companies present high levels of centralisation at the strategic level. However, AGD shows a decreasing tendency while Vicentín an increasing one (see figure 10.7). These high levels should be understood in the context of these firms: both are family firms and the family maintains a strong grip on strategic issues (Poza, 1995).

TABLE 10.8: MANN-WHITNEY-WILCONXON TEST FOR THE LEVELS OF CENTRALISATION AND FORMALISATION IN AGD AND VICENTÍN³⁴⁶

1989	Question	AGD average (A)	Vicentín average (V)	Difference (A-V)	P value	Reject Ho
<i>Strategic Centralisation</i>	To what degree were strategic decisions taken by the CEO or the Board?	4.83	4.88	0.04	0.80	NO
<i>Operational Centralisation</i>	To what degree were operative decisions taken by the CEO or the Board?	3.92	4.63	0.71	0.05	YES
<i>Strategic Formalisation</i>	Was strategic decision making formalised? What was the degree of such formalisation?	2.25	2.38	0.13	0.74	NO
<i>Operational Formalisation</i>	What was the degree of formalisation of decision making in your area?	2.25	2.63	0.38	0.14	NO

1999	Question	AGD average (A)	Vicentín average (V)	Difference (A-V)	P value	Reject Ho
<i>Strategic Centralisation</i>	To what degree were strategic decisions taken by the CEO or the Board?	4.58	4.90	0.32	0.19	NO
<i>Operational Centralisation</i>	To what degree were operative decisions taken by the CEO or the Board?	2.67	4.80	2.13	0.00	YES
<i>Strategic Formalisation</i>	Was strategic decision making formalised? What was the degree of such formalisation?	3.67	2.60	1.07	0.01	YES
<i>Operational Formalisation</i>	What was the degree of formalisation of decision making in your area?	3.50	4.60	1.10	0.00	YES

Sidus and Andrómico

Sidus' levels of centralisation (strategic and operational) diminished over the period 1989-1999. Meanwhile, during the same period, levels of formalisation (both strategic and operational) tended to increase (see figure 10.8).

³⁴⁶ The first and second columns of the tables contain the variables that are being analysed (i.e., strategic centralisation) and the question the interviewees were asked in each company respectively. The third and fourth columns show the mean of each variable for AGD (A) and Vicentín (V). The fifth column (i.e., difference A-V) indicates the difference between the averages presented in columns three and four. With that difference we obtained a p-value (see the sixth column). Conventionally a cut-off of 0.05 is chosen. If P is smaller than the cut-off value (i.e., 0.05) the null hypothesis is rejected and the result of the p value is said to be statistically significant. When the result of the p value is above 0.05 it is called not significant.

At Sidus, operational centralisation decreased over time due to a re-shaping of the Board's activities. While in the 1980s the Board was "everywhere", it now concentrates on strategic issues. Operational decentralisation was boosted after the changes in the structure that split Sidus up into a group of companies. Since then, the different companies have gained autonomy of decision-making. Each company has taken its own decisions and the Board has accepted this so long as these decisions have not been strategic ones.³⁴⁷

Centralisation of strategic decision-making was still considered to be very high in 1999: *"The Board is reluctant to delegate those aspects that they consider strategic. They think about this, they make their own decisions and we acknowledge this after the decisions have been taken. [...] Of course they share their decisions with us, but these are their decisions, we are not participating in or formulating them."*³⁴⁸

Formalisation was very low in the 1980s. At the end of the 1980s and beginning of the 1990s the Board foresaw the importance of some sort of formal control mechanism to suit the new times. IT systems, budget control, productivity and indicators of performance appeared in different areas as a way of *"integrating and being more efficient and not with the idea of adding bureaucracy."*³⁴⁹

Changes in the outer context made the company standardise some procedures and add more formal mechanisms: *"With the regulations due to be implemented in 1995, the company had to be ready to face fierce competition. Informality and a relaxed attitude could have harmed the company. We have seen in the sector that companies with a lax attitude lost ground. We had to tighten controls, not because we wanted to do that, but because of the looming competition. Otherwise, we would be running a loss-making company."*³⁵⁰

³⁴⁷ Interview with Marcelo Argüelles-CEO Sidus

³⁴⁸ Interview with Claudio Battilana-Finance Manager Sidus

³⁴⁹ Interview Marcelo Burstein- HR Manager Sidus

³⁵⁰ Interview Claudio Battilana- Finance Manager Sidus

One manager outlined his ideas about the process of formalisation in the company: *“I think everything that happened was a logical process in a family business. We [the managers] have more autonomy to decide; they [the Board] had a grip on strategy. Because the Board delegated the operation to their managers they also increased the control systems, otherwise how could they control whether what we were doing was right or wrong? How could they track several decisions that they were no longer taking? In their position, I would have strengthened the mechanism of control too.”*³⁵¹

Andrómaco’s levels of formalisation and centralisation of decision making, on the other hand, are marked by the change of the company’s CEO. When Pablo Roviralta took over the post in 1997, operative centralisation, which had been very high in 1989, was reduced slightly in 1999. The levels of both operative and strategic formalisation, however, increased notably from 1989-1999 (see figure 10.8).

Centralisation – both operative and strategic – were considered too high by far, as was the interference of the Board in running the operation: *“Everything concerning the company, from hiring a shop floor employee to the retirement of another one requires the Board’s approval, as do any investments made in the department.”*³⁵²

It was not only the number of control mechanisms that had increased the perception of high levels of formalisation in Andrómaco as shown in figure 10.8, but also the administrative procedures that were set up by the new CEO after years of disorder and corruption. These procedures were seen as both a burden and as producing *“decision-stiffness.”*³⁵³ *“For a project to be approved it has to have fourteen signatures!”*³⁵⁴

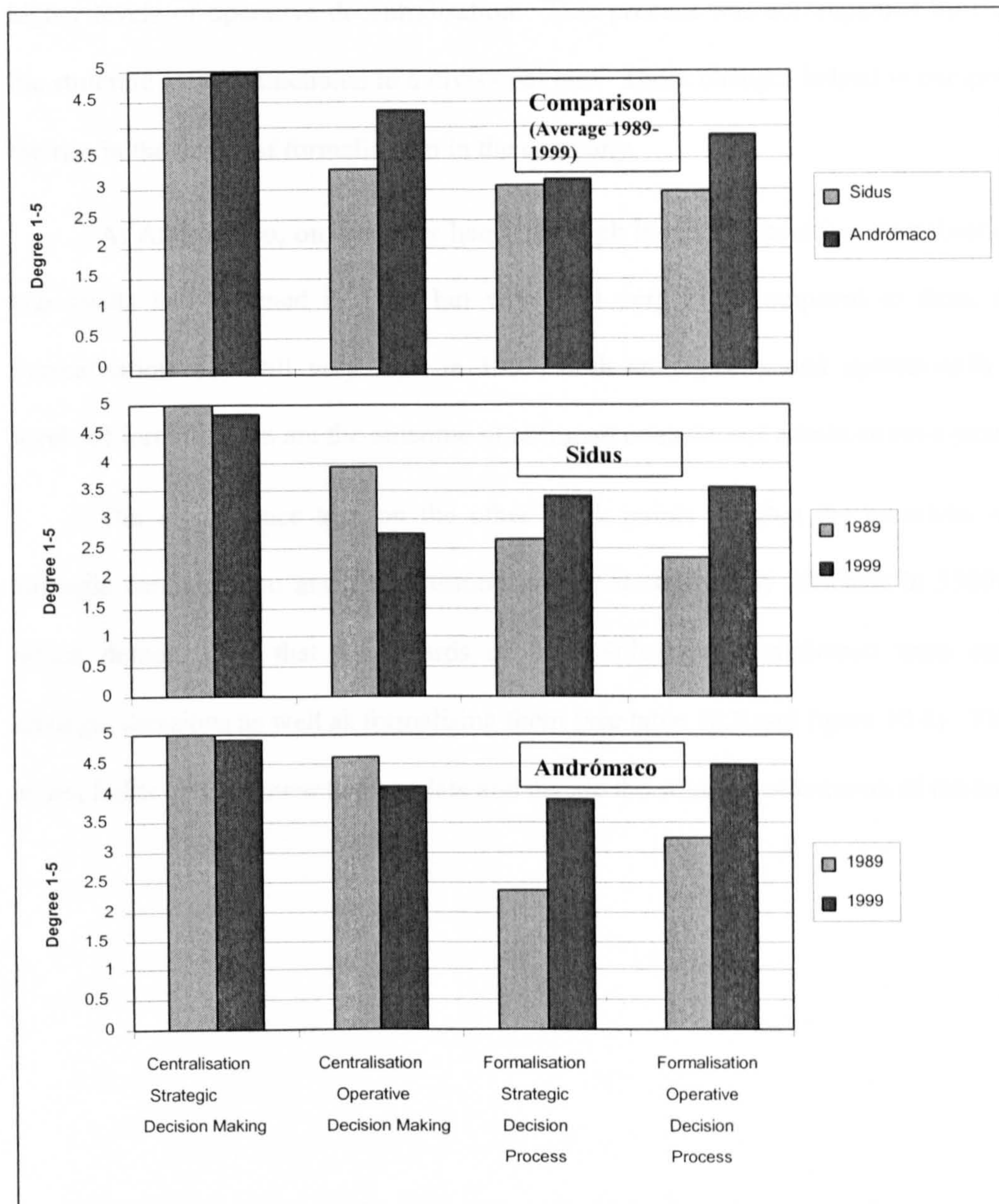
³⁵¹ Interview Marcelo Criscuolo-Executive Director of BioSidus

³⁵² Interview with Hugo García-Logistic Manager in Andrómaco

³⁵³ Interview with Juan Sackman-Ethical Marketing Products Manager in Andrómaco

³⁵⁴ Interview with Juan Sackman-Ethical Marketing Products Manager in Andrómaco

FIGURE 10.8: CENTRALISATION AND FORMALISATION AT SIDUS AND ANDRÓMACO 1989-1999



The most conspicuous differences between Sidus and Andrómaco, however, are the differences at the level of operative centralisation and operative formalisation. In our significance test in table 10.9 the questions related to operative centralisation and formalisation were found to be statistically different in both Sidus and Andrómaco for the two periods analysed (i.e., 1989 and 1999).

The delegation process Sidus started in the 1990s allowed the company to achieve higher levels of operative decentralisation. This process was accompanied by changes in the structure from a functional to a divisional one. These changes helped to compensate for the rise in the levels of formalisation in the company.

At Andrómico, on the other hand, the high levels of operative centralisation in the late 1980s had lessened in 1999 but were still very high compared to those in Sidus. Formalisation was still very high in 1999, both strategically and operationally. These levels of formalisation are the outcome of stringent controls and administrative processes.

Our significance test, on the other hand, points out that the questions related to strategic centralisation and formalisation were not statistically different in 1989 or 1999 which demonstrates that the Boards of both Sidus and Andrómico were centralising strategic decisions as well as formalising them (see table 10.9 and figure 10.8). The family, again, holds all the power to formulate and decide the strategic orientation of the company.

TABLE 10.9: MANN-WHITNEY-WILCOXON TEST FOR THE LEVELS OF CENTRALISATION AND FORMALISATION IN SIDUS AND ANDRÓMACO³⁵⁵

1989	Question	Sidus average (S)	Andrómaco average (A)	Difference (S-A)	P value	Reject Ho
<i>Strategic Centralisation</i>	To what degree were strategic decisions taken by the CEO or the Board?	5.00	5.00	0.00	1.00	NO
<i>Operational Centralisation</i>	To what degree were operative decisions taken by the CEO or the Board?	3.92	4.63	0.71	0.03	YES
<i>Strategic Formalisation</i>	Was strategic decision making formalised? What was the degree of such formalisation?	2.67	2.38	0.29	0.51	NO
<i>Operational Formalisation</i>	What was the degree of formalisation of decision making in your area?	2.33	3.25	0.92	0.05	YES

1999	Question	Sidus average (S)	Andrómaco average (A)	Difference (S-A)	P value	Reject Ho
<i>Strategic Centralisation</i>	To what degree were strategic decisions taken by the CEO or the Board?	4.83	4.90	0.07	0.66	NO
<i>Operational Centralisation</i>	To what degree were operative decisions taken by the CEO or the Board?	2.75	4.10	1.35	0.01	YES
<i>Strategic Formalisation</i>	Was strategic decision making formalised? What was the degree of such formalisation?	3.42	3.90	0.48	0.27	NO
<i>Operational Formalisation</i>	What was the degree of formalisation of decision making in your area?	3.58	4.5	0.92	0.04	YES

³⁵⁵ The first and second columns of the tables contain the variables that are being analysed (i.e., strategic centralisation) and the question the interviewees were asked in each company respectively. The third and fourth columns show the mean of each variable for Sidus (S) and Andrémaco (A). The fifth column (i.e., difference S-V) indicates the difference between the averages presented in columns three and four. With that difference we obtained a p-value (see the sixth column). Conventionally a cut-off of 0.05 is chosen. If P is smaller than the cut-off value (i.e., 0.05) the null hypothesis is rejected and the result of the p value is said to be statistically significant. When the result of the p value is above 0.05 it is called not significant.

Comments on the pattern found in the highly flexible and less flexible firms

Our discussion of the variation over time of the degrees of formalisation and centralisation clearly indicates that they influenced the flexibility each organisation had to adapt under circumstances of turbulence and uncertainty. The individual effect of either centralisation or formalisation was difficult to establish because in our case studies a change in one resulted in a change in the other. So, how have the flexible firms balanced out the effects of different levels of centralisation and formalisation? What form did the process take in the less flexible firms?

In the flexible firms we found three common patterns in the way they have managed centralisation and formalisation processes: firstly, both AGD and Sidus had centralised strategic decision making while the operation of the business was delegated to the managers; secondly, both firms underwent deep structural reforms; and finally, the formalisation levels had increased over time in both firms.

Our analysis of the centralisation process at AGD's and Sidus' highlighted the high level of strategic centralisation and low level of operative centralisation of decision-making. In both firms, the Board delegated the operation of the business to the managers while the Board itself concentrated on strategic issues. The reduction of operational centralisation increased the autonomy of business managers and with it their freedom to act and be flexible. In so doing, the firms believed that new strategic initiatives would be encouraged and implemented quickly.³⁵⁶

The interviewees also stressed the importance of the structural changes throughout the 1990s (see evidence provided while comparing flexible and less flexible firms in this section. See also case studies in chapter 7 and 8). For the Boards of both AGD and Sidus,

³⁵⁶ Interviews with Adriana Urquía (AGD); Santiago G.Belmonte (Sidus); Marcelo Argüelles (Sidus)

changes in the structure of the firms were essential in helping them to delegate and dedicate their premium time to strategic issues.³⁵⁷

The changes in the structure helped AGD and Sidus mitigate the possible harmful consequences of the upsurge of formalisation. The business units at AGD and the new companies or divisions at Sidus had fewer layers thus facilitating communication and fast responsiveness. AGD's and Sidus' new way of organising is more horizontal and organised across functional core processes. Thus, hierarchy is vanishing and teamwork is becoming the cornerstone of these organisations. In AGD they claimed that *"We built a flatter structure which was an advantage we had over our competitors. Our flat structure gave the managers more autonomy, and we were very flexible and adapted quickly."*³⁵⁸ As Pettigrew (1999) and Pettigrew and Fenton (2000) state, new ways of organising are required to improve flexibility, creativity and the companies' capacity to react.

The levels of formalisation – strategic and operational – found at AGD and Sidus went surprisingly against the results found in the literature on organisational innovativeness and flexibility that state that low levels of centralisation and formalisation of decision making are required to boost innovativeness and creativity in an organisation (Nicholson *et al*, 1990; Damanpour, 1991; Overholt, 1997).

There are two reasons why we found higher levels of formalisation in AGD and Sidus. The first reason is related to the changes in the economy over the period 1989-1999, and the second reason is associated with the control mechanisms the Board needed.

Firstly, the 1980s were very hectic in terms of economic and political turmoil, and therefore the companies could not plan or strategise in advance. In 1989 alone, inflation reached approximately 5000%. Speculation was more important than production and budget control. Hence, informal procedures were needed to enable companies to respond quickly to the changes in the environment.

³⁵⁷ Interview with Adriana Urquía and Roberto Urquía of AGD and Marcelo Argüelles and Santiago G.Belmonte of Sidus

³⁵⁸ Interview with Marcelo Vit-HR Manager in AGD

The 1990s, on the other hand, brought economic stability but difficult times for the companies in terms of competitiveness. More formal procedures and a less relaxed attitude were needed. Long-term thinking replaced the attitude of rushing into short-term matters. Deregulation opened the country up to foreign investors and helped create competitive and efficient companies. More control and planning appeared as a way of being cost-efficient. If decision making had become too decentralised and informal, organisational flexibility might also have suffered (Volberda, 1999). As an interviewee in Sidus pointed out *“the 1990s meant the search for efficiency, and attaining efficiency meant having more formality.”*³⁵⁹

Adler’s theoretical studies on different types of formalisation (1996 and 1999) highlight that whether the impact of formalisation is positive or negative (enabling or coercive formalisation) on employees’ attitudes is a function of whether that formalisation enables them to master their tasks or impedes them from doing so. The evidence provided by both AGD and Sidus illustrates that the incorporation of formal mechanisms in the 1990s was enabling rather than coercive.

The second explanation is related to the control mechanism the Board needed. While delegation of the operational matters started in 1990, the Board also increased control mechanisms so as to be able to monitor their managers. In family businesses characterised by strong leadership, this might be considered a normal process (Ward, 1987; Aronoff and Ward, 1997).

Regarding the less flexible firms – Vicentín and Andrómaco – the main similarities lay in the high levels of centralisation and formalisation of decision making over time.

Levels of strategic and operative centralisation were higher in Andrómaco and Vicentín than in their fellow flexible firms. However, it is important to notice that in Andrómaco operative centralisation has tended to decrease while in Vicentín it has increased. This different tendency over time may be explained by the internal changes the

³⁵⁹ Interview with Marcelo Burstein-HR Manager in Sidus

new CEO in Andrómaco was trying to implement (in terms of more delegation of the operation to the new top team) after the reshuffle of the top management team in 1997.

The high level of centralisation in both Vicentín and Andrómaco, as Fredrickson (1986:284) highlights, increases the probability that cognitive limitations of the top management will constrain the *“comprehensiveness of the strategic process”*. Our interviewees have been clear about the lack of fresh ideas³⁶⁰ or lack of strategic orientation³⁶¹ in both Vicentín and Andrómaco.

Formalisation, on the other hand, also presents its differences. Formalisation at the operation level was higher in both Andrómaco and Vicentín than in the highly flexible companies and was increasing over time. In Vicentín, one interviewee indicated: *“The level of bureaucracy in this company stifles our decision-making process. We suppressed any incentive our managers might have had to innovate.”*³⁶²

Conversely, the formalisation of the strategic decision-making process varied in both companies: Vicentín showed low levels of formalisation (even lower than AGD) and Andrómaco saw this level soar over the period 1989-1999. The differences between the companies stem from the ways strategy is formulated and implemented. Andrómaco's high level of strategic formalisation was the outcome of the implementation of strategic planning and control. Vicentín's low level, on the other hand, was the result of informality and lack of strategic planning.

The results of the findings about the determinant centralisation and formalisation in decision-making are important for those that have emphasised the relationship between structure and size of the organisation (Child, 1984). Child (1984) highlights the concern of the impact of large organisation on organisational structure. The larger an organisation is, states Child, the more likely it is that a centralised approach to control will generate top management overload. One of the most difficult transition for a young firm is, according to

³⁶⁰ Interview with Máximo Paduán-Commercial department and fourth generation family member-Vicentín

³⁶¹ Interview with Pablo Roviralta-CEO Andrómaco

³⁶² Interview with Maximo Paduán-Commercial department and fourth generation family member-Vicentín

Child, is when the CEO, who may be the founder, has to hand over some of the reins to subordinates. Pugh and his associates (1975) also consider large size to influence structural complexity that sets up pressures for delegation.

The findings in the flexible and less flexible firms, however, showed a different pattern where the large flexible firms were able to mitigate the harmful consequences of an upsurge of formalisation and the less flexible firms (that were smaller in size) could not.

We have seen then how the flexible firms balanced out the effects of different levels of centralisation and formalisation. The less flexible firms were not able to balance the levels of centralisation and formalisation needed over different periods of time. The overlaying of more centralisation and formalisation in Andrómaco and Vicentín in the 1990s³⁶³ increased the negative influence on organisational flexibility. We will return to the conflicting advantages of high and low levels of formality and centralisation later in chapter 11.

³⁶³ With the exception of strategic formalisation in Vicentín (see figure 10.7)

10.4 Low macroculture embeddedness

Another factor identified by this study as a determinant of organisational flexibility is the extent to which the companies analysed are embedded in their sectoral macroculture. This factor reflects the institutional pressures exerted upon the organisation and may affect the speed with which it can adopt new strategies (Abrahamson and Fombrun, 1994; Webb and Pettigrew, 1999; Dacin *et al*, 1999, 2002).

From our inductive analysis, two factors emerged as indicating the degree to which the companies under analysis were embedded in their macroculture: the perceived similarity and dissimilarity to other firms in the industry and the degree of connectedness to other firms in the industry.

Institutional theory describes how these factors influence the degree of embeddedness within the industry macroculture. The higher the perceived similarity to others in the industry, the more likely it is that firms will accept the prevailing norms and become more institutionalised in that industry (Greenwood and Hinings, 1996). On the other hand, the degree of connectedness refers to interpersonal contacts between executives in the same industry (Gnyawali and Ravindranath, 2001; Dacin *et al*, 1999; DiMaggio and Powell, 1983). Frequent contacts promote the awareness of the practices and values of an industry (Webb and Pettigrew, 1999).

To understand the perceived similarity/dissimilarity to their macroculture, interviewees were asked about which company or companies were used by them for benchmarking. Similarly, to understand the levels of connectedness, the interviewees were asked whether their company supported any professional association in the industry and, if so, which professional association they supported. Questions were asked regarding two specific years: 1989 and 1999.

Answers for each question were displayed in a table and different percentage scores calculated as shown in tables 10.10 to 10.17. An inter-coder reliability check gave a reliability score between 85 and 90%.³⁶⁴

AGD and Vicentín

The interviewees at AGD and Vicentín were consistent in their description of the extent to which these two factors were present in their companies. Tables 10.10 to 10.13 demonstrate the different perceptions in both firms regarding the level of similarity/dissimilarity and connectedness with the industry macroculture. While the level of embeddedness of AGD in the macroculture of the edible oil industry declined over the period 1989-1999 (i.e., demonstrated through benchmarking outside the industry as illustrated in table 10.10, and low level of contact in professional associations as shown in table 10.12), Vicentín's embeddedness was more manifest as illustrated by the evolution of its benchmark within the edible oil industry (table 10.11) and its high level contact with the professional associations (table 10.13).

At the end of the 1980s, AGD's benchmark was mainly against indigenous businesses that participated in the edible oil industry and also against some MNCs (see table 10.10). However, this benchmark started to change by the time the company

³⁶⁴ The question regarding the perceived similarity/dissimilarity was an open question, that means that the interviewees were free to answer with examples of companies that they believed they were using for benchmarking. The answers were coded into three categories of benchmarking for each company as shown in tables 10.10, 10.11, 10.14 and 10.15. and percentages calculated accordingly. In the question regarding the level of connectedness, only two responses were allowed: yes or no (tables 10.12, 10.13, 10.16 and 10.17).

The reliability score was calculated by the independent re-coding of six interview transcripts in each company for the two questions the interviewees were asked. The re-coding was then compared to the original coding and a percentage score calculated according to Huberman and Miles (1994) formulae: $\text{reliability} = \frac{\text{number of agreements}}{\text{total number of agreements} + \text{disagreements}}$.

In the analysis of the macroculture embeddedness of the firms we did not use any significance test. The statistical test used in the foregoing analysis (i.e., heterogeneity of the dominant coalition, degree of centralisation and formalisation of decision making) is based on the assumption that the response was measured at least using an ordinal scale (i.e., from 1 to 5), whereas in the questions concerning the degree of macroculture embeddedness of the firms the scale used was categorical (i.e., interviewees were given a set of possible answers or categories). Thus it is not possible to use a significance test in this analysis (Everitt, 1998).

launched its first strategic initiative (1989-1990). Molinos, a food and edible oil company, was then used as benchmark.

The process of benchmarking before launching the first strategic initiative illustrates the way the company's benchmark has changed over time: *"We have our own strategies. We look inside and outside the country to see what we can do to differentiate ourselves from the rest, not to see how we can copy them."*³⁶⁵ This was the thinking behind the way the brands were introduced by AGD. First of all Adrián Urquía Jr. went abroad to see what other companies were doing. The Board also analysed the competitors within the internal market, although none of the companies in direct competition with AGD were the focus of the benchmarking: *"The first comparison we made was with big companies such as Molinos."*³⁶⁶ *It would have been nonsense to compare ourselves with other direct competitors. We would have remained a medium sized company."*³⁶⁷

The diversification process AGD underwent over the period 1989-1999 caused the company's benchmark to change over time. Today's benchmarks are with Bestfood, an American food company, and Arcor, a regional food company (based in Argentina)³⁶⁸ (see table 10.10). *"Now, as a company, we do not have only edible oil products but other products such as mayonnaise and soya milk. So we no longer consider edible oil companies to be our ideal parallel, but food companies."*³⁶⁹

Vicentín, on the other hand, has seen a different pattern regarding its benchmark. In the 1970s and 1980s managers claim that the company liked to benchmark against companies such as Cargill and Dreyfus – both of them MNC companies. The company was a growing one that had *"aspirations of becoming a leader."*³⁷⁰ However, the critical 1990s caused the company's choice of benchmark to shift dramatically. The strategy of the company evidently favoured concentration on crushing and cotton ginning as a niche

³⁶⁵ Interview with Marcelo Vit-HR Manager

³⁶⁶ Molinos is an Argentinian edible oil and food company.

³⁶⁷ Interview with Adriana Urquía-Director

³⁶⁸ Interview with Gonzalo Dominguez-Marketing Manager

³⁶⁹ Interview with Adriana Urquía-Director

³⁷⁰ Interview with Raúl Gonzalez Arceluz-Corporate lawyer in Vicentín

market, thus the benchmark leaned towards crusher companies. The clarification of the strategy in 1997 fixed the benchmark on nationally-owned crushing companies. Since then, the company's perceived similarity within the edible oil industry has grown even more (see table 10.11).

*"We'd like to compare ourselves with other nationally-owned businesses. It is impossible to benchmark with multinational companies. They have resources that we do not have; they have worldwide experience that we do not have. Multinationals have different objectives in mind. Copying them would have been disastrous for us."*³⁷¹

TABLE 10.10: LEVEL OF SIMILARITY/DISSIMILARITY WITHIN THE INDUSTRY: BENCHMARKING AT AGD

Percentage	1989	1999
With whom is the company benchmarking?		
Benchmarking with indigenous edible oil companies	61%	7%
Benchmarking with multinational edible oil companies	44%	27%
Benchmarking with food-processing companies	0%	67%

TABLE 10.11: LEVEL OF SIMILARITY/DISSIMILARITY WITHIN THE INDUSTRY: BENCHMARKING AT VICENTÍN

Percentage	1989	1999
With whom is the company benchmarking?		
Benchmarking with indigenous edible oil companies	73%	87%
Benchmarking with multinational edible oil companies	33%	33%
Benchmarking with food-processing companies	7%	0%

Compared with Vicentín, AGD also demonstrates a lower level of connectedness in the industry over time. This can be seen in AGD's declining participation in the professional association as seen in table 10.12. The company maintains passive

³⁷¹ Ruben Dario Vicentín-Vice President

participation in CIARA. Table 10.12 shows how the support of professional associations was trimmed down from 80% in 1989 to 47% in 1999.

Vicentín, on the other hand, has seen its level of connectedness increase over the period 1989-1999 (see table 10.13). The perceived similarity of the company with its industry counterparts grew after its strategic orientation changed.

The high level of connectedness in Vicentín made industry associations the most important source of information for the managers of the company. This frequent interaction with the professional bodies of the industry, as Webb and Pettigrew (1999) point out, reinforces the values and norms of the sector in the firm. The interviews with some managers of the company are revealing in this sense: *"I personally participate in CIARA [professional association]. Meeting other colleagues in the industry helped me to acquire information about what the trends are and what they are doing and whether what we are doing follows that path or not."*³⁷²

TABLE 10.12: DEGREE OF CONNECTEDNESS IN THE INDUSTRY: AGD'S SUPPORT FOR PARTICIPATION IN PROFESSIONAL ASSOCIATIONS

Percentage	1989	1999
Support for Participation in Professional Associations		
YES. Participation in professional associations is actively supported by the company	80%	47%
NO. Participation in professional associations is not actively supported by the company	20%	53%

TABLE 10.13: DEGREE OF CONNECTEDNESS IN THE INDUSTRY: VICENTÍN'S SUPPORT FOR PARTICIPATION IN PROFESSIONAL ASSOCIATIONS

Percentage	1989	1999
Support for Participation in Professional Associations		
YES. Participation in professional associations is actively supported by the company	64%	79%
NO. Participation in professional associations is not actively supported by the company	36%	21%

³⁷² Interview with Sergio Nardelli-Commercial Department, Director of the Board and third generation family member

Sidus and Andrómaco

Tables 10.14 to 10.17 and our interview data demonstrate that the level of embeddedness of Sidus in the macroculture of the pharmaceutical industry declined over the period 1989-1999 (see table 10.14 and 10.16). In contrast to Sidus, Andrómaco was deeply embedded in the macroculture of the industry (see tables 10.15 and 10.17).

In contrast to the benchmarks that Sidus used in the 1980s, which were with indigenous companies such as Roemmers and Bago, its current benchmark lies outside the Argentinian market (see table 10.14). In 1999 Sidus targeted health companies in the biotechnological market – such as Genetech and Amgen (both American companies) – as the focus of its benchmarking activities.

The evolution of the benchmark is related to the image of the company its members had. Early in the 1980s the company saw itself as a small national company and benchmarked accordingly.³⁷³ However, by the time the biotechnology initiative and the strategic alliance with Merck (1988) took off, the paradigm had changed:

“In the early 1980s we saw ourselves as part of the national market, we were a tiny company in the industry. We compared ourselves to other competitors in the market. Today, our models are outside the Argentinian market. We have the most important biotechnological company in the region, so why should we be compared with a national laboratory? We look at companies such as Genetech or Amgen.”³⁷⁴

Andrómaco, on the other hand, saw important changes in its benchmark over time. Most respondents stated that from the 1980s to 1996 the benchmarking was against nationally owned companies (see table 10.15). The appointment of a new CEO in 1997 caused the benchmark to start to change. Today’s benchmarking is mainly against national companies. However, multinational laboratories running their business in Argentina have also been incorporated into the company’s benchmark (see table 10.15).

³⁷³ Interview with Marcelo Argüelles-CEO Sidus

³⁷⁴ Interview with Marcelo Argüelles-CEO Sidus

“In the 1980s and 1990s as well, we tried to copy the behaviour of other laboratories, with the risk of incurring the loss of the company’s vision and the potential it could have. In the economic conditions of the 1980s, I can understand this. Copying what other players in the sector were doing reduced the risk. That was our benchmark before.”³⁷⁵

From 1997 onwards the company broadened its benchmark. National and MNC companies were then the subjects of comparison: *“We wanted our managers to have a broad picture of the sector. We came from a company in which the benchmark was simple: we had to follow the leader. Now, if you ask the different managers, they have more companies they want to imitate or follow. However, we still have to work on that. We are still imbued with the old culture of benchmarking.”³⁷⁶*

TABLE 10.14: LEVEL OF SIMILARITY/DISSIMILARITY WITHIN THE INDUSTRY: BENCHMARKING AT SIDUS

Percentage	1989	1999
With whom is the company benchmarking?		
Benchmarking with indigenous pharmaceutical companies	87%	9%
Benchmarking with multinational pharmaceutical companies	20%	39%
Benchmarking with biotechnology or health companies	7%	52%

TABLE 10.15: LEVEL OF SIMILARITY/DISSIMILARITY WITHIN THE INDUSTRY: BENCHMARKING AT ANDRÓMACO

Percentage	1989	1999
With whom is the company benchmarking?		
Benchmarking with indigenous pharmaceutical companies	91%	63%
Benchmarking with multinational pharmaceutical companies	18%	37%
Benchmarking with biotechnology or health companies	0%	9%

³⁷⁵ Interview with Hector Alquati-OTC Manager Andrómaco

³⁷⁶ Interview with Pablo Roviralta-CEO Andrómaco (second interview, 2000)

Regarding the level of connectedness, Sidus saw changes in its level early in the 1980s. Since breaking away from the professional association of the industry (CILFA) in 1988, the level of connectedness has diminished substantially, as seen in table 10.16. Since then, its support for professional bodies has continued to fall until it reached the low levels of 1999.

After breaking from CILFA, Sidus joined a low profile professional body that operated among small and medium size laboratories – COOPERALA. At Sidus they stated: *“We just do not care about what they are doing [competitors] in professional associations. We are part of Cooperala because we have to be, but it is only a formality.”*³⁷⁷

Andrómaco, on the other hand, saw an increasing level of connectedness between 1989 and 1999 (see table 10.17). After re-defining the strategy in 1997, the new CEO encouraged participation in the different activities prepared by the professional association (COOPERALA) or other chambers in the different areas.

*“Each manager participates in meetings in different chambers. I go to CAPEMUEI –Chamber of Free Sale Producers. I try to go on a monthly basis to the meetings. This is a way of keeping in touch with sectoral trends and changes”*³⁷⁸

TABLE 10.16: DEGREE OF CONNECTEDNESS IN THE INDUSTRY: SIDUS'UPPORT FOR PARTICIPATION IN PROFESSIONAL ASSOCIATIONS

Percentage	1989	1999
Support for Participation in Professional Associations		
YES. Participation in professional associations is actively supported by the company	40%	27%
NO. Participation in professional associations is not actively supported by the company	60%	73%

³⁷⁷ Interview with Marcelo Burstein-HR Manager of Sidus

³⁷⁸ Interview with Hector Alquati-OTC Marketing Product Manager in Andrémaco

TABLE 10.17: DEGREE OF CONNECTEDNESS IN THE INDUSTRY: ANDRÓMACO'S SUPPORT FOR PARTICIPATION IN PROFESSIONAL ASSOCIATIONS

Percentage	1989	1999
Support for Participation in Professional Associations		
YES. Participation in professional associations is actively supported by the company	53%	73%
NO. Participation in professional associations is not actively supported by the company	47%	27%

The impact of the company's embeddedness on the speed with which it can adopt strategies

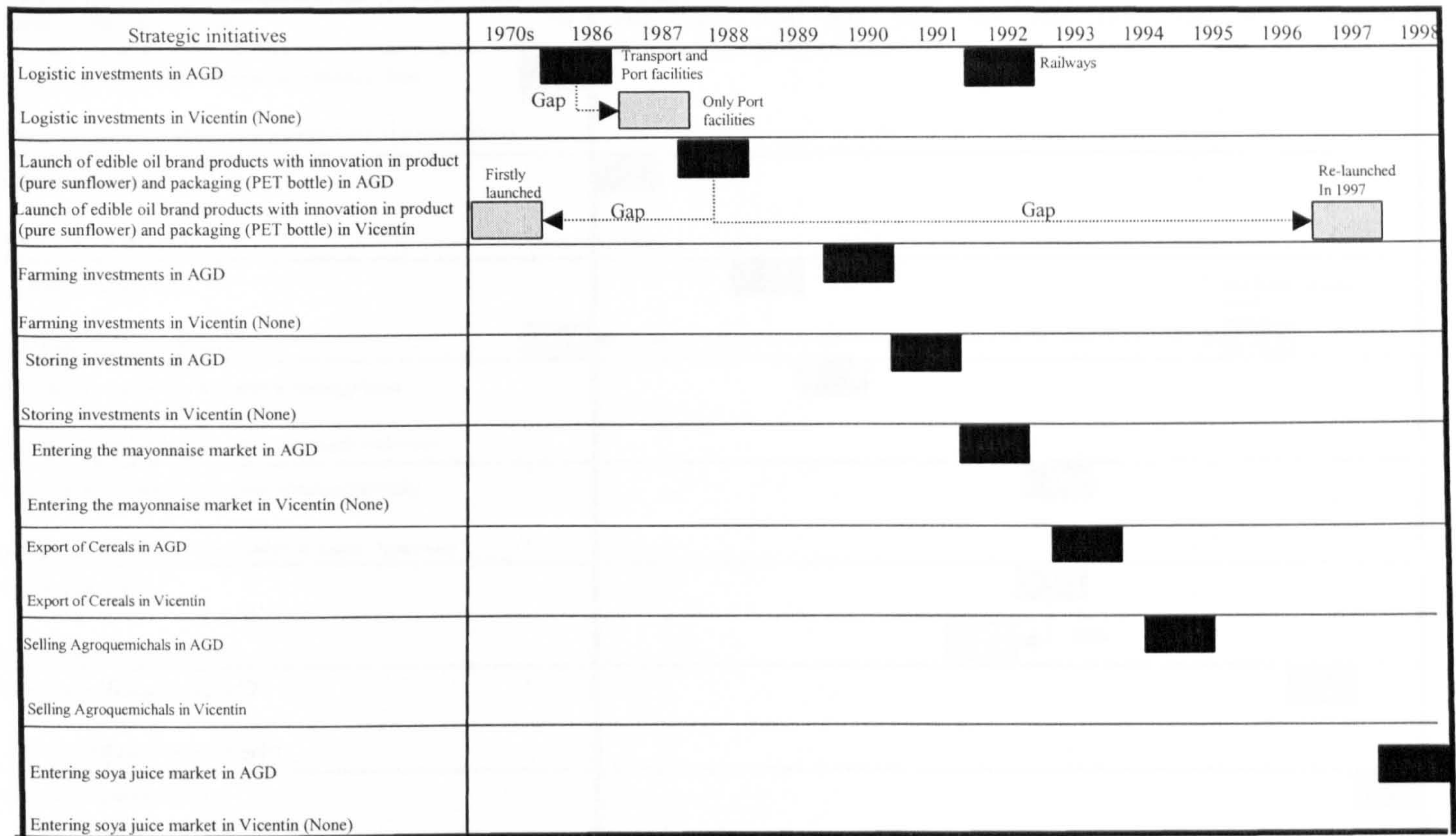
One of the consequences of the level of macroculture embeddedness of the firms analysed in this study is their freedom to make strategic moves and become either early adopters of strategies or laggards. Institutional theory states that over time firms tend to adopt a particular strategy that will become increasingly institutionalised within the framework of the industry (Abrahamson and Fombrun, 1994). To be early movers or first adopters of strategies, firms must try to avoid the pressures exerted by the environment (Dacin *et al*, 1999, 2002; Oliver 1991, 1992). Therefore, those firms which are less embedded in their macroculture may succeed in their attempt to adopt new strategies more rapidly (Greenwood and Hinings, 1996; Sharma, 2000).

Perceived turmoil encourages companies to try explorative activities such as diversifying, broadening the boundaries of the sector, making alliances, and investing more in R&D, among others. Lewin *et al*'s coevolutionary approach (1999) states that in periods of disorder, companies are keener to intensify exploratory activities.

What were the strategic responses of the companies under study? How did macroculture embeddedness influence this response? By tracking the strategic initiatives of the four companies – as shown in figures 10.9 and 10.10 we were able to visualise the early adoption of strategies and follower behaviour.³⁷⁹

³⁷⁹ The most important strategic initiatives between 1989 and 1999 were tracked. The strategic initiatives of the most flexible firms are shown in black shading and the ones corresponding to the less flexible firm are

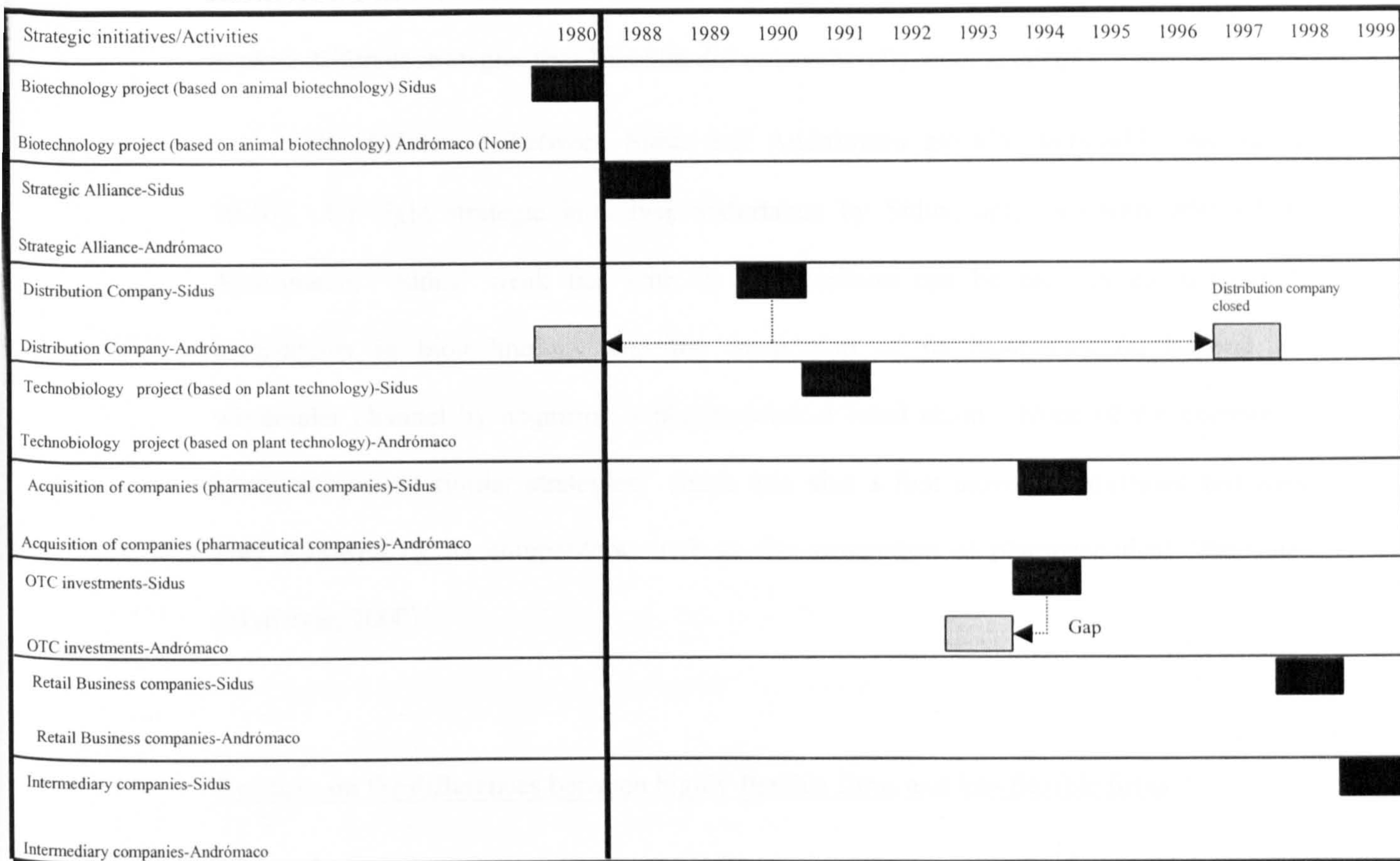
FIGURE 10.9: EARLY ADOPTION OF STRATEGIES IN AGD AND VICENTÍN³⁸⁰



shown in grey. The appropriate shading is shown under the year that the strategic initiative was launched. The existent gap – if there was any – between the launch in one company and the other is highlighted with an arrow.

³⁸⁰ This figure was created using information from the interviews carried out at AGD and Vicentín, and brochures and archival material from the companies.

FIGURE 10.10: EARLY ADOPTION OF STRATEGIES IN SIDUS AND ANDRÓMACO³⁸¹



Figures 10.9 and 10.10 shows the main difference between highly flexible and less flexible firms in terms of their adoption of strategies. AGD, for example was an early adopter of strategies compared to Vicentín. AGD disrupted the edible oil industry by integrating all its activities, from farming to selling products in supermarkets. None of its competitors followed this strategy, a fact which demonstrates that AGD operates outside institutional norms. In many cases – such as investments in transport, farming and storing capacity - AGD was a first mover in the edible oil industry and its competitors were followers.³⁸²

By contrast, Vicentín was only an early adopter in terms of branding strategy. However, this strategy failed and needed to be re-launched in 1997, nine years after AGD

³⁸¹ This figure was created using information from the interviews carried out at Sidus and Andrómico, and brochures and archival material from the company.

³⁸² CIARA, 1999; Gatto and Gutman, 1993 and company data.

had released its own successful brands. The figure also shows that AGD was keener to explore different strategies that Vicentín did not eventually want to adopt.

The differences between Sidus and Andrómaco are also noticeable (see figure 10.10). Of eight strategic initiatives undertaken by Sidus, only two were adopted by Andrómaco. Sidus' weak ties with its macroculture can be seen in the company's investments in biotechnology and the integration of its businesses far beyond the wholesaler channel by acquiring a pharmaceutical retail chain. None of the company's competitors used similar strategies. Sidus was also a first mover in strategies that were later followed by its competitors, such as the acquisition of pharmaceutical companies (Manzone, 2000).

Remarks on the differences between highly flexible firms and less flexible firms

From the previous analysis the differences between highly flexible and less flexible firms are self-evident: AGD and Sidus – both highly flexible companies - demonstrate a degree of “*disembeddedness*”, that is, a low degree of embeddedness (Dacin *et al*, 1999:341). On the contrary, the less flexible firms illustrate a higher level of embeddedness in the industry macroculture.

This notion of low embeddedness, or ‘disembeddedness,’ relies on intentional action by AGD and Sidus to step back from institutional frameworks of cognition, culture and the social structure of inter-actor relations. This was indicated by the perceived high levels of dissimilarity and low levels of connectedness in both companies. Vicentín and Andrómaco, on the other hand, demonstrated high levels of perceived similarity and connectedness over time (see tables 10.10 to 10.17). The strategic content and speed, and cognitive activities of the firms are revealing of the differences between flexible and less flexible firms in terms of their level of embeddedness.

These comments and our previous discussion indicate that because of their high level of embeddedness in the industry macroculture, Andrómaco and Vicentín faced considerable institutional pressure to conform. This in turn had a negative effect upon the strategic content and speed of the companies. In the case of AGD and Sidus, the fact that they increasingly distanced themselves from other Argentinian competitors meant that institutional pressures to conform to the norms of the edible oil and pharmaceutical industries were much weaker. As a result, the industry macroculture had little effect upon the firms' selection of their strategies.

The flexible companies in this study adapted by exploring new competitive advantages but moving rapidly from one advantage to another, from one series of short-lived actions to another, thereby disrupting the market place (Lewin *et al*, 1999; Lewin and Volberda, 1999; March, 1995). The most flexible companies in this study showed what Tushman and Anderson (1986) and Anderson and Tushman (1990) called competence-destroying discontinuities instead of competence-enhancing discontinuities. Evidence was offered to confirm that the most flexible firms disrupted their industry with new competence-disrupting discontinuities (i.e., AGD through strengthening its logistic chain and through launching its branding strategy; Sidus through its biotechnological initiative and through its retail strategy).

In figures 10.9 and 10.10 it is possible to observe that there is a short lag between the different strategic initiatives launched by the firms. The short lag between initiatives was a way of achieving competitive advantage over other companies in the industry. In periods of environmental turmoil in which advantages are eroded rapidly this might be considered an offensive rather than a defensive strategy (D'Aveni, 1994).

Andrómaco and Vicentín, on the other hand, did not show any of the patterns evidenced by AGD and Sidus. On the contrary, their strategic initiatives were isomorphic with the predominant strategies in the sector (DiMaggio and Powell, 1983). The institutional pressures these firms had to conform to and the high level of similarity to other

companies in their sector meant that it was very difficult for them to achieve non-isomorphic behaviour such as that found in AGD and Sidus.

As in the findings in the literature on organisational embeddedness, we have also identified other major source of pressure on institutionalised norms from cognitive practices that may have influenced the strategic and organisational responses of the flexible and less flexible firms (Oliver, 1992; Dacin *et al*, 2002).

The study of the cognitive mechanisms of the organisation is concerned with the way the frameworks of meaning affect individual and corporate actors as they interpret and make sense of their world (Dutton and Dukerich, 1991). With a more heterogeneous management team, the flexible firms had the possibility of a broader cognitive range that helped them to act fast and take risks (i.e., such as the strategic initiatives undertaken by the flexible firms). The less flexible firms, however, with a more compacted and homogeneous top team with background experiences mainly in the edible oil and pharmaceutical industries, were constrained by institutional pressures and thus their strategies were isomorphic with the rest of the industry.

10.5 Anticipating changes in the industry: Environmental scanning

In introducing their model of organisations as interpretative systems, Daft and Weick (1984) assert that the capacity to interpret is a key element that distinguishes human organisation from others. To achieve a deep interpretative capability, scanning the environment is a fundamental activity for the organisation. Scanning, then, can be considered both the starting point of the interpretation process in an organisation (Daft and Weick, 1984:286) and the starting point of the decision-making process (Mintzberg *et al*, 1976).

So why is it important for a flexible company to be aware of the mechanism of scanning the environment? In an attempt to provide an insight into the relationship between the strategic sensemaking process (i.e., scanning, interpretation and action) and organisational performance in 156 hospitals, Thomas *et al* (1993) argue that when managers implement a mechanism to increase information use by scanning the environment, they increase the likelihood of interpreting issues quickly and will sense the controllability of the process. Companies are thus able to respond more swiftly to any environmental threat or opportunity (Smith *et al*, 1991). The idea of fast response capacity is reinforced by Pettigrew and Whipp's (1991) detailed study on the ability of UK firms to manage strategic change. They emphasise that companies that can absorb signals and mobilise resources from the environment will be more proactive and able to deliver successful changes.

From the inductive analysis, two indicators emerged as factors illustrating the importance of environmental scanning in the companies analysed. Under conditions of intense competition in the period 1989-1999, firms sought new sources of information and set up both formal and informal mechanisms for scanning the environment.

The literature on environmental scanning describes the extent to which the two indicators found may help companies to interpret and anticipate market changes. Daft *et*

al's (1988) empirical research on the scanning behaviour of fifty CEOs emphasises the importance of using different sources of information to prevent managers from forming their impressions on the basis of narrow environment data. They state the importance of scanning both the task or operational environment (i.e., customers, suppliers, competitors and technology) and the general environment (i.e., economy, politics, social and cultural matters and regulations) (see also Hambrick, 1981; Choo, 1999; Ebrahimi, 2000; Sawyerr *et al*, 2000; Beal, 2000).

Pettigrew and Whipp (1991), on the other hand, recognise that environmental scanning happens across the organisation. They also argue that it is highly dangerous to assume that a single specialist can by himself achieve an adequate interpretation of the outer context. Therefore, formal structures for scanning the environment are not only not enough, but they are also dangerous as they can lead the organisation to inadequate interpretations. Informal ways of scanning are also necessary.

The following table summarises how the different indicators were operationalised through questions and categories of analysis. The use of visual mappings as applied by Webb (1999) and Webb and Pettigrew (1999) helped to simplify and visualise the results of the analysis (see figures 10.11 to 10.14).

TABLE 10.18: ANALYSING THE INDICATORS OF ENVIRONMENTAL SCANNING ³⁸³

Indicator of environmental scanning	Questions asked	Categories/Coding built
<i>New sources of information</i>	<p>-To what extent did you use sources of information to understand issues related to customers, competitors, suppliers and technology?</p> <p>-To what extent did you use sources of information to understand issues related to the national economy, politics, socio-cultural matters and regulations?</p>	<p>-Answers were classified according whether they referred to the scanning of the task or general environment. Four answers were allowed: 'extensively', 'not at all', 'to a certain extent' and 'no data'. Responses were shaded in figures 10.11 and 10.13 according to whether they related to a 'Extensively' answer (black shading), 'to a certain extent' answer (grey shading), 'Not at all' (no shading) 'No data' (n/d).</p> <p>-The appropriate shading is shown in the figure against the appropriate category of task environmental scanning (i.e., customers, competitors, suppliers and technological) or general environment (i.e., national economy, politics, socio-cultural matters and regulations). Questions were asked for both 1989 and 1999.</p>
<i>Setting up of formal and informal structures for scanning</i>	<p>-Is there in the company any area whose main responsibility is gathering and analysing economic and sectoral data?</p> <p>-Did you have formal and/or informal talks, meetings or activities to discuss issues related to the customer, competitors, suppliers and technological matters?</p> <p>-Did you have formal or/and informal talks, meetings or activities to discuss issues related to the national economy, politics, regulations and socio-cultural matters?</p>	<p>- Two answers were allowed: yes or no. If yes, the interviewee was told to point out which area of the company he/she was referring to.</p> <p>-Answers were classified according to whether the interviewee considered the activity to be a formal or an informal one. The interviewee was asked to list the meetings, activities and topics discussed. Responses were coded in figures 10.12 and 10.14 according to whether they were informal activities ('I' and grey shading), formal activities ('F') or neither of these (this was indicated with a blank space). The appropriate letter is shown in the figure against the appropriate category of task environmental scanning (i.e., customers, competitors, suppliers and technological) or general environment (national economy, politics, socio-cultural matters and regulations). Questions were asked for both 1989 and 1999.</p>

³⁸³An inter-coder reliability check gave a reliability score of between 79.7% and 84% for the questions related to the environmental scanning behaviour of the companies under analysis. The reliability score was calculated using eight interview transcripts. The re-coding was then compared to the original coding and percentage score calculated using Huberman and Miles (1994) formulae: reliability=number of agreements/total number of agreements + disagreements.

Environmental scanning and organisational flexibility

AGD and Vicentín

AGD and Vicentín sought new sources of information throughout the 1990s. AGD, however, procured information from different sources, unlike Vicentín in which the scanning behaviour was more erratic as evidenced by the opinion of the interviewees and illustrated in figure 10.11.

As figure 10.11 illustrates, our interviewees in AGD laid considerable importance on scanning the environment. However, figure 10.11 shows a variation over time: while in the 1980s the company stressed the scanning of the general environment, in the 1990s the greatest effort was made in scanning the task environment (see in figure 10.11 the black shading representing the extensive scanning activity in the task environment in the 1990s).

In the 1980s AGD stressed the scanning of the general environment – mainly macroeconomic issues – and in the task environment only gathered data from the crushing industry and “*somehow*” found information about the edible oil industry. During the course of the 1990s this situation changed: “*We are not only aware of what is happening in the edible oil industry, but also in the food industry, and we have stronger relationships with customers and suppliers. They are also key elements in sensing the environment.*”³⁸⁴

The idea of “*being open to what is happening outside the organisation*”³⁸⁵ is an integral part of the Board’s day-to-day work: “*thinking strategically means that you have to be aware of what is going on not only in your company, but also in the rest of the industry and the country.*”³⁸⁶ Adrián Urquía Jr. stated that the idea of scrutinising the outer-context was not new, but had always been in the spirit of the Board: “*We learnt from the founder always to be ready to listen, to be aware of what others were doing. The difference now is that with the new contextual reality, this is more organised and our*

³⁸⁴ Interview with Adriana Urquía-a Director of AGD

³⁸⁵ Interview with Roberto Urquía-Director

³⁸⁶ Interview Adrian Urquía-Director-CEO

agenda is full of activities to enable us to look into this reality. [...] this openness allowed us to take advantage of market opportunities as in the case of our branding strategy."³⁸⁷

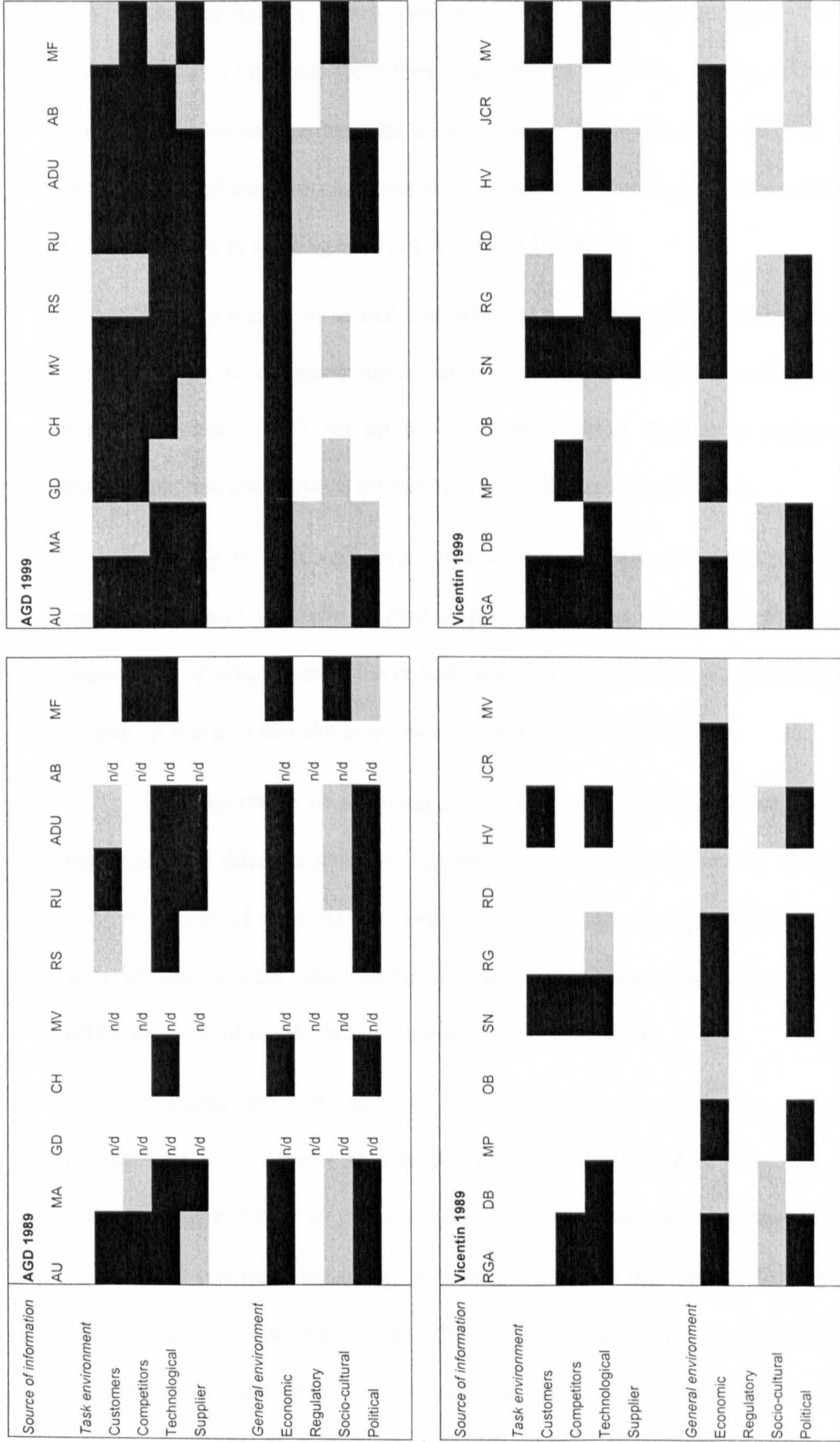
Vicentín presented a different scanning behaviour compared to that of AGD. Our interviewees described the extent to which their scanning behaviour had changed over time. Figure 10.11 demonstrates that in the 1980s the company was mainly scanning the general environment. The task environment was not tackled as a priority. Only in the 1990s, as figure 10.11 illustrates, was there more stress on scanning the task environment albeit to in a lesser extent than AGD (see in figure 10.11 variation in shadings from different periods). Some managers blamed the problems they experienced during the 1990s on the company's failure to pay attention to the outer context:

*"In the 1980s and 1990s we could not anticipate the changes in the market for edible oils, the importance of scaling up our crushing capacity and the consequences of the economy opening up in Argentina. I would not say we failed, but we did not perform as well as other companies did."*³⁸⁸

³⁸⁷ Interview Adrian Urquía-Director-CEO

³⁸⁸ Interview with Miguel Valazza-Finance department and Administration office Buenos Aires

FIGURE 10.11: SOURCES OF INFORMATION AT AGD AND VICENTÍN OVER THE PERIOD 1989-1999



Differences between both AGD and Vicentín also arose in terms of the formal and informal mechanisms the companies had for scanning the environment. Our interview data and figure 10.12 highlight the differences between the firms. Firstly, AGD used both more formal and informal mechanisms than Vicentín. Secondly, from 1989 to 1999 AGD had increased its informal mechanisms compared with Vicentín, as can be seen in figure 10.12 (see differences in shading between AGD and Vicentín).

The emergence of formal and informal mechanisms of scanning in AGD reveal the ways in which the company supported the scanning behaviour it wanted from its managers and employees. AGD set up an Economic Studies Unit as a means of channelling macroeconomic and sectoral information to the Board and managers.

“Setting up this unit gave us a means of channelling the information from the environment, and secondly, it formed part of an organisational effort to emphasise the importance of being open to the outside world. Of course this is a process that takes years. Setting up this unit was the outcome of a whole philosophy.”³⁸⁹

The importance of scanning the environment in AGD was reinforced by informal mechanisms at different levels of the organisation (see figure 10.12). The Board supported different levels of contacts with colleagues from other companies in different industries, trips abroad to visit other companies and institutions, and internal meetings between different levels of employees and experts in different fields.

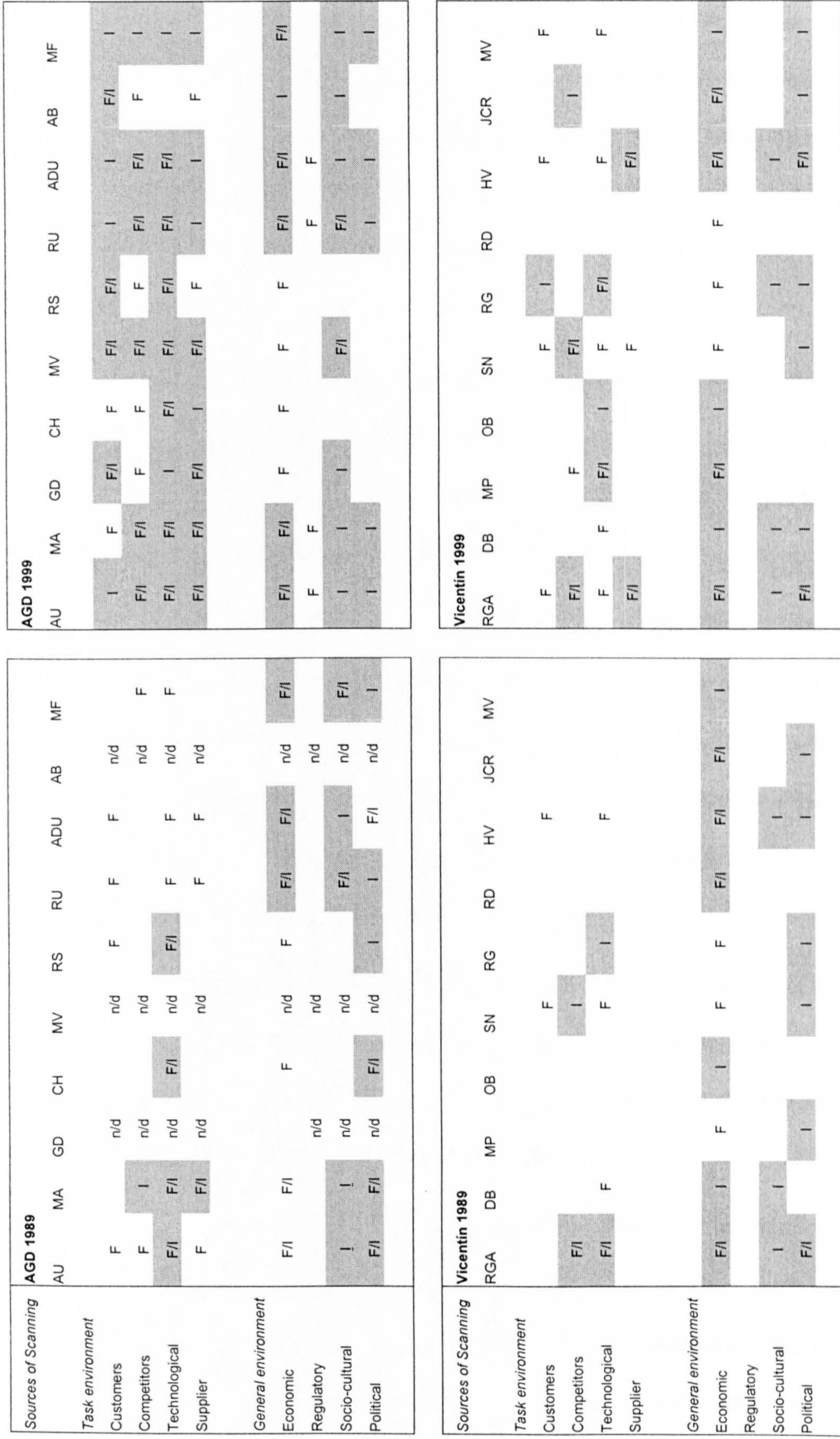
Vicentín did not have a formal structure for scanning and while informal mechanisms were developed over the period 1989-1999 they were still not enough for some managers: *“They’ve got everything [Directors], we have nothing. If you do not have information, you make the wrong decisions. This is an issue here. The management do not bother to share the information they have to help us in our work. I do not think they do this on purpose, I think it is more to do with the culture of the organisation: ‘we family*

³⁸⁹ Interview with Carlos Haerberle-Economic Studies Manager in AGD

members make decisions, so you do not need to bother about it.”³⁹⁰ Middle managers and employees therefore keep themselves informed through publications issued by the professional associations and industry reports the company buys for specific reasons, such as those related to the branding market. Visits to suppliers in the country and abroad are some of the informal mechanisms used in Vicentín.

³⁹⁰ Interview with Osvaldo Arciniega-Commercial department

FIGURE 10.12: FORMAL AND INFORMAL STRUCTURES OF SCANNING IN AGD AND VICENTÍN 1989-1999



Sidus and Andrómaco

Our interviewees in Sidus and Andrómaco, as shown in figure 10.13, were consistent in their descriptions of the extent to which the scanning behaviour of the firms has changed over time. The opening up of the industry to competition in the early 1990s boosted scanning activities in Sidus and, to a lesser extent, in Andrómaco. While both companies saw changes in their scanning behaviour and structures, the main differences need to be stated.

In the 1980s the most important scanning activity in Sidus sought to understand the national economy and competitors' moves in the pharmaceutical industry. However, by the 1990s new scanning interests in customers, suppliers and competitors emerged, as the increase of the black shading in figure 10.13 shows.

The transformation of the company from a simple national laboratory in the 1980s to a major health company in the 1990s was considered as having an impact on the assessment of the environment: *“Over this period [from the 1980s to the 1990s] you could imagine that we went through stages in which more information was needed from different sectors like biotechnology and new relationships were built. Gathering this information was vital for seizing opportunities in the market.”*³⁹¹

Andrómaco, on the other hand, showed a different pattern of scanning behaviour. Based on our interviews in the company, figure 10.13 displays the low level of scanning activity in the 1980s and the rise in this activity in the 1990s albeit to a lesser extent than in Sidus (see evolution of black shading in figure 10.13).

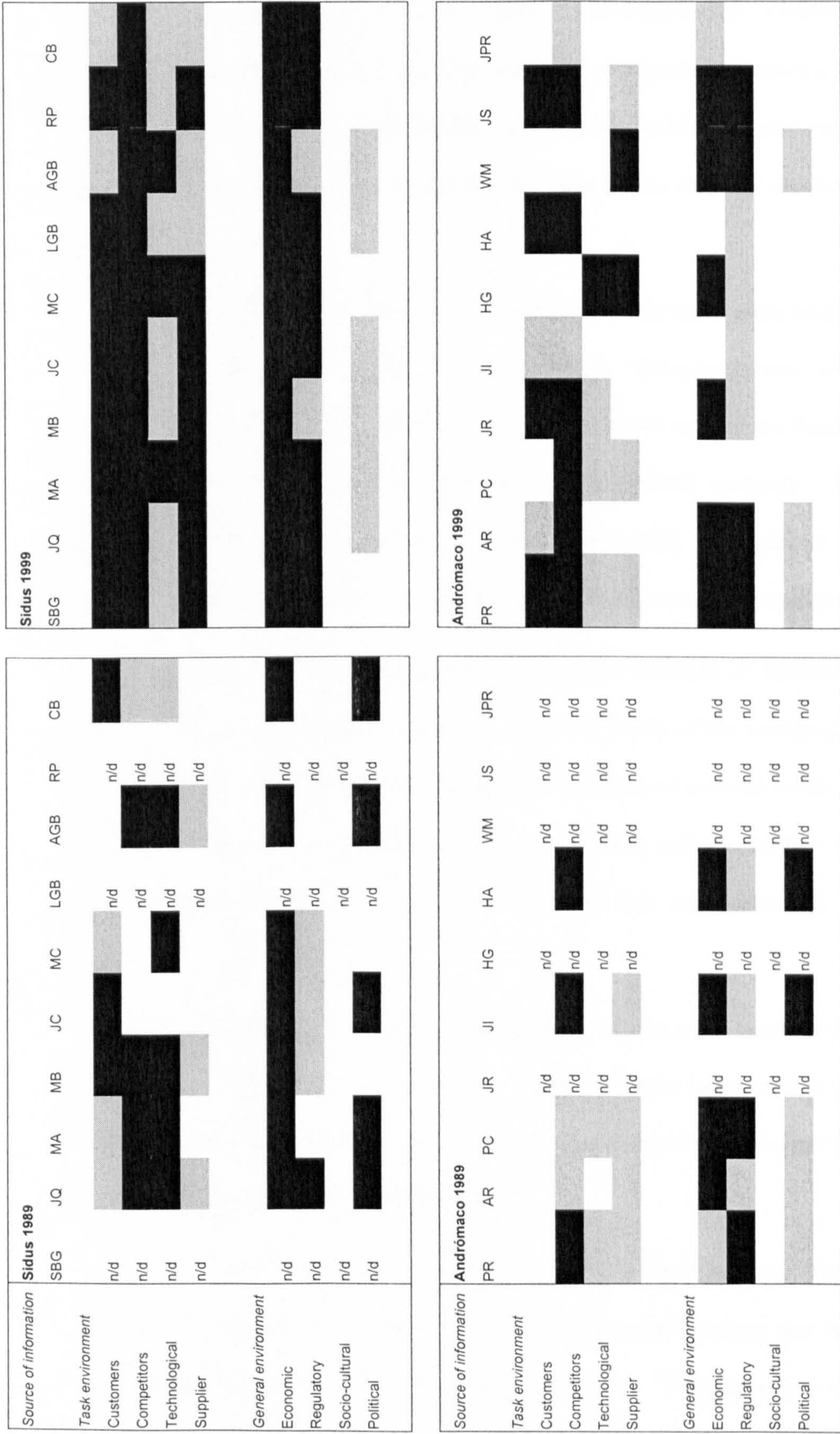
The low level of scanning activity in the 1980s was the result of the concentration of decision-making power in the hands of the CEO, as many interviewees suggested.³⁹² The 1990s required a different approach and this was brought into the company by the new CEO, Pablo Roviralta. The company's focus on its customers rather than the wholesaler

³⁹¹ Interview with Marcelo Argüelles-President and CEO of Sidus

³⁹² Interviews with Pablo Roviralta, Pedro Carvallo and Alejandro Roviralta

chain (one of the main changes after 1997) made Andr omaco start to scan more and look at different sources of information.

FIGURE 10.13: SOURCES OF INFORMATION IN SIDUS AND ANDRÓMACO OVER THE PERIOD 1989-1999



Both Sidus and Andrómico also diverge regarding the way formal and informal mechanisms of scanning were used. Figure 10.14 demonstrates clearly the differences between the firms in that Sidus not only used more mechanism of scanning (i.e., formal and informal) but also increased the number of informal mechanisms over time (see in figure 10.14 where the grey shading represents the areas where informal mechanisms are being used).

Informal and formal structures of scanning became much more widely used in Sidus over the period analysed, as shown in figure 10.14. Three areas were created: legal and regulatory analysis; sectoral; and macroeconomic analysis to keep the Board and managers abreast of the latest changes in the sector and in national economy. The information produced by the legal and regulatory area was widely disseminated throughout the company to keep employees informed of recent changes in legal and regulatory systems.

Informal mechanisms supported the scanning structure of the company. Internal workshops were a widespread practice at different levels of the company and formed an arena in which relevant aspects of the national economy or sectoral trends were discussed. Also employees from different levels of the structure had access to a wide variety of publications including retail reports, and sectoral and macroeconomic reports, among others.

The scanning mechanisms in Andrómico, on the other hand, evolved over time. From the 1980s up to 1996 managers in Andrómico only had access to sectoral reports. Contact with Tuchi, the CEO, was sporadic, thus preventing managers from discussing sectoral and company strategies with him.

Pablo Roviralta – the new CEO – started to have meetings with the different managers and sought to convey those factors in the environment that would affect the company in general and each manager's particular area: *"I try to analyse with the different areas the impact of the macro-policies on the company and on their department. This is important for us because we used to have a blinkered view of what was going on*

*outside.*³⁹³

What stands out in Sidus and Andrómaco as a similarity in their scanning behaviour is the fact that the scanning of the general environment was considered critical in both companies. Figure 10.13 shows the relevance of the scanning of the general environment over time. Being a regulated industry in the 1980s and in a process of deregulation in the 1990s might explain this behaviour (Grabowsky *et al*, 1978). The increased scanning of the 'regulatory' source of information in the 1990s is also noticeable. This occurred after the regulations of the industry were loosened, opening up new opportunities in the industry.

³⁹³ Interview with Pablo Roviralta-CEO Andrómaco (second interview, 2000)

FIGURE 10.14: FORMAL AND INFORMAL STRUCTURES FOR SCANNING IN SIDUS AND ANDRÓMACO 1989-1999

		Sidus 1989												Andrómaco 1989											
		SBG	JQ	MA	MB	JC	MC	LGB	AGB	RP	CB	PR	AR	PC	JR	JJ	HG	HA	WM	JS	JPR				
Sources of Scanning	Task environment																								
	Customers	n/d	F/I	F/I	F	F/I	F	n/d	n/d	n/d	F	I	F	F	n/d	n/d	n/d	I	n/d	n/d	n/d	n/d			
	Competitors	n/d	F/I	F/I	F	F	F	n/d	F	n/d	F	F	F	F	n/d	n/d	n/d	F/I	n/d	n/d	n/d	n/d			
	Technological	n/d	F/I	F/I	F	F	F	n/d	F	n/d	F	F	F	F	n/d	n/d	n/d	I	n/d	n/d	n/d	n/d			
Supplier	n/d	F	F	F	F	F	n/d	F	n/d	F	F	F	F	n/d	n/d	n/d	I	n/d	n/d	n/d	n/d				
General environment	Economic	n/d	F	F/I	F/I	F	F	n/d	F/I	n/d	F	F	F	F	F/I	F/I	F/I	I	F/I	F/I	F/I	F/I			
	Regulatory	n/d	F	F	F	F	F	n/d	F	n/d	F	F	F	F	F	F	F	F	F	F	F	F			
	Socio-cultural	n/d	I	F/I	I	I	I	n/d	I	n/d	I	I	I	I	I	I	I	I	I	I	I	I			
	Political	n/d	I	F/I	I	I	I	n/d	I	n/d	I	I	I	I	I	I	I	I	I	I	I	I			
Sources of Scanning	Task environment																								
	Customers	I	F	F	n/d	n/d	n/d	n/d	n/d	n/d	n/d	F/I	F	F	F/I	F	F	F/I	F/I	F	F	F			
	Competitors	F	F	F	n/d	n/d	n/d	n/d	n/d	n/d	n/d	F	F	F	F/I	F/I	F/I	F/I	F/I	F	F	F			
	Technological	F	F	F	n/d	n/d	n/d	n/d	n/d	n/d	n/d	F	F	F	F/I	F/I	F/I	F/I	F	F	F	F			
Supplier	n/d	F	F	n/d	n/d	n/d	n/d	n/d	n/d	n/d	F/I	F	F	F/I	F/I	F/I	F	F	F	F	F				
General environment	Economic	F/I	F	F	n/d	n/d	n/d	n/d	n/d	n/d	n/d	F/I	F	F	F	F	F	F	F	F	F	F			
	Regulatory	F/I	F	F	n/d	n/d	n/d	n/d	n/d	n/d	n/d	F/I	F	F	F	F	F	F	F	F	F	F			
	Socio-cultural	F/I	F/I	I	n/d	n/d	n/d	n/d	n/d	n/d	n/d	F/I	I	I	I	I	I	I	I	I	I	I			
	Political	F/I	F/I	I	n/d	n/d	n/d	n/d	n/d	n/d	n/d	F/I	I	I	I	I	I	I	I	I	I	I			

Environmental scanning in the most flexible firms and in the less flexible firms

What are the similarities and differences between the scanning behaviour of the flexible and less flexible firms? And what has influenced that behaviour?

In the flexible companies we found three common patterns in the way they scanned the environment: firstly, both AGD and Sidus created formal and informal structures of scanning; secondly, both companies attempted to create an external openness and orientation; and, finally, the scanning behaviour of both companies was boosted by the new mental models that prevailed during the 1990s.

Regarding the first aspect, AGD and Sidus tried to limit the ambiguity of the environment by setting up information-processing structures (Thomas *et al*, 1993) and informal mechanisms of scanning (Pettigrew and Whipp, 1991). AGD set up the Economic Analysis Unit and Sidus convened three units to keep the company abreast of the macroeconomic situation, the sector, and legal and regulatory changes.

The second aspect – external openness and orientation – was also seen as a common factor in both AGD and Sidus. Externally oriented companies are more able to sense competitors' moves (Thomas *et al*, 1993) and perceive themselves as more capable of implementing competitive responses than internally focused firms. Managers in these firms are also more confident at creating a fit between the organisation and the environment by using environmental scanning (Smith *et al*, 1991; Barr and Huff, 1997).

It was essential for AGD and Sidus to scan the environment to become externally oriented: *“From the foundation of the company, the founders were aware of the importance of understanding what was going on outside the company. We were never a self-absorbed company. We were always aware of the importance of being externally oriented [...] Every*

*employee is aware of the importance of having an open mind and catching all they can from the sector, competitors and customers. This is our constant message to them.*³⁹⁴

*“Watching what was going on outside the company, and observing the trends and changes in the competition was the only way of succeeding we found. This [external orientation] helped us to seize the opportunity while others [competitors] were more concerned with domestic problems.”*³⁹⁵

The third common aspect we found in AGD and Sidus was the influence of the new mental models on their scanning behaviour. While analysing the heterogeneity of the dominant coalition as a determinant of organisational flexibility, we flagged the importance of the cognitive diversity or diversity of mental models in the dominant coalition. These new mental models helped managers to sense signals from the outer context and it also helped them to make sense of those signals (Pettigrew and Whipp, 1991:117).

*“The fact that we have changed the profile of our management over the last 10 years to suit the requirements of the Argentinian environment, also swayed our decision-making process. Managers are fully aware of what is happening in the external context through our department of economic studies and their own information, reports and contacts. We have internal meetings or workshops – a word that is trendy now – to clarify and share information and make decisions accordingly.”*³⁹⁶

*“Before, we [the Board] made decisions by relying on common sense. Today things are different. The new professionals come better prepared and are very quick off the draw. That is better because it accelerates our response.”*³⁹⁷

³⁹⁴ Interview with Adriana Urquía-Director in AGD

³⁹⁵ Interview with Santiago García Belmonte-family member and Executive Director of Retail Businesses in Sidus

³⁹⁶ Interview with Adriana Urquía-Director of AGD

³⁹⁷ Interview with Marcelo Argüelles-President and CEO of Sidus

Regarding the less flexible firms – Vicentín and Andrómaco – the main similarities lay in the lack of a formal structure for scanning and the importance of scanning the general environment instead of the task environment during the 1980s.

Neither Vicentín nor Andrómaco have formal structures for scanning. There are different reasons for this lack of formal structure. In Vicentín they claimed that there was no formal structure because there was no need³⁹⁸ or because the main scanning activity fell to the Board of Directors.³⁹⁹ In Andrómaco, on the other hand, they are more hesitant regarding the usefulness of such a structure: *“We are not a big enough company to afford an area fully dedicated to assessing the context. We found, however, that companies in the sector are setting up these structures. We have still not made up our mind about the best route to follow.”*⁴⁰⁰

In the 1980s both companies also highlighted the importance of scanning the general environment. This attitude has changed since 1990 and the focus of the scanning behaviour has been placed firmly on the task environment (see figures 10.11 and 10.13). The lack of support in the 1980s for task scanning in the companies had harmful consequences for business, as can be seen in the opinion of the interviewees: *“The problems we have are the result of not caring much about our customers’ taste and our competitors’ moves. Now there is an awareness that the customer is the king and our competitors are there to watch them and care about what they are doing.”*⁴⁰¹

*“We were a closed company. The result in Vicentín was clear: the crisis in 1997, low profitability and a low level of professionalism in the company.”*⁴⁰²

The highly flexible firms in this research sought new sources of information much more actively and applied a rich array of formal and informal mechanisms for scanning the environment. The less flexible firms had a less well organised approach to environmental

³⁹⁸ Interview with Herman Vicentín

³⁹⁹ Interview with Osvaldo Arciniega-Commercial department

⁴⁰⁰ Interview with Pablo Roviralta-CEO Andrómaco

⁴⁰¹ Interview with Javier Ruiz-Promotion and Sales Manager Andrómaco

⁴⁰² Interview with Juan Rodriguez-Commercial department

scanning. The outcome of the scanning behaviour was self-evident: flexible firms anticipated changes in the sector and seized opportunities while the less flexible firms simply could not.

10.6 A strong organisational identity

Why does the concept of organisational identity emerge as an important one in understanding how flexible firms adapt? And what are the main features of the concept of organisational identity?

Albert and Whetten (1985) characterise organisational identity as a concept with three dimensions: firstly, what is considered central to the organisation; secondly, what makes the organisation distinctive; and finally, what is perceived by members to be an enduring or continuing feature linking the present of the organisation with its past. At the heart of this definition are core values that make organisations act or react in a particular way and the lenses through which managers interpret organisation level issues (Dutton and Penner, 1993; Collins and Porras, 2000; Gioia and Thomas, 1996).

We preferred to use the concept of values rather than culture or organisational culture because the former is more sharply demarcated than the latter facilitating organisational analysis (Alvesson, 1987). While culture is more preoccupied with limited organisational meanings, symbols and beliefs (Pettigrew, 1979), values are central aspects of the organisation and more enduring as well (Albert and Whetten, 1985).

Therefore, how can a firm's identity enhance or harm organisational flexibility? Some writers on organisational identity emphasise that because organisational identity is composed of values that are enduring and deeply ingrained, it is likely to provide a natural inertial force (Stimpert *et al*, 1998; Reger *et al*, 1994) and cause resistance to change (Dutton and Dukerich, 1991).

On the other hand, among those favouring the idea of organisational identity as a source of both organisational continuity and change are Collins and Porras (2000). In their examination of eighteen long-lasting firms, which they term 'visionary firms', they concluded that visionary companies are those that can articulate a core ideology. Through these core values, companies

have a clear identity, lending the organisation strategic continuity and precision. For Collins and Porras, strategies change as market conditions change, but core values remain intact in a visionary company.

The questions that emerge from this are: what type of organisational identity do the companies under analysis have? And how did their organisational identities – through their set of core values – promote or constrain their organisational flexibility?

Due to the central role of core values within the concept of organisational identity, we tried to operationalise this determinant through one activity: ideological coaching over successive generations. Ideological coaching, a term previously used by Collins and Porras (1991 and 2000), is the anchor that makes it possible for the values of previous generations to be passed on, accepted and used by successive generations.

How this factor influences the identity of an organisation and its ability to change is described by the literature on organisational identity. The analysis of the evolution of company values over successive generations seems more appropriate when seeking to determine whether or not the firms are conservative about their values and how this influences their organisational identity (Collins and Porras, 2000), and whether those values acted as enablers of organisational flexibility or as constraining factors (Volberda, 1999).

To undertake the analysis of ideological coaching over successive generations, we used different types of written material (i.e., speeches, letters) from which we attempted to obtain organisational values. The sources of data in the four companies are specified in table 10.19. In their review of unobtrusive methods, Webb *et al* (1966) and Lee (2000) argue for the use of speeches and letters as ways of understanding the evolution of ideas and values. Similarly, Collins and Porras (1991) also compared speeches and discourses to analyse how values from the first generation influenced the second one.

TABLE 10.19: SOURCES OF DATA IN THE FOUR COMPANIES UNDER ANALYSIS

Company	Material analysed
<i>AGD</i>	Note sent from Adrian Urquía to the Manager of the GD Plant. Dated January, 1963. Speech given by Mr Adrian Urquía to managers and employees in December, 1968. Speech given by Mr Roberto Urquía to managers and employees in March, 1989 at the launch of "Natura" bottled edible oil. Speech given by Mr Adrian Urquía Jr to managers in June, 1990. Speech from the Board-Roberto Urquía-November, 1996. Speech from the Board to newcomers during the induction week.
<i>Vicentin</i>	Based on the 14 interviews held in the company
<i>Sidus</i>	Speech given by Mr. Miguel Argüelles in CILFA - the Professional Association- in October, 1972. Speech given by Antonio Argüelles to Sidus' managers explaining the investments in the biotechnological department in the company. Dated August, 1980. Letter from Antonio Argüelles to his children - it was a letter that was given to Antonio's children after his death- dated July, 1984. Article in "Argentime" Magazine. Number 5, year 1998, page 123. Presentation given by HR area to managers of Sidus in December, 1999. Speech given by Mr. Marcelo Argüelles in the "Executive Programme for Sidus Managers" in module 6 "Motivation and empowerment in the management practice" 6/7 December, 2000. Speech given by Marcelo Argüelles at the launch of a genetic therapy in a joint venture with Fundacion Rene Favaloro. May, 2000.
<i>Andrómaco</i>	Speech given by Alejandro Roviralta in commemoration of the 65 th anniversary of the company in Argentina- 4/10/1991. Speech given by Alejandro Roviralta on the occasion of the launch of Vita Dermaglos (dermatological product) in the Caesar Palace Hotel- 4/11/1992. Note from Pablo Roviralta to Alejandro Roviralta Jr. Dated 1998. Speech given by Pablo Roviralta on the occasion of the 'Pharmaceutical day' in the Coliseum theatre- 30/11/1999. Speech given by Pablo Roviralta on the occasion of the national convention of sales in Salguero Plaza auditorium 1 st and 2 nd of March 1999. Speech given by Pablo Roviralta to the 'brand team' in September 2000 (first speech). Speech given by Pablo Roviralta to the 'brand team' in September 2000 (second speech).

We need, however, to acknowledge the limitations of our analysis. As mentioned before, we tried to collect data regarding the values of the different firms over successive generations. Nonetheless, the absence of data points in terms of quantity and quality meant that the data presented in this section is only indicative of the importance of certain values and that the study of this determinant needs to be undertaken in a more comprehensive and systematic way as we highlight later in the conclusions.

Hardy (2001) indicates that one of the main difficulties associated with data collection in discourse analysis is the sampling of the documents used for analysis. She argues that the sampling should contain enough documents – in terms of quantity and quality – to enable the researcher to draw conclusions from them. In analysing the social identities and relations in the

Canadian refugee system, Hardy and Phillips (1999) analyse 127 different documents as a way of achieving depth and scope of the social reality among refugees. Between the four companies analysed in our research, we were able to gather only 22 documents. Furthermore, in one of the firms – Vicentín – such material was unavailable. Due to the quantity and quality of the documents available in the companies it was inappropriate to draw any firm conclusions.

In the light of what has been said, we decided to include ‘strong organisational identity’ as a category of analysis in this thesis because it has the potential to help us understand organisational flexibility. While we found this determinant important and appropriate in terms of the literature, we also acknowledge the limitations of our analysis. This is the main reason why we do not want to expose fully the data obtained from the analysis as we have thus far done with previous determinants. Therefore, all the statements made in this section should be taken as indicative of the importance of some organisational values in the companies over time rather than as clear or overwhelming evidence.

For each company, a set of values was indicated. At AGD, values such as constant learning, an agile decision-making-process, and innovation, were identified as values that had been rooted in the company since the first generation tenure of family members. Some quotations from the documents analysed are indicative of the values the companies uphold over time:

“It is like emerging from the ashes. It is difficult, I know, but we must stand firm, we must remain strong. We have to bear the brunt of these problems. If we stick together and we sort all these problems out, what is happening in the company [1968 crisis] would be for our future managers and us a great learning experience, and for us a way of jumping hurdles without breaking our bones! We are going to be tougher and stronger; we are going to learn from this

*tough experience. We must learn, otherwise we are not going to survive.*⁴⁰³ [quotation indicative of constant learning as a value in the previous generation].

*“Our father always preached that you should learn from your experience. We are under pressure to make a decision [about investing in origination]. We have to learn from the lessons of the past. In 1968 we nearly went bankrupt because we had not realised the importance of having adequate stocks of raw material. This is an opportunity to move forwards and still learn as the founder said.”*⁴⁰⁴ [quotation indicative of constant learning as a value in the current generation].

*“We do not want to lose something that we have been cultivating since my father created this company. This is to make decisions fast, without bureaucratic structures that hinder the decision process. With these changes we want to ensure fast responsiveness.”*⁴⁰⁵ [quotation indicative of agile decision making process as a share value over time].

*“Our father always says that we have to be quick as a rabbit to take on competitors. This can be only achieved through creating and innovating. Natura is the example of this. This is our first step towards leading the market.”*⁴⁰⁶ [quotation indicative of innovativeness as a share value over time].

At Sidus, values such as risk taking and innovation were found to be ingrained in the two generations of family members. Again, some quotations from documents currently used by the firm are indicative of the existence of such values:

“The founders took a great risk while trying to set up the basis of this company. They always stated that this is the only way to achieve things. But risks, as you know from the history

⁴⁰³ Speech given by Mr Adrian Urquía to managers and employees in December 1968

⁴⁰⁴ Speech given by Mr Adrián Urquía Jr. to managers in June, 1990

⁴⁰⁵ Speech from the Board-Roberto Urquía-November, 1996

⁴⁰⁶ Speech given by Mr Roberto Urquía to managers and employees in March, 1989 at the launch of “Natura” bottled edible oil.

of the company, also imply sacrifices."⁴⁰⁷ [quotation indicating risk taking as a share value over time].

*"Do not copy: be creative or innovative, otherwise we are going to be followers rather than leaders."*⁴⁰⁸ [quotation indicative of innovation as a value in the previous generation].

*"Innovation was the key to the foundation of our company. It seems that innovation continues to be the pillar of our growth. Biotechnology is the future and this is the foundation stone."*⁴⁰⁹ [quotation indicative of innovation as a share value over time].

*"We are pioneers: we were innovative in our research, we diversified, always trusting the country and its human potential. Over 60 years we privileged and invested in the development of science [...] Our growth is based on a solid base of infrastructure, technology and innovation."*⁴¹⁰ [quotation indicative of innovation as a share value over time].

*"Infrastructure, technology and innovation, are what made this possible. This new methodology is the latest in the process of genetic engineering. We achieved this because of our commitment to innovation and creating solutions like this one."*⁴¹¹ [quotation indicative of innovation as a value in the current generation].

Vicentín and Andrómaco, on the other hand, differ from AGD and Sidus in this respect. We could not find strong evidence to support the existence of many shared values over time. What we found, however, is an indication of rejection of values sustained in previous generations. In Vicentín we found some evidence indicating that values such as innovation and being ahead of competitors that were considered important in previous generations of family owners were abandoned by the current generation as the following quotations indicate:

⁴⁰⁷ Speech given by Mr. Marcelo Argüelles in the "Executive Programme for Sidus Managers" in module 6 "Motivation and empowerment in the management practice" 6/7 December, 2000

⁴⁰⁸ Letter from Antonio Argüelles to his children – it was a letter that was given to Antonio's children after his death – dated July, 1984.

⁴⁰⁹ Speech given by Antonio Argüelles to Sidus' managers explaining the investments in the biotechnological department in the company. Dated August, 1980

⁴¹⁰ Article in "Argentine" Magazine. Number 5, year 1998, page 123.

⁴¹¹ Speech given by Marcelo Argüelles at the launch of a genetic therapy in a joint venture with Fundación Favaloro. May, 2000

*“When I was a child my grandfather told me about a company of dreams. We had products on the shelves of the supermarkets, our brand name sounded in customers’ heads and we took care of details. We were an innovative company in the market.”*⁴¹² [quotation indicative of innovation as a value in the previous generations].

*“The worst thing for me is that innovation is not at the heart of the company’s values. On the contrary, innovation implies risks and we hate that. Innovation implies investment in research and development of products, and we cannot afford that. Finally, innovation implies managerial capabilities that we do not have.”*⁴¹³ [quotation indicative of innovation as a value not shared by the current generation].

*“What strikes me, and you can consider this a change in values or ideas, is that we were winners, or we felt as if we were winners. Now we feel like survivors. This is a big change because if you think you are a winner, you will try to succeed and lead, but if you believe you are struggling to survive, you will never lead, you are a follower, whichever way you look at it.”*⁴¹⁴ [quotation indicating that ‘being ahead of competitors’ is not a value shared between the previous and current generation].

The case of Andrómaco is similar to that of Vicentín where risk taking is now rejected while it seems that in previous generations risk taking was considered critical to succeed. The following quotations show this apparent difference:

*“As pioneer, Raúl Roviralta Astoul had the capacity to merge a good idea and the courage to take the risk of starting with this company. Without this entrepreneurial and risk-taking spirit, this company would not have been possible.”*⁴¹⁵ [quotation indicating risk-taking as a value in previous generations]

⁴¹² Interview with Máximo Paduán-Commercial area and fourth generation member-Vicentín.

⁴¹³ Interview with Máximo Paduán-Commercial area and fourth generation member-Vicentín.

⁴¹⁴ Interview with Raúl Gonzalez Arceluz-Corporate lawyer

⁴¹⁵ Speech given by Alejandro Roviralta in commemoration of the 65th anniversary of the company in Argentina-4/10/1991.

*“We cannot afford to take risks. We would like people with stamina to try new things but under a controlled process. Therefore, we can attempt new things but only after we have thought a lot about it.”*⁴¹⁶[quotation indicating that risk taking is not a value shared between the previous and current generations].

How did the firms under study build up their identity over time? And, most importantly, how did the identity of the organisation affect the possibilities the organisation had for changing and thereby its flexibility? We start by explaining how the core values we previously indicated helped the flexible firms to build up a strong identity, unlike the less flexible firms.

Ideological coaching from previous generations to the current one

The core values that shape organisational identity did not emerge out of the blue, but it took time to form a consistent set of beliefs that moulded the identity of the organisations. The role of leadership in tackling this task proved to be important in the most flexible firms, and lack of leadership or problems of leadership proved to be critical in this respect in the less flexible firms.

In introducing his conceptual framework to understand the creation and change of organisational culture, Gagliardi (1986) states that in the early phases of an organisation, it is the leader who sets up the core values and beliefs of an organisation. Over the life span of an organisation, a series of formal structures will be created, and rules and procedures will replace the active role of the leader. The leader’s role would then be important but not as critical as in the first stages of the organisation (Collins and Porras, 2000; Albert and Whetten, 1985; Kimberly, 1979; Pettigrew, 1979, Selznick, 1957).

In AGD and Sidus many interviewees conveyed the critical role played by their founders in setting up the organisation’s values and aims: *“Through our identity we convey what we are*

⁴¹⁶ Speech given by Pablo Roviralta to the ‘brand team’ in September, 2000 (first speech).

*and what we want to be. We follow the way marked out by the founders, and we have a commitment to those values and that way of doing things they first established.*⁴¹⁷

*“What my father did is immeasurable. From nothing he set up what today is a leading company in its sector. His commitment and ideals remain today. His ideals are vivid and jog our memory about the right things to do.”*⁴¹⁸

But leader’s beliefs are not enough. Argyris (1992) asserts that success tends to consolidate the commitment and the set of beliefs an organisation has. What happened with AGD and Sidus was that the success of the business shifted the rational agreement members of the companies had with the leader’s beliefs towards a concentration on identifying with those beliefs. This is why, in our opinion, the process of identification started in both companies. Both companies developed consistent actions over time to build up their organisational identity. AGD and Sidus asserted the validity of their faith in innovation even when they faced threats and criticism from the external environment (Sidus with its deal with Merck, and AGD with its investments in the origination area); both companies made long-term investments even if the economic situation was bad (Sidus in biotechnology and AGD in brands).

The lack of success in both Vicentín and Andrómaco, on the other hand, harmed the commitment to the companies’ set of beliefs. Andrómaco disinvested and, for a long time, many of the market launches were not successful. After the new CEO took over, releases of products were called off for two years. *“We were a shrinking company. In a shrinking company nobody cares about the ship, but about their lives. You need to find a lifeboat rather than commit yourself to a sinking company.”*⁴¹⁹

Vicentín was careless regarding the innovativeness that characterised the company in the 1970s and put aside the branding strategy. The company no longer aspired to be a leader of the market – as previous generations had pleaded – and instead became a laggard.

⁴¹⁷ Interview with Marcelo Argüelles-CEO Sidus

⁴¹⁸ Interview with Roberto Urquía-Director AGD

⁴¹⁹ Interview with Pablo Roviralta-CEO Andrómaco

Our findings in the flexible and less flexible firms are important in understanding the relationship between strategy and leadership. The leaders in the flexible firms were an important element in strategy formation. Viewing leaders as historical figures and “*tenants of time and context*” (Leavy and Wilson, 1994) made us emphasise on the challenges the leaders faced during their tenures at the top rather than on personal attributes. Strategy in the four firms was informed by the organisational history (the “path dependencies” for Teece *et al*, 1997) and the organisation leaders. Raff (2000) shows how the founders’ vision and values in two book retailers in the USA have influenced what the company became and the strategies they followed. Kimberly (1979) and Pettigrew (1979) empirically demonstrated the critical role of the leaders of the organisations analysed (i.e., the founders of the organisations) in shaping the organisations’ strategies and set of beliefs. Similarly, this thesis demonstrates how the founders’ values and beliefs helped the organisations to cope with the demands of the new environment through implementing new strategic initiatives (i.e., biotechnological project in Sidus, branding in AGD) (Kimberly, 1979).

Briefly, by ensuring that their values remained largely unchanged throughout different generations, the flexible firms forged a very strong identity, unlike the less flexible firms in which the organisation’s core values changed over time. The role of the founders in creating a set of beliefs (i.e., values) and in consolidating the people’s commitment to those values allowed the companies to achieve a strong organisational identity.

The indoctrination of one generation by the previous one may, however, prove to be a critical element in forging organisational identity and most importantly, we need to understand how the firms (i.e., flexible and less flexible) coped with the transformation needed to be able to survive. Also how did the strong identity found in the flexible firms encourage change rather than impede it?

Change and identity in the flexible and less flexible firms

The main difference between highly flexible and less flexible firms is in the way their identity – through their organisational values – helped them to change or trapped them in inertial forces.

However deeply-rooted, the strong identities of both AGD and Sidus did not trap them in the rigidity of inertial forces. On the contrary, both companies were able to change quickly and smoothly without affecting their organisational core values. So how were AGD and Sidus able to cope with the relationship between strong identity and change? And why did Vicentín and Andrómico fail over time to undertake substantial transformations?

Barney *et al* (1998) suggest that organisational identity is likely to be a source of competitive advantage when the environment is stable and homogeneity is high. Otherwise, identity is likely to be a source of competitive disadvantage. However, when the identity includes ideals favouring change, innovation and risk taking, identity may not be a factor causing resistance to change.

Both AGD and Sidus incorporated values related to innovation and change (in AGD values such as agile decision making, and innovation; in Sidus values such as innovation and risk taking). The incorporation of these values enabled them to undertake major transformations without damaging their core identities and yet avoiding resistance to change (Barney *et al*, 1998).

Vicentín and Andrómico, on the other hand, rejected those values from a previous generation that emphasised change or transformation. Vicentín, for example, rejected the value of innovativeness. Andrómico, conversely, dismissed the value of risk taking that had been emphasised by previous generations.

Based on their theoretical analysis of organisational identity and change in turbulent environments, Gustafson and Reger (1995) distinguish two parts of an identity: the intangible attributes that are central and enduring - the core values - and the substantive attributes of

organisational identity. Examples of those substantive attributes are products, strategies, and geographic scope, among others. In times of turmoil, when organisations need to adapt to new environmental circumstances, the substantive parts change while the intangible parts remain unchanged. For Gustafson and Reger the outcome of this process is organisations that embrace change while simultaneously maintaining a sense of stability by using their sense of identity as a psychological anchor.

The strong sense of identity gave the most flexible companies the organisational anchor they needed to be able to move forwards and change (Gustafson and Reger, 1995; Calori *et al*, 2000). By maintaining core values but changing their strategies, products and processes, AGD and Sidus managed to transform themselves without creating internal turmoil. The interviews are revealing in this respect:

“Over the 1990s the company has changed a lot. However, if you ask an employee whether they have felt the changes, they would say that they had not noticed internal turmoil. They did not feel threatened by the changes. I do not know how or why this has happened. However, if you compared our business now and ten years ago, you would think we were a different company. [...] Regarding the process of transformation we went through, I would say that we did well in terms of avoiding internal chaos, but we were probably lucky enough to avoid these problems or we built some capabilities over time without noticing their effects in the long term.”⁴²⁰

At Sidus, they stated: *“One amazing aspect of this company is that over the last decade or over the last thirteen years, Sidus has shifted its strategy completely but we still have the spirit of the old times, even similar traditions and stories. We did not lose the thread that links us with our past, although we look to the future –a wise combination that was fostered by the founders and their children.”⁴²¹*

⁴²⁰ Interview with Roberto Urquía-AGD Director

⁴²¹ Interview with Marcelo Burstein-HR Manager Sidus

We have therefore underlined the critical role of identity in the process of change. Both AGD and Sidus were conservative about their core values but dynamic at the same time. This dynamism is represented by organisational values that were enablers of change and transformation. The strong identity found at Sidus and AGD did not imply, as some writers in the field of organisational identity state, an inertial force impeding change and transformation. On the contrary, their strong organisational identity enhanced their organisational flexibility by providing the anchor they needed to change, try new things and take risks.

10.7 The interconnection between the determinants of organisational flexibility

So far, we have considered the different determinants of flexibility individually, and have not addressed the linkages between them. The evidence provided suggests that there is an interconnection between the five determinants of organisational flexibility, which facilitated the rapid adaptation in the flexible firms analysed.

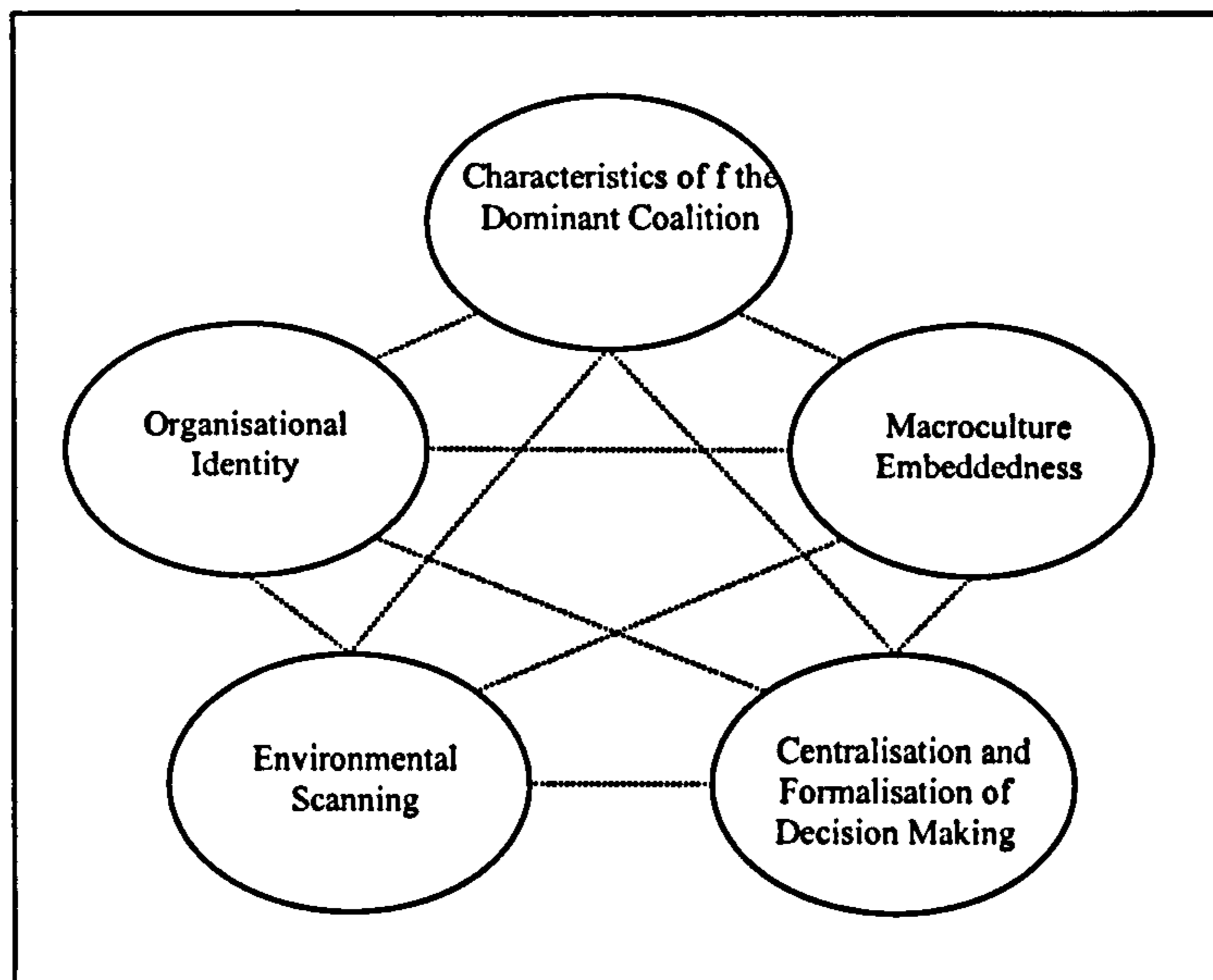
We argue that the five determinants we have analysed individually in previous pages form an interconnected model that enhances our understanding of the way flexible firms have successfully adapted in conditions of environmental turmoil. This model (see figure 10.15) is not a prescriptive one. On the contrary, it has emerged from the interplay of the initial theoretical framework and the empirical research undertaken in the four companies as shown in chapters 7 and 8. We are not claiming that this model could be used as an instruction manual to enable a firm to achieve flexibility. Instead, we would like to offer *“a representation of the mechanism by which the phenomenon under study operates”* (Pettigrew and Whipp, 1991:270).

The issue of interconnection between different organisational elements is not new. Pettigrew and Whipp's (1991) study of organisational change and performance in eight companies in four different industries sheds light on the holistic appreciation of organisational dimensions and their interrelation. They highlighted the importance of five interconnected factors in the way high and low performing organisations managed change over time. The firms in their study differed in the way they scanned the environment, managed their HR, led change, linked strategy and operationalised change, and achieved coherence. No single factor could provide an answer as to how a firm managed change to achieve competitive success. Rather, the explanation of change and competitive success was to be found in the interconnection of the five factors.

Figure 10.15 illustrates the existent interrelation between different determinants of organisational flexibility as revealed by the evidence provided in this chapter. This relationship

is shown through dotted lines. The lines represent a qualitative interpretation and do not imply a quantitative relationship. An explanation of those interrelations follows.

FIGURE 10.15: INTERCONNECTION OF DETERMINANTS OF ORGANISATIONAL FLEXIBILITY



The inflow of new managers with diverse experience background in the 1980s and early 1990s helped both AGD and Sidus to reduce the influence of institutional pressures. The heterogeneous top team had different cognitive frameworks that also helped the firms both to sense the signals from the environment and broadened their capacity for interpretation. As a result, both AGD and Sidus explored new strategic initiatives and became either early adopters or first movers of strategies (i.e., Sidus in biotechnology and retail in the pharmaceutical industry; AGD in branding and logistics in the edible oil industry).

The importance of the low level of macroculture embeddedness of AGD and Sidus (i.e., through the low level of connectedness and similarity in their industries) has been demonstrated by the fact that both firms were able to move rapidly and anticipate other competitors' moves. The 'disembeddedness' of AGD and Sidus from their macroculture was facilitated firstly by, mechanism of scanning (i.e., formal and informal mechanisms as previously analysed) and,

secondly, by managers who came from industries other than those in which the firms participated.

The low levels of centralisation and formalisation demonstrated by the flexible firms, on the other hand, increased the possibilities the top team had for interacting more (i.e., the constructive conflict we have analysed in this chapter), participating in decision making (i.e., through the process of delegation started by the Boards of both Sidus and AGD in the 1990s), and speeding up the responses of both firms when needed (i.e., the strategic initiatives of the flexible firms).

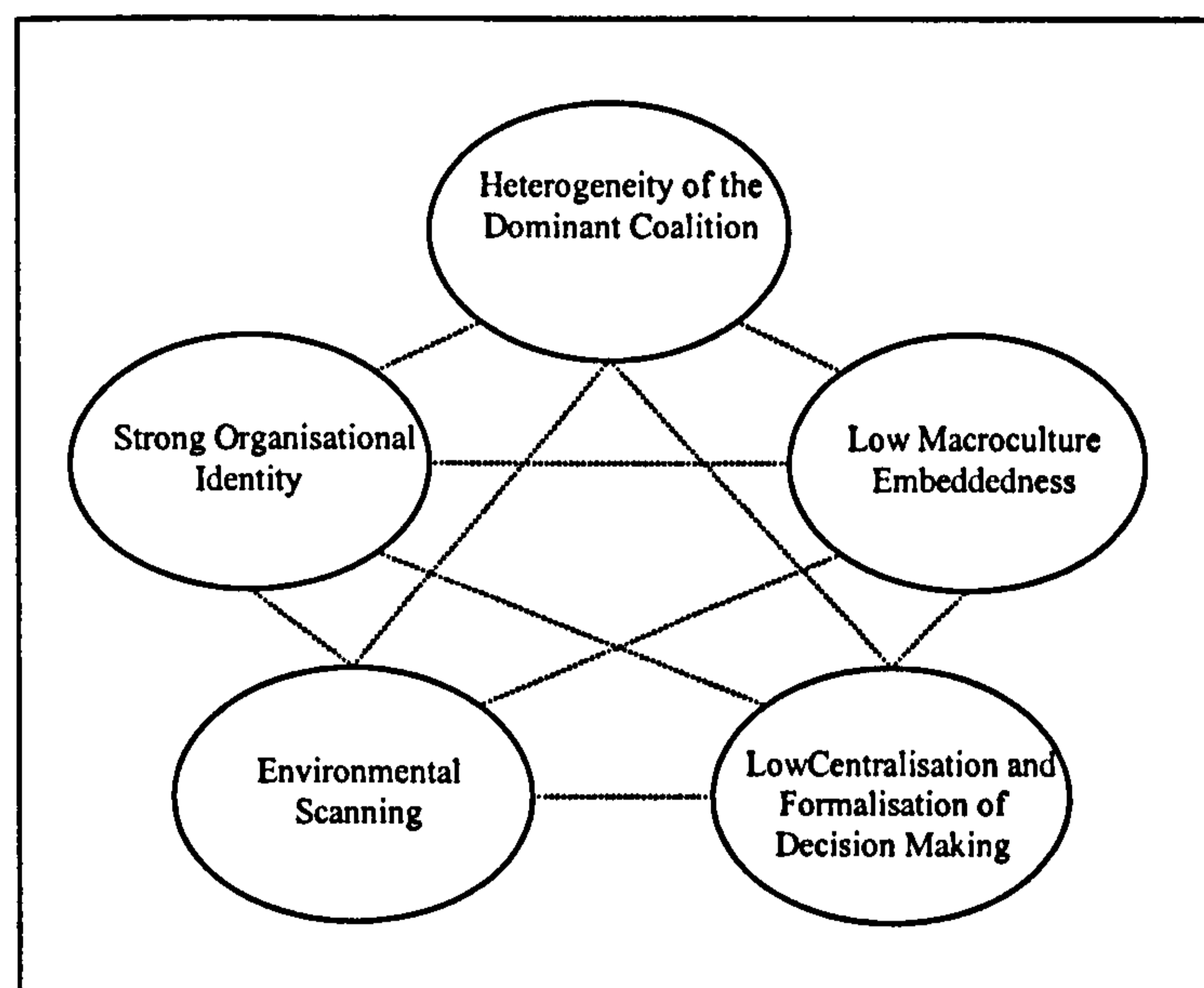
Scanning the environment in the flexible firms not only became a critical factor for anticipating competitors' actions (i.e., through the firms' formal and informal mechanism) but also influenced other determinants of organisational flexibility. Being open to the signals of the environment influenced the firms' ability to notice the importance of new managerial skills early in the 1990s as a competitive advantage (i.e., both firms had incorporated new managers throughout the late 1980s early 1990s). Similarly, scanning has also been important in the firms' decisions to re-arrange their structure and initiate a delegation process to allow greater participation of the business managers in operative decisions and allow the Boards of AGD and Sidus to perform a strategic role in the firms.

Finally, the strong organisational identity of AGD and Sidus represented by their set of core values impacted on the rest of the determinants. By supporting values related to change and innovation (such as a risk-taking attitude and innovation in Sidus, and agile decision making and innovation in AGD), the firms were able to avoid isomorphic behaviour in their industries. The same set of values enabled the firms to achieve external openness in an attempt to find new opportunities and maintain the competitive advantages that made them successful at adapting quickly. AGD and Sidus' set of beliefs also made it necessary for managers to realise those values. Finally, the values also necessitated organisational arrangements to enact those values.

The changes in structure and delegation process implemented in AGD and Sidus were the fruit of the companies' values of innovation and change.

The five determinants of organisational flexibility interconnected and complemented each other in a way that allowed the flexible firms to adapt rapidly under environmental turmoil, to move fast and first in their industries (i.e., through their strategic initiatives) and to cope with political and economical changes (i.e., changes in regulations and government policies) (see figure 10.16).

FIGURE 10.16: THE UPWARD SPIRAL OF FLEXIBILITY: INTERCONNECTION OF DETERMINANTS OF ORGANISATIONAL FLEXIBILITY IN THE FLEXIBLE FIRMS



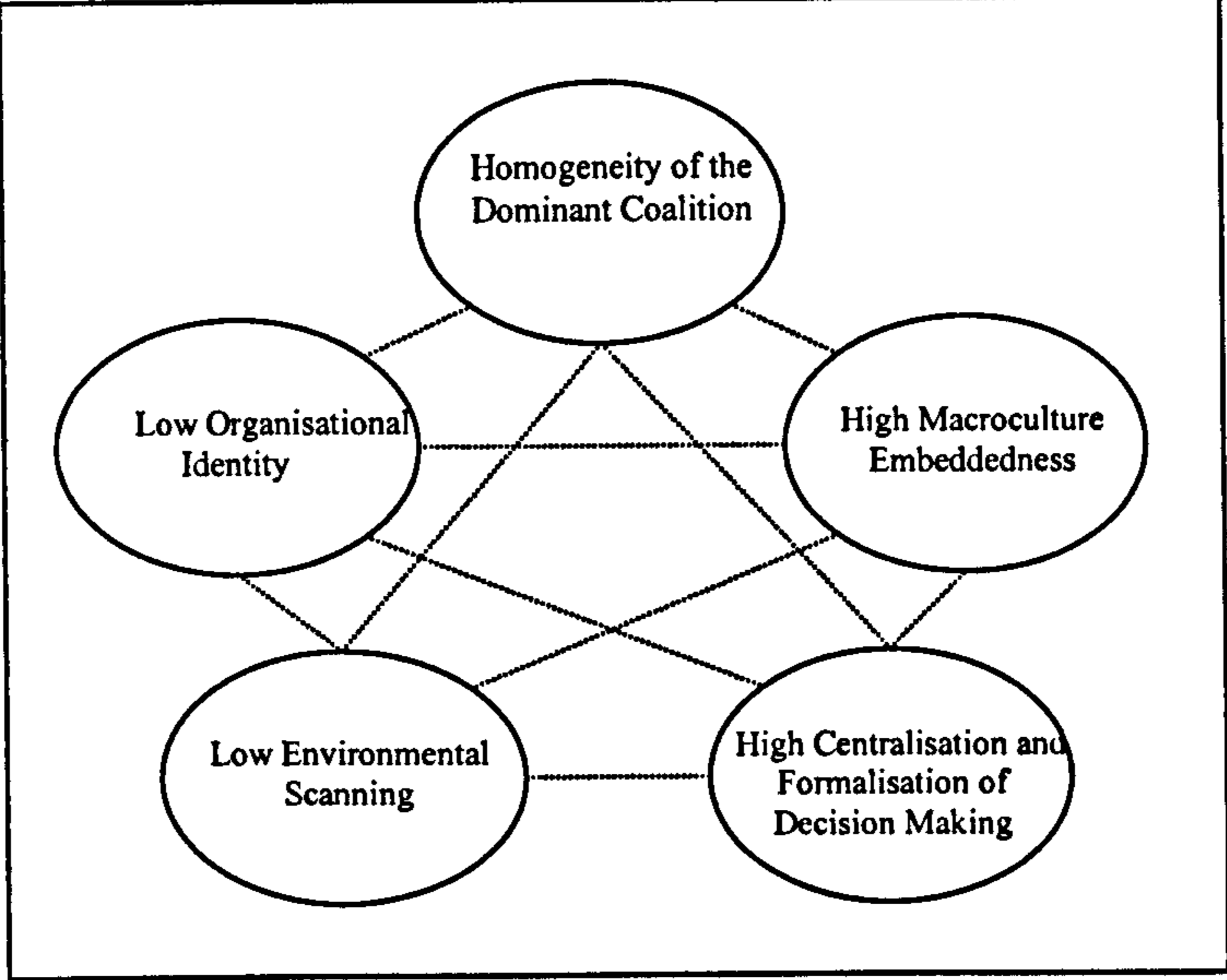
The less flexible firms, on the other hand, were laggards in their industries, they were not able to adapt rapidly under environmental uncertainty and, they were lagging behind the flexible firms (i.e., losing market share, lack of strategic initiatives). The less flexible firms were affected by what Whittington and Pettigrew (2003) called “a complementarities trap.” This complementarities trap happens, according to Whittington and Pettigrew, when firms persist with

what once fitted the organisation best, making it difficult for the organisation to change and adapt to new contextual challenges.

Andrómaco was trapped in an old formula of success: the idea that they should participate successfully in the different market niches of the pharmaceutical industry. Andrómaco toyed with different niches for a long time and overlooked the dermatological niche in which the firm had a competitive advantage. Vicentín, on the other hand, became trapped in the low-profit business of cotton ginning because it was part of the business the company started with. Vicentín did not invest in its brand strategy that was proving to be more profitable than cotton ginning and crushing. Both firms became stuck in the modes of thinking and working that brought them their initial success. When business conditions change, their once winning formulas instead bring failure (Sull, 1999 a, b).

The absence of determinants of organisational flexibility (most notably in Vicentín) may have encouraged Vicentín and Andrómaco to stick to the old complementary system that no longer worked in the 1990s. Neither Andrómaco nor Vicentín could envision a new system to replace the old one. Instead, they kept the same strategic frames that blinkered their vision, preventing managers from noticing new options and opportunities. This process led both Andrómaco and Vicentín to achieve high levels of inertia, making adaptation a difficult process. What saved the companies from succumbing was mainly the fact that they either markets willing to buy the firms' products (i.e., the case of Vicentín) or the internal changes in the company saved it from a downward spiral of more inflexibility (i.e., the case of Andrómaco after the replacement of the CEO) (see figure 10.17).

FIGURE 10.17: THE DOWNWARD SPIRAL OF FLEXIBILITY: INTERCONNECTION OF DETERMINANTS OF ORGANISATIONAL FLEXIBILITY IN THE LESS FLEXIBLE FIRMS



Chapter 11: Conclusions

This thesis examines the process of organisational adaptation and the competitiveness of firms in an emerging economy. The study is set in the Argentinian context of the 1990s when a combination of economic and political change triggered a transformation in the competitive context of indigenous firms. Two highly flexible firms and two less flexible firms were studied from the pharmaceutical and edible oil industries and longitudinal data were used to explore the determinants of organisational flexibility in those organisations.

This perspective raised a number of important issues regarding the content and process of being flexible and the determinants of organisational flexibility. Recognition of this gap in the literature prompted the development of three researchable questions:

- Do some firms display more flexibility than others in competitive circumstances?
- Why are some firms able to display more flexibility?
- And how do they do it?

In this final chapter we return to our research questions and draw together the results of our case study findings and analysis. We will also discuss the contributions this research has made to the study of flexibility, adaptation and change theory. We also identify the contributions to both the literature on family firms and the literature on the influence of national differences as shapers of the organisational action of firms. Finally, we describe the limitations of our work and suggest recommendations for further research, both to address these limitations and to exploit the utility of the research method developed during this study.

11.1 Findings and contributions of this study

In chapters 1 and 2 we stressed the importance of organisational flexibility as a way firms have of adapting under high levels of competitive pressure. We have also described our two main criticisms of research into adaptation – the extreme views in adaptation theory (i.e., contingency theory, population ecology) and the single level of analysis in some research on organisational adaptiveness. We argued that organisational adaptation and therefore flexibility is the interplay between inner and outer context, a dynamic process in which elements of both managerial choice and environmental influence coexist. Thus, deterministic and voluntaristic positions are rejected. Regarding the single level of analysis predominant in some research into adaptation, we propose a multilevel approach to understanding organisational flexibility. As yet, there are few multilevel analysis of organisational flexibility. If we recognise the dynamic and multilevel character of organisational flexibility then it is possible to raise a number of important questions concerning the process and character of a firm's flexibility over time and the factors that influence such a process. This study took up the challenge of exploring these dynamic issues regarding organisational flexibility.

Our research questions also encouraged us to address two critical aspects of the methodology (chapter 3). Firstly that data collection had to be longitudinal. Secondly, although the firm level of analysis was the focus of our interest, we also needed to investigate the phenomena at the industry level. Our choice of multiple levels of analysis therefore required the use of multiple research methods.

In chapter 4, we examined the national business environment (NBE) and the elements that may have influenced a firm's development in an economy characterised by turmoil. These factors were the role of the state, the role of financial institutions and the role of national culture. We demonstrated how the different elements of the NBE impacted on the constitution of indigenous firms. We firstly underlined the role of the state as critical in deciding the different types of firms that predominate over time (i.e., indigenous firms, multinationals, national

holdings) (Whitley, 2000; Kosacoff, 2000). We secondly stressed the role of financial institutions as determining the way firms funded their growth (i.e., through bank loans or own savings) (Zysman, 1983). Finally, the role of national culture was considered crucial in influencing a firm's governance structure, the ways in which people deal with each other and with other organisations, and the patterns of work organisation and control (Hofstede, 1991; Whitley, 2000).

In chapter 5 we explored the competitive environments within which the Argentinian pharmaceutical and edible oil firms operated during the 1980s and 1990s. We demonstrated how the environment had changed for regulated (i.e., pharmaceutical) and non-regulated (i.e., edible oil) industries from being a highly protective environment to one characterised by hypercompetition (D'Aveni, 1994).

Chapter 5 prompted us to concentrate on our first researchable question: do some firms display more flexibility than others? In other words, we wanted to know what indicates whether a firm is more or less flexible. We raised a set of indicators of flexibility, customised them for the different industries under study, and operationalised them to discover the flexible and less flexible firms in the two industries under analysis (i.e., pharmaceuticals and edible oils). The most flexible firms coped better than the less flexible firms in this new environment in terms of the four indicators analysed, namely: product innovation, collaboration and partnerships, and internationalisation and diversification. Sidus and AGD succeeded in adapting to the new circumstances while Andrómaco and Vicentín were laggards in their industries.⁴²²

In chapters 6 to 10 we turned our attention to our second and third researchable questions: why are some firms able to display more flexibility? And how do they do it? In essence, what factors will determine whether a firm is flexible? The four comparative case studies presented in chapters 7 and 8 revealed the transformation trajectories of the flexible and less flexible firms. In

⁴²² The way the indicators were chosen and operationalised to select flexible and less flexible firms are explained in the methodology chapter (i.e., chapter 3).

the course of the case studies we were able to see how the flexible firms renewed their strategies and organisational arrangements in a process of continuous change. The less flexible firms, on the other hand, followed a different transformational trajectory characterised by attempts of revolutionary change (see chapter 9).

Our comparative case studies of the four firms identified five interrelated factors as determining a firm's flexibility: characteristics of the dominant coalition; the degree of formalisation and centralisation of decision making; embeddedness within the industry macroculture; environmental scanning; and organisational identity (see chapter 10).

The internal dynamics and characteristics of the dominant coalition refer to the heterogeneity of the top management team and the interaction within the group. A diversity of career background and tenure within the industry promotes a range of cognitive mindsets and values among the top management team. The greater the heterogeneity and the greater the number of mental models there are among the top team, the wider the range of alternative interpretations of the state of the firms and their environment there will be. The cognitive diversity of the management team is represented in our research by the capacity for action and the constructive conflict among the top team. The former will allow managers to take risks and explore new opportunities (i.e., new strategies and new organisational arrangements). The latter will stimulate debate and offer new alternatives.

The degree of formalisation and centralisation of decision making refers to the extent to which the actions of the firms are governed by formal rules and procedures and the extent to which they are determined centrally at the top of the organisation. The more centrally and formally the organisation is controlled the more its actions are determined by a small number of senior managers. Consequently, the extent to which alternative ideas and interpretations of the organisation and its environment can emerge and influence decision making is reduced (Damanpour, 1991; Bahrami and Evans, 1995). The flexible firms in this thesis combined high levels of strategic centralisation and low levels of operational centralisation. Formalisation levels

in the four firms, however, increased over time because the changes in the outer context (i.e., opening up of the Argentinian economy) needed more formal mechanisms and control to achieve efficiency. This differs from the findings published in the literature on organisational innovativeness and flexibility that expects low levels of centralisation and formalisation of decision making in organisations (Volberda, 1999; Damanpour, 1991). However, the literature on organisational innovativeness and that on organisational flexibility concentrates on developed economies and firms rather than emerging markets.

Embeddedness in the industry macroculture refers to the extent to which the firm adheres to the institutionalised norms and values of the industry group in which it operates. Firms which are highly embedded within the industry macroculture are less inclined to reject institutionalised types of activity and pursue new strategies ahead of their competitors.

Environmental scanning highlights the importance of anticipating competitors' moves. Managers must be willing and able to interpret the firm's environment as they absorb signals and to question not only how the firm does things but also what it does. Using different sources of information as well as formal and informal sources helps managers to discern and interpret reality and anticipate challenges posed by the environment.

Finally, our last determinant is related to organisational identity. Organisational identity underlines the important role of the core values of the organisation as its central, distinctive and most enduring part (Albert and Whetten, 1985; Collins and Porras, 2000). Organisations with a strong set of core values related to innovation and change help firms to transform and adapt under changeable contexts.

Our findings demonstrate that none of the determinants identified on its own promotes organisational flexibility. It is, however, the interrelation of the five determinants that causes firms to be more flexible.

Implications of our framework and findings for the interpretation of the current Argentinian context

We have already discussed the empirical evidence this study provides for the understanding of the determinants of organisational flexibility and their importance in the adaptation of a firm in highly changeable contexts. We have not only revealed what determines whether an organisation is flexible (chapter 10) but have also identified a set of indicators to identify flexible firms (chapter 3).

The critical socio-economic situation that began in Argentina at the end of 2001 gave the researcher an opportunity to witness directly the way flexible and less flexible firms adapted in a rapidly changing environment. The way in which the crisis has begun to affect the firms in this study also confirms the appropriateness of the sample we have chosen to use: all four firms have begun to show patterns of behaviour previously identified in this study. AGD and Sidus have adapted quickly, whereas Vicentín and Andrómaco were sluggish in their response. Let us comment briefly on the way flexible and less flexible firms were adapting to the economic situation that was emerging by the end of 2001.

From 1998 Argentina began to enter and suffer a long recession that by the end of this PhD showed no signs of improving. As a consequence of that recession, and the resultant fiscal and debt burden the economy had almost ground to a halt by the end of 2001. The chain of payments between consumers, businesses and suppliers had broken down, and people were prevented from using their bank savings. Moreover, after a decade in which the peso was fixed by law at parity with the dollar the government allowed the peso to float on the open market (The Economist, March 2nd 2002).

How did the flexible and less flexible firms in this research confront such an unpredictable and changeable situation? The case of the edible oil industry is illustrative of the way the strategies elaborated by the firms in the 1990s helped them to make decisions according to the market needs a decade later. AGD's diversification strategies helped them to avoid

making huge losses. Since 2000, AGD has focused its efforts on exporting branded or elaborated products (i.e., soya milk, soya sub-products, and mayonnaise, among others) to avoid tax retentions from the government for products sold in bulk.⁴²³ The brands for the internal market continued but with a higher price (due to the devaluation of the peso). Market share was stable and showed no signs of losing ground in the edible oil market. In addition, AGD's efficient logistics chain helped the company to be cost efficient.⁴²⁴

Vicentín's focus on exporting bulk products was not rewarded by the new economic plan. A 10% retention tax was levied on exports of bulk products. Cotton ginning exports had to compete with lower prices from other developing countries and the internal sales of those products stagnated. In a deep economic crisis, Vicentín's inexpensive edible oil brand however was doing well and increasing its market share. It is important to remember, however, that the company had cast off such a strategy in the past and the brand strategy was a marginal one (see case study in chapter 8). Therefore, the company could not counteract the effect of the losses the firm suffered in the main businesses.⁴²⁵

When, as a result of the economic crisis, the pharmaceutical industry was running short of basic products, Sidus' biotechnological project was the good sign on the horizon. Through reinforcing exports of biotechnological products, Sidus invested the result of the exports into supplying their own pharmacies with pharmaceutical products. It was an exception among the shortages that affected the whole industry⁴²⁶: *"This is a bad time for the country and the industry, but we have also seen an opportunity in trying not to betray our customers. They can find products in our pharmacies. The economic situation will see some pharmaceutical firms struggling for survival, and we are going to gain terrain in the market"*.⁴²⁷ In spite of the crisis, Sidus also decided to make 20% of BioSidus public during 2002. The sell-off will provide Sidus

⁴²³ The retention tax was 10% for agriculture exports and 5% to industrialised products.

⁴²⁴ Informal talk with Adriana Urquía, Director AGD in December 2001; e-mail sent on 14/3/2002

⁴²⁵ Information obtained by e-mail sent by Roberto Gazze, Financial Director in Vicentín in March, 2002

⁴²⁶ La Nacion Newspaper. 27/06/2002, sección Economía.

⁴²⁷ Informal talk with Santiago G. Belmonte from Sidus. Talk held in January 2002 and telephone call in March, 2002.

with the money to continue to invest in a market that *“will become even more concentrated after the collapse of some of the remaining national firms”*.⁴²⁸

Finally, the case of Andrómaco is not so promising. The decision to focus on skin care is backfiring on the company. In the current economic situation, skin care is not seen to be an essential product, so sales have dropped. The company is running short of imported products. All these factors are worsening the financial situation of Andrómaco. In March 2002 there was a drop of 16% in sales compared to the same period the year before. Andrómaco's response to the crisis was to postpone investments and to cut costs including salaries.⁴²⁹

The flexible firms have adapted quickly to the new economic situation. Furthermore, the diversification strategy initiated in the 1990s gave Sidus and AGD flexibility to adapt a decade later. On the contrary, the focused strategy of the less flexible firms only provided them with short-term solutions, but in the longer term, these have turned out to be traps because such a focused strategy has impeded the firms' ability to adapt. The 2001/2002 crisis in the Argentinian economy confirmed Khanna and Palepu's (1997) assertion that focused strategies may be inadequate for emerging markets.

11.2 Organisational Flexibility

Throughout this thesis we have further developed the term 'organisational flexibility' to refer to the repertoire of organisational and managerial capabilities that allow organisations to adapt quickly under conditions of environmental change. The term organisational flexibility has previously been used to refer to the means firms have for limiting the impact of environmental change on the organisation (Ansoff, 1988). In Ansoff's words, the aim of organisational flexibility is to provide the firm with a buffer to protect the organisation from disturbances so that

⁴²⁸ Informal talk with Santiago G. Belmonte from Sidus. Talk held in January 2002 and telephone call in March, 2002.

⁴²⁹ Information provided by email by Pablo Roviralta, CEO of Andrómaco 15/3/2002

uncertainty will be reduced. However, the passive connotation of the idea of organisational flexibility as used by Ansoff does not result in fundamental changes to the organisation.

We have demonstrated the significance of a much more active interpretation of organisational flexibility than that offered by Ansoff (1988). The active interpretation includes factors that made the flexible firms analysed highly responsive to environmental change, allowing them to adjust their strategy and organisation quickly to exploit changes in their environments. Flexible firms were able to respond successfully to sudden environmental changes and able to build up new organisational capabilities (i.e., flexible capabilities) if required.

Flexible organisations do not just respond quickly to change in the environment, they also proactively influence that environment and force others to match their moves. AGD's and Sidus' strategic initiatives have changed the map of competition in their industries as they became first movers or early adopters of strategies, while other companies attempted to imitate the strategies adopted by Sidus and AGD in their respective industries.

In the case of the flexible firms analysed in this thesis, organisational flexibility also involved adaptation to environmental turmoil across the organisation and at different levels within the organisation, namely the strategic, organisational and managerial levels. Both AGD and Sidus have simultaneously changed their strategic orientation (i.e., both firms invested backwards and forwards in the chain of value of their respective industries), while transforming their organisations (i.e., introducing new managerial skills, and working on new organisational practices such as enhancing the delegation process, developing more professional management and a structure that stresses operational autonomy).

11.3 Further contributions of this research

This study makes a number of contributions to the study of organisational adaptation and organisational flexibility. These are mainly methodological and empirical, but this research also contributes to the theoretical debate about a number of related analytical issues. These include an understanding of how the character and specific nature of family firms shaped the determinants of organisational flexibility; and also understanding of the role of national differences in the ways firms organise and act.

Contributions at the methodological level

Lewin and Volberda (1999) suggest that in the field of organisational adaptation longitudinal research is required, but that such research is far from becoming the norm. In the organisational flexibility field most of the writing has been theoretical and although there are some exceptions (Bahrami, 1992; Bahrami and Evans, 1995; Volberda, 1999), as yet there has been little empirical research.

A particular strength of this study is the use of the comparative case study method that allowed us to explore and investigate the phenomenon of organisational flexibility in depth over a relatively long period of time (1989-1999). A complementary strength of our methodology is the analysis technique we have used to explore the different determinants of organisational flexibility. The analysis of the determinants is an original contribution to the field of organisational flexibility – in particular the coding analysis and the display techniques used throughout the analysis.

Organisational flexibility process

Is flexibility an intended or emergent process? This is another question that this thesis helps to answer. McKinley and Scherer (2000) distinguish between intended and emergent actions. The former is the goal towards which the action is destined; the latter is the outcome of an action that the actor is not expecting. This is an important differentiation that can shed light on the process of being flexible.

In contrast to what some writers in the field of organisational flexibility have argued (see Volberda, 1999), there is clear evidence in the case studies to show that the flexible firms were building organisational flexibility as an intended process instead of just an emergent one. The intentionality of the process triggers questions about what the antecedents and origins of the process of being flexible are, and whether the building of organisational flexibility is a long-term process. To understand the trajectory of building organisational flexibility in these companies, we need to draw upon the five determinants of organisational flexibility we analysed in chapter 10, and in particular we need to understand not only how many determinants the firms had (as we analysed in chapter 10), but also when they had them.

Sidus' process of building flexibility is revealing as far as the intentionality of such a process is concerned. The firm showed low macroculture embeddedness early in the 1980s when it decided to follow a different strategic orientation, that is, investment in biotechnology. The company decision to withdraw from CILFA – the professional association of the industry – in 1988 was an intentional action that confirmed Sidus' objective of differentiating itself from the rest of the firms of the industry: *"We always try hard to be different from the rest of our competitors. That difference give us an advantage over the rest of the companies in the industry."*⁴³⁰

Similarly it was a deliberate action on Sidus' part to become more decentralised and to enhance the scanning activities of the organisation. As early as 1989 Sidus recognised the

⁴³⁰ Interview with Marcelo Argüelles-CEO Sidus

importance of splitting the Group into different companies thereby emphasising a decentralisation process to avoid bureaucracy in a company that was growing very fast. We also provided evidence of how Sidus, in a calculated move, enhanced its scanning behaviour by creating three areas which aimed to look at the context surrounding the company: regulation and legal analysis, sectoral analysis (both areas created in 1990), and macroeconomic analysis (set up in 1997).

The heterogeneity of the dominant coalition at Sidus can be considered both an emergent and intentional process. When the company set up its biotechnological venture, it opened up the doors of the Group to new professionals with a different educational profile, experience and background. The cultural gap between Instituto Sidus and the new professionals was an unexpected result of the changes. However, after this first experience with a new profile of managers and employees, the company deliberately attempted to achieve high levels of professionalism in all its new ventures by hiring professionals with diverse backgrounds. This was also used as a way of putting pressure on the more resistant management of Instituto Sidus to make them change.

Similarly, AGD reveals a trajectory of building organisational flexibility that underlines its intentionality. AGD's low macroculture embeddedness goes back to the 1980s when the company launched its first strategic initiative – branding. The intentionality of the process was asserted by some members of the Board when saying, *“copying what others in the sector are doing is a loser's strategy. If you want to be in the forefront, you have to leap forwards, outside sectoral boundaries, and this is what we did. You need to have your body in the sector but your head outside it.”*⁴³¹ Some investments that allowed AGD to become a strong, vertically integrated company, however, were the consequence of opportunities such as the grain export business that became an important business in its own right.

⁴³¹ Interview with Roberto Urquía-Director AGD

It was also a purposeful action on AGD's part to boost the levels of autonomy and scanning in the organisation. To avoid problems with the upsurge of formalisation needed after the opening up of the economy early in the 1990s, AGD favoured and reinforced operational autonomy through the creation of business units with more freedom to act. Regarding the scanning of the organisation, the Directors of the firm pointed out the fact that being open to what the context had to say was a constant fact in the Board's day-to-day work. AGD's scanning behaviour was intentionally boosted when the firm, in 1996, set up the economic studies unit with the main purpose of scanning the environment.

Like Sidus, in AGD the heterogeneity of the dominant coalition can be considered both an emergent and intentional process. When AGD began its logistic investments in 1986 and its branding strategy in 1989, the company received a flow of new managers and professionals who ran the new businesses. However, as many in the company believe, AGD did not expect this process to be a challenge for the company. The company confronted some startling problems stemming from the wave of new professionals combined with the old generation of managers. The intentionality of the process can be seen when in 1996 the Board deliberately implemented a strategy of professionalising and diversifying its management team.

Regarding the determinant related to the strong organisational identity in both AGD and Sidus, the analysis of the case studies indicated that the current generation of family members in both companies have intentionally forged their identity around the values of previous generations. We suggested in chapter 10 that Sidus and AGD deliberately wanted to preserve the values of previous generations as a way of giving the company an anchor to try new things and change yet, at the same time, avoid organisational chaos.

The experiences of both Sidus and AGD demonstrate that intentionality in building organisational flexibility matters. As such, creating organisational flexibility is not a short term process but a long one in which firms build up the capabilities that will form the determinants of organisational flexibility. The trajectory process, however, may differ in each company. On the

one hand, Sidus built up its flexible capabilities between the early 1980s and early 1990s, while in AGD that process lasted longer. The main reason for this difference lies with the different sectoral realities in which the firms were embedded. Sidus, unlike AGD, was in an industry unaccustomed to competitive pressures of the deregulated market. Therefore, Sidus needed to build up its flexible capabilities more quickly than AGD.

Contributions to adaptation and change theories

Our research has also provided empirical evidence which can contribute to the long-standing debate within the organisational and management literature –that of continuous versus revolutionary transformation, and that of environmental determinism versus strategic choice.

We have already shown in chapter 9 how the flexible firms undertook transformations that involved continuous change, while the less flexible firms displayed a more revolutionary attempt at transformation. The outcome of the transformation process in the flexible firms does not conform to the pattern portrayed in the literature on adaptation and change which explains transformations as processes that include long periods of stability or convergence and short periods of revolutionary change (Tushman and Romanelli, 1985; Tushman and Smith, 2001; Benner and Tushman, 2001). The most flexible firms have shown continuous change rather than stable equilibrium positions punctuated by sudden change.

Our study also contributes empirical evidence to the debate between environmental determinism and strategic choice. We have seen how deterministic and voluntaristic approaches have influenced the field of organisational adaptation (chapter 2). However, we reject purely deterministic theories in which adaptation and thus flexibility are reactive capacities of the organisation (i.e., contingency theory), or even more radical approaches in which the power of the environment is such that organisational adaptation is impossible (i.e., population ecologists).

Additionally, we claim that voluntaristic approaches that rely entirely on the power of managerial enactment and choice are also false (i.e., strategic choice).

Our findings suggest that these polar positions are empirically untenable. In line with the contextualist approach proposed by Pettigrew (1985) and Pettigrew and Whipp (1991) we view adaptation as a dynamic concept and the result of a fusion of managerial choice and the pressures imposed by the internal and external contexts in which firms operate. In this context, flexibility is a set of organisational capabilities (i.e., managerial and organisational) allowing the firms to adapt fast in conditions of environmental turmoil.

Contributions in the field of family businesses

Our study has also contributed to the understanding of the transformation, adaptation and flexibility of family firms. Ward (1987) and Gersick *et al* (1997) have highlighted the lack of research into transformation and change in family firms. In the most important journal in the field of family firms (Family Business Review) less than 4% of the articles published between 1988 and 1997 addressed the issue of change and development (Dyer and Sanchez, 1998).

But most importantly, this thesis highlights the way the character of family firms has influenced and shaped the determinants of organisational flexibility. At the beginning of chapter 10 we introduced three main issues affecting the organisational flexibility of family firms, namely: the life cycle of the family firms and the role of the founder; control systems and professionalisation of the management team; and, ownership issues. The first two issues have shaped different aspects of the determinants of organisational flexibility analysed in this thesis.

The role of the founder had a great impact on the way the identity of the flexible firms developed. We pointed out that the flexible firms in this research, unlike the less flexible firms, had a strong identity based on a set of core values shared with previous generations. The strong identity found in the flexible firms is contrary to some organisational studies that assert that a

strong identity can hamper the ability to see important changes in the market (Ouchi, 1981). Burgelman (1983), for example, underlines the importance of a strong organisational identity in helping the organisation to preserve order. However, Burgelman also warns that a strong identity may impede organisational change. The flexible family firms analysed in this thesis, however, managed to maintain an identity containing values that facilitated and motivated change.

The life cycle of the firm and the mechanisms of control applied in our family firms impacted on the determinant 'centralisation and formalisation of the decision-making process.' The evidence provided by AGD and Sidus confirms the conclusions of the literature on family firms: both firms became more autonomous in their operation and also more formalised in later stages of life (see evidence in chapter 10, and also Moores and Mula, 2000). The decisions of the companies to give more autonomy to the managers meant that more formalisation and control was necessary to keep the family abreast of operations. The less flexible firms followed a different pattern: both Vicentín and Andrómaco had increased formalisation and centralisation of decision making over time, therefore taking a more hands-on approach towards the running of the company. The evidence by flexible and less flexible firms revealed a pattern different from that found in studies of non-family firms that have widely accepted that low levels of centralisation and formalisation foster innovativeness and flexibility in organisations (Volberda, 1996, 1999; Bahrami, 1992; Damanpour, 1991, 1992). The evidence provided by our case studies indicates a different process inside family firms.

Finally, the degree of professionalisation of the top team in the family firms had an important influence on the demographic characteristics of the firms analysed. The literature on family firms has suggested that professionalisation of the management team is a critical issue in the middle or late stages of their organisational development. Failure to professionalise might have devastating consequences for the survival and success of the firms (Ward, 1987). The earlier professionalisation of Sidus and AGD helped them to build a more heterogeneous top team. By contrast, the lack of incorporation of a professional management with different

background experience, and the fact that the less flexible firms relied upon family members to fill top jobs shaped the existent homogeneity found in Andrómaco and Vicentín. The long-term consequences were evident in the firms: the heterogeneous firms had more cognitive diversity that helped them to take risks and boosted their capacity to act. Meanwhile, the homogeneous firms revealed some of the cognitive limitations that restricted the top team capacity for action.

The influence of the National Business Environment (NBE) as a shaper of organisational action in the firms

This thesis also contributes to our understanding of the different ways the NBE impinges on a firm's ability to adapt and change. While there have been some attempts to address this issue (Khanna and Palepu, 2000; Hoskisson *et al*, 2000; Lewin *et al*, 2002) there is still a large gap in our understanding of how institutional factors affect management practices, innovation processes, creativity and flexibility in organisations.

In presenting a combined approach to which institutional and cultural elements were gathered together, we were able to examine the context in which the firms have to operate from a multidimensional viewpoint. Such an analysis makes it possible to begin answer the following questions: what are the institutions that can help us to understand the evolution of indigenous firms? How have these institutions shaped the development of the national enterprise? And finally, what elements of the national culture influence the managerial behaviour of the firms and their ability to change and adapt?

The two institutions analysed – the role of the state and the role of financial institutions – clarifies the institutional influence of the emergence, development and demise of indigenous businesses. The role of the state in the economy was significant in shaping the levels of centralisation and formalisation of decision making found in the firms. With the sudden opening up of the economy early in the 1990s flexible firms became more formalised and less centralised as far as the operations were concerned to confront the efficiency required in a market that

stabilised (in terms of macroeconomic indicators) and became more competitive (after the opening up of the economy to international competition). This implied an approach that differed from that used in the 1980s in which flexible firms were less formalised and more centralised to be able to confront a closed but highly unstable market.

The scanning behaviour of the firms was also influenced by the changes in the economy. After the opening up of the economy, flexible firms, and to a lesser extent the less flexible firms, started to scan more the environment to understand competitors' moves and customers' needs.

The sudden opening up of the economy fostered by the Argentinian state also impacted on the strategies of the flexible firms. To be able to compete in an open economy, the flexible firms needed to integrate their businesses because of the lack of reliable suppliers. New business strategies and long-term planning were necessary to confront the new competitive landscape.

Elements of the national culture also shed light on the implications for organisational action. Linking the results of our analytical chapter (chapter 10), and the cultural elements analysed in chapter 4, produces some revealing results regarding the way flexible and less flexible firms behave.

In chapter 4 we described how four elements of national culture as stated by Hofstede (1980, 1991) may have impacted on the way firms organised themselves and changed. Hofstede stated that Argentina would be a country with high power distance, high uncertainty avoidance, collectivism and masculinity. The less flexible firms confirmed the patterns we found when trying to link the four elements of analysis of the national culture as suggested by Hofstede and the ways firms organised themselves in the Argentinian case (i.e., high levels of centralisation and formalisation, resistance to change among others. See table 4.4 in chapter 4).

Most interesting is the case of the flexible firms that did not comply with some of the factors of our analysis of national culture. Sidus and AGD behaved counter culturally *vis-à-vis* the predictions of national culture. It seems that in these companies a local organisational effect

overrode the effects of the national culture. This was demonstrated by the fact that the flexible firms decentralised decision making, took risks and undertook organisational change.

There is still a question to tackle, that is, whether organisational action in flexible firms is shaped only by elements of the national culture or, as Whittington and Mayer (2000) argued, by convergence based on efficiency. The results of our research make it difficult to answer such a question. More research comparing flexible firms in different countries will facilitate the understanding of whether flexible firms converge towards adapting structural and process routines associated with greater flexibility, or whether prevalent management practices reflect specific national state configurations as determined by cultural factors.

11.4 Limitations and suggestions for further research

In chapter 3 we indicated some of the main limitations of this thesis. These limitations, however, open up challenges for further research. Our findings are based on a comparative case study of polar types: two flexible and two less flexible firms in two industries – pharmaceuticals and edible oils. Consequently there must be questions as to the extent to which these findings are applicable to other contexts. Because the extent to which our findings are supported by elements of the literature on organisational flexibility, organisational innovativeness and institutional embeddedness, some level of generalisability can be claimed. However, the originality of this work within the adaptation literature cannot be claimed until further research into other industries is carried out. This is a critical issue which needs to be resolved before we can claim generalisability of the findings.

The use of a particular set of indicators to select flexible firms and the selection of the determinants of organisational flexibility as categories of analysis may also have limited the findings of this research. Further research needs to show whether a selection of other indicators

would produce similar results and also whether other determinants can shed light on the way firms can achieve flexibility.

As said before, the selection of the determinants of organisational flexibility as categories of analysis may also have limited the findings of this research. In our research, we have not analysed three important issues that may have had an influence on the organisational flexibility of the firms researched: leadership, technology and the role of HRM.

Although we have addressed the issue of leadership while analysing the strong organisational identity determinant, we have not tackled such an important topic directly. Leadership style can clarify issues such as the potential for a participative or delegative culture, the planning approach of the organisation and the management attitude (Volberda, 1999). However, our analysis of the dominant coalition, organisational identity and transformation of the firms is a proxy analysis of leadership effects. Instead of isolating it out, we picked up its effects in different ways.

Another possible determinant of organisational flexibility that was not considered in our analysis is the flexibility potential of technology (i.e., mode of production, physical layout and means of transformation). Volberda (1999) has included technology as an indicator to explain organisational flexibility. However, we believe that technology was not an issue related to organisational flexibility but with manufacturing flexibility (Adler, 1988). The findings of this thesis confirmed our choice of leaving behind technology as a determinant of organisational flexibility. Although flexible and less flexible firms had similar levels of technological innovation, this did not imply any change in the organisational flexibility of the firms. However, further research is needed to explore whether technology can be a factor in achieving organisational flexibility (i.e., through exploring how technological change can influence changes in organisational processes).

HRM was also not considered in this analysis as a determinant of organisational flexibility. While some writers have considered HRM as a factor in understanding adaptation

and change (Pettigrew and Whipp, 1991), in this study, HRM has not been considered as a determinant of organisational flexibility but seen important in supporting the knowledge, skills and attitudes that firms need to compete. The main limitation for us to leave this determinant behind was the fact that the firms analysed in this thesis lacked in HR area (i.e., the case of Vicentin or the case of the rest of the firms until late 1990s). However, further studies may consider the feasibility of HRM as a factor in understanding the differential ability of the firms and how this impacts firm's flexibility.

One clear limitation of our analysis of the determinants of organisational flexibility was the approach chosen to analyse the determinant 'organisational identity.' As we stated before, organisational identity as a category of analysis is sensible in terms of the literature. This determinant has the potential to help us understand how the organisational values of an organisation can foster or harm organisational adaptation, change and flexibility. The limitations of our analysis, nevertheless, stem from the lack of data points. Not only was the quantity of the data insufficient, but the quality was also inadequate.

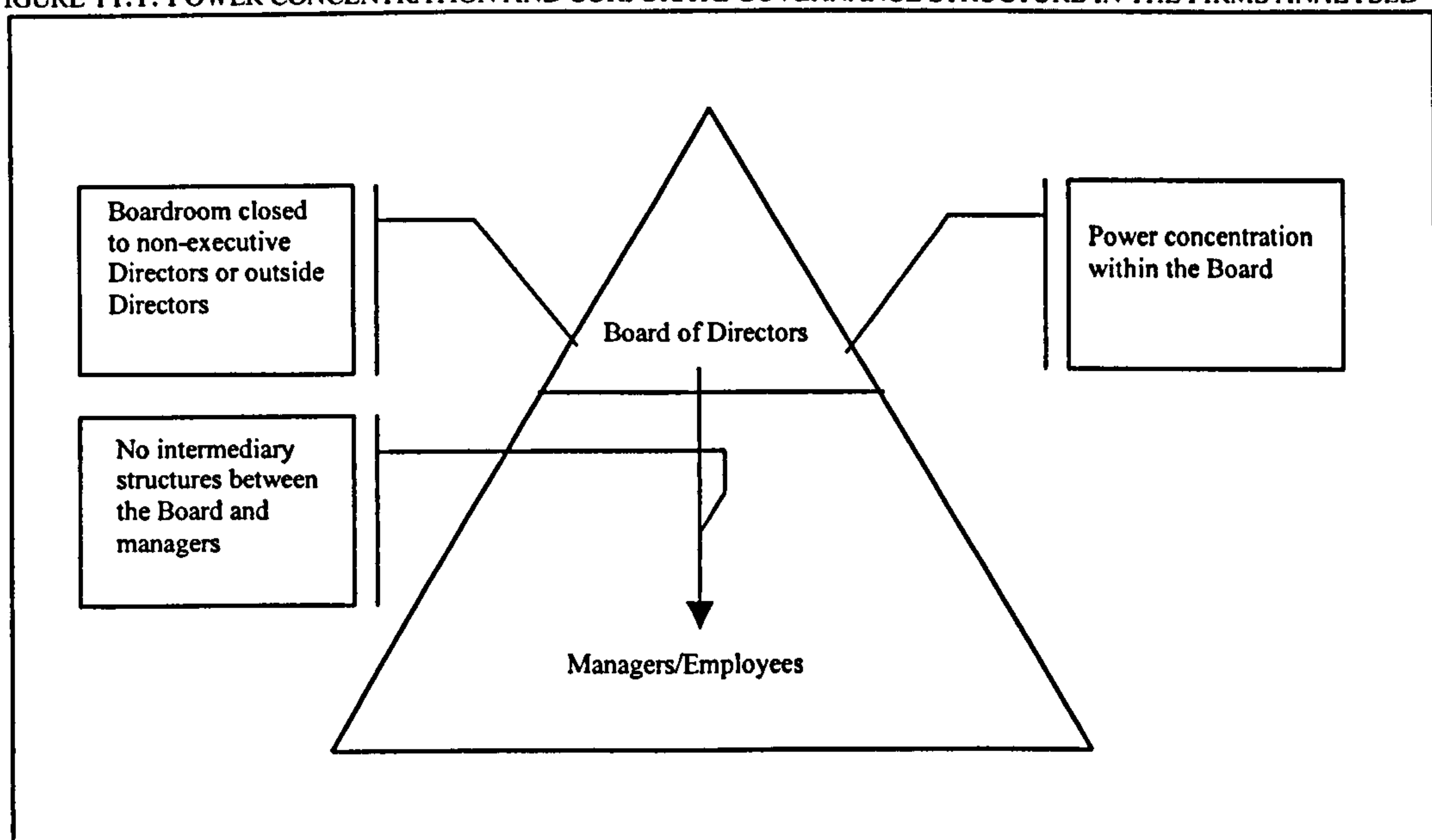
Therefore, in addressing the issue of identity as a determinant of organisational flexibility future research should consider how to improve the methodology of analysis so as to study organisational identity in the firms comprehensively and systematically. Improving the quality of analysis means that the researcher needs to connect texts with their historical and social contexts and to be able to refer to particular actors, relationships, and practices that characterise the situation under study (Phillips and Hardy, forthcoming 2002). In our analysis of organisational identity we made some attempts to do this. However, the lack of data made our analysis incomplete and the statements presented in this thesis should be considered only as indicative of the identity of the firms.

In this thesis two issues emerged as central to our understanding of governance and leadership in family firms and their influence on organisational flexibility. These aspects, however, were not tackled directly. The first aspect is related to the corporate governance of

family firms. The second issue relates to the internal dynamics of the Board of flexible and less flexible firms.

The family is the most important component of the governance structure in most family firms. Hence, power is normally concentrated at Board level. None of the companies investigated have intermediary structures such as an executive committee. But how can a different corporate structure enhance organisational flexibility? Can, for example, executive committees help to boost the flexibility of a firm? Neubauer and Lank (1998) emphasise that less concentration of power in the Board and the presence of intermediary structures in family firms might facilitate the participation of managers and younger family members in strategic decisions. On the other hand a corporate structure that incorporates intermediary structures may offer the Board alternative views and therefore enhance its capacity to act. Consequently, a less centralised corporate structure may offer some insight into other ways flexibility can be achieved at the top level of the firm.

FIGURE 11.1: POWER CONCENTRATION AND CORPORATE GOVERNANCE STRUCTURE IN THE FIRMS ANALYSED



The four companies analysed in this thesis do not offer insight into the benefits of intermediary arrangements in corporate structure. As figure 11.1 shows, the concentration of power at the Board level in the firms analysed meant a lack of intermediary structures between the Board and managers. Moreover, the Boards in the four firms are exclusively made up of family members. In the Boards there were no part-time members, non-executive members or outside Directors. This is another element of the Board composition that Neubauer and Lank (1998) consider a key issues in family firms. They suggest that in family firms part-time or executive directors can act as knowledgeable outsiders that can potentially offset the management's shortcomings and can also give and test new ideas. Outsiders offering alternative views to the Board, then, may influence family firms' flexibility. More research analysing flexible firms with different corporate structures may shed light on the way the firms' capacity for action may be boosted and organisational flexibility enhanced.

The second factor we mention as potentially important to our understanding of organisational flexibility is the internal dynamic of the Board itself. Throughout the analysis of the case studies we perceived the importance of complementarities between members of the Board in the flexible firms. However, we did not explore this topic further.

Both AGD and Sidus had three directors. These triads, using Simmel's (1950) words, shaped the dynamic work between directors. At AGD, Adrian and Roberto Urquía were the strategists of the company while Adriana was the mastermind behind the organisational change the firm went through. At Sidus, the CEO was responsible for all the strategic initiatives while the other two directors dealt with the administrative adjustments needed after each new venture was incorporated. Communication between directors as well as daily interaction was dynamic in the flexible firms unlike in the less flexible firms. Further research needs to address the complementarities of the Board's members and interpret them *vis-à-vis* the organisational flexibility of the firms. Different questions will probe the way a Board's complementarity might enhance a firm's flexibility: what is the Board's composition and hierarchy in a flexible firm?

What personal traits are necessary or sufficient in a flexible firm? What kind of interaction between Board members is required? And what is the knowledge base that would enhance a firm's flexibility?

In family firms where the family controls and decides the fate of the business, it is important to grasp the way corporate governance develops as well as understand the internal dynamic of the Board. In this way, we may be able to appreciate the genesis of the process of becoming flexible, the context from which flexible capabilities can be generated and the constraints on developing flexible capabilities.

We introduced chapter 1 with a quote by D'Aveni (1994) in which he warned researchers and practitioners about the complexity of the business world. In the same essay D'Aveni predicts that hypercompetitive environments will favour organisations that are able to be flexible and to adapt quickly to change. Throughout this thesis we have developed theoretically and empirically what determines whether an organisation is flexible. However, our study is still a limited contribution to the understanding of organisational flexibility. More research needs to be done in a field the importance of which has been recognised for the survival and future success of organisations, but which, to date, has been characterised by scarce research.

ANNEXES

ANNEX 1: Letter sent to Sidus' Board of Directors

ANNEX 2: Interview Pro-Forma

PHD Programme
Warwick Business School
University of Warwick
COVENTRY
CV4 7AL
UK

ANNEX 1⁴³²

4th July 2000

CONFIDENTIAL

Sr. Santiago García Belmonte
Superi 2514 1er Piso
(C1430) Capital Federal
Buenos Aires
Argentina

Dear Mr García Belmonte,

RE: Research project on transformation and change in Argentinian Companies

Further to our telephone conversation concerning my doctoral research project, I would like to clarify the main aims of my research and the data I would like to collect from your company.

The main aim of my research is to understand the transformation of family-owned firms in Argentina over the period 1989-1999. The fact that family firms went through dramatic processes of transformation after the opening up of the economy in the early 1990s highlights the importance of understanding those processes that enabled firms such as Sidus to transform and adapt to environmental changes.

Moreover, the pharmaceutical industry benefited from substantial amounts of foreign direct investment during this period, and accordingly, competition within the industry rose considerably. The main questions my project seeks to answer are therefore as follows: How did

⁴³² This is an English translation of the original letter in Spanish sent to the company

Sidus cope with the changes in the Argentinian economy? How did your firm deal with the intense competition in the industry? What processes have changed over time to allow the company to adapt to sudden environmental changes?

To be able to answer these questions, I would ideally need to interview both managers and employees, and both family and non-family members of the firm. I am happy to discuss with you which employees might be the most suitable candidates for the interviews. In my research, interviews will be one of the main sources of information. All information obtained during the interviews will be treated as strictly confidential and will be used exclusively for academic purposes.

In addition to interviews, it would be very helpful if I could gain access to any of the company's documents that may reflect changes in its strategic focus over time and any archive material that might otherwise contribute to the accuracy of my research. I understand that this will depend on the availability of such a material in the company and the extent to which it is possible to disclose the information it contains.

On completion of my project, I am sure you would like to share the results of my study. One way in which I might present my research might be in a workshop made up of those members of staff you consider appropriate. I should also like to take this opportunity to thank you for your time and effort. I am very much indebted to you and your company.

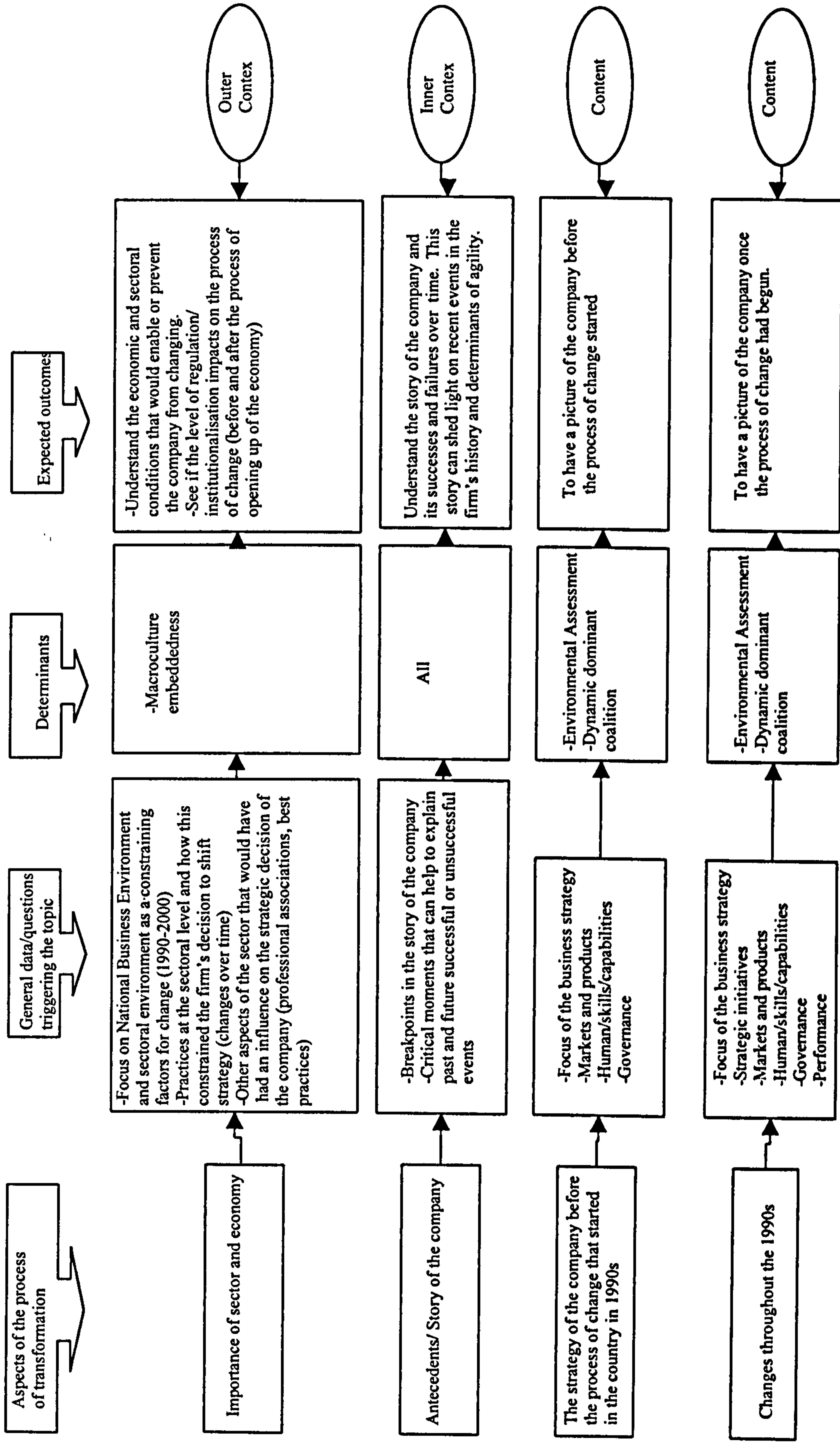
Yours sincerely,

Andrés Hatum

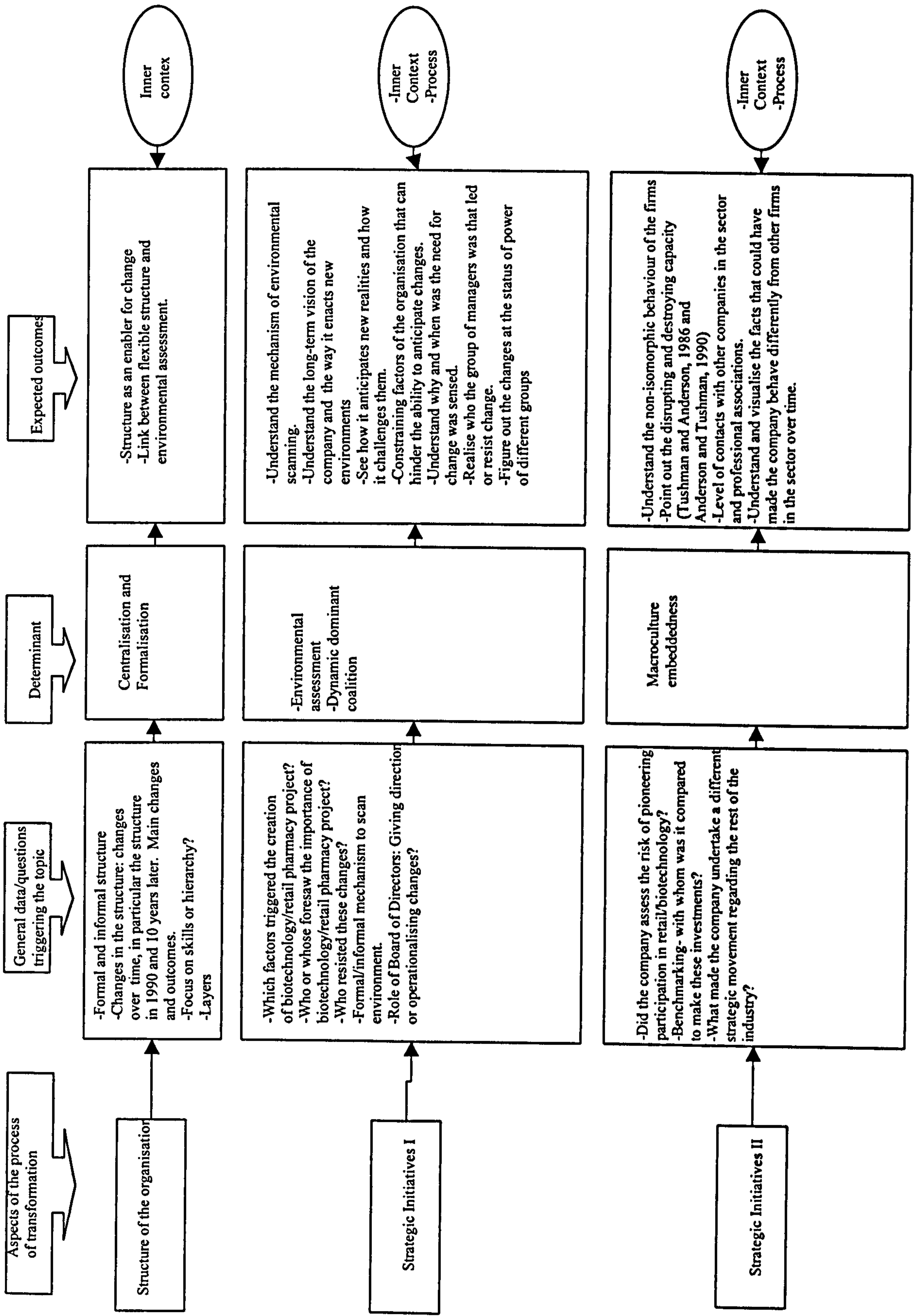
Doctoral Research Student

ANNEX 2: Interview Pro-Forma

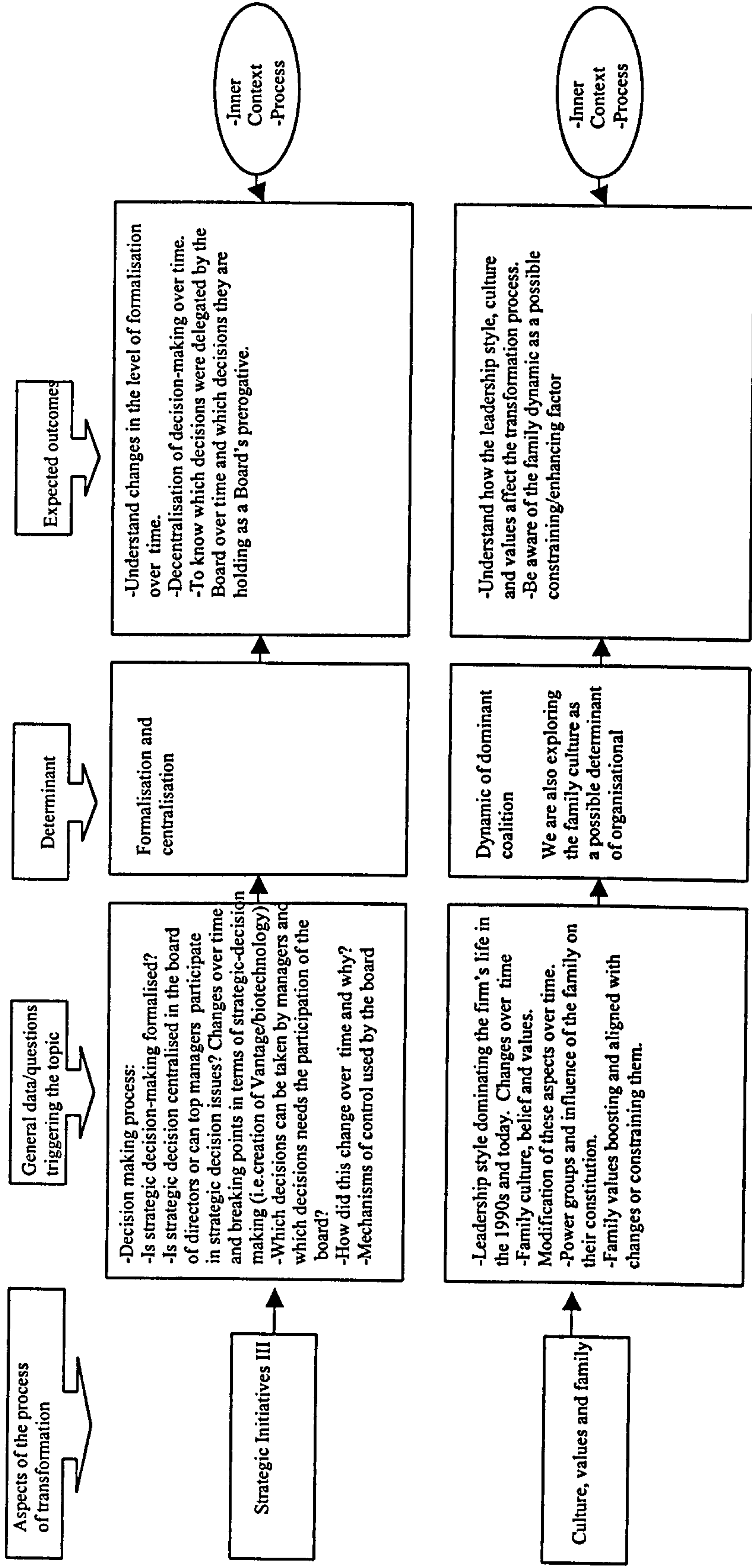
Content, context and process of transformation of the firm



Content, context and process of transformation of the firm



Content, context and process of transformation of the firm



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